



**SNC • LAVALIN**

# 2022 Annual Report: Elk Valley Regional and Site-Specific Groundwater Monitoring Program

Regional Groundwater Monitoring Program

Fording River Operations

Greenhills Operations

Line Creek Operations

Elkview Operations

Coal Mountain mine

Teck Coal Limited

**VOLUME II OF VI**

March 24, 2023

SNC-Lavalin Project: 635544

# Appendix I

Permit 107517





December 19, 2022

Tracking Number: 417388

Authorization Number: 107517

**REGISTERED MAIL**

Teck Coal Limited  
3300-550 Burrard ST  
Vancouver, BC V6C 0B3

Dear Permittee:

Enclosed is Amended Permit 107517 issued under the provisions of the *Environmental Management Act*. Your attention is respectfully directed to the terms and conditions outlined in the permit. An annual fee will be determined according to the Permit Fees Regulation.

The following authorization amendment letters have been incorporated.

<b>Date of decision</b>	<b>Subject</b>	<b>Description</b>
2021-12-22	Line Creek Operations Dry Creek Water Management Plan Submission	Adds clause 3.5.5 Best Achievable Technology Assessment, and 3.5.6 Initial Dilution Zone Assessment
2022-02-10	Selenium bioaccumulation downstream of the Line Creek Operations Dry Creek Water Management System	Inserts new clause 2.8.1 Dry Creek Benthic Invertebrate Tissue Selenium Concentration and new Appendix 1Ia monitoring location map
2022-04-07	Discontinuation of the Greenhills Local Aquatic Effects Monitoring Program	Removes clauses 8.3.4 and 9.5 ii.
2022-04-14	Change the requirement to upload data to EMS	Updates clause 9.1
2022-05-11	Implementation Plan	Adds terms to Section 1. Definitions and Glossary, inserts new clause 7.1 Implementation Plan
2022-06-01	Approving use of transect data to determine compliance with SPOs at LK2, Koochanusa Reservoir south of Elk River	Updates Section 3.1 Table, and adds footnote #4, updates clause 8.1.1 Table 2 Order Stations Sampling Locations and adds Table 2A, adds clause 9.2.4 xi. Quarterly Reporting requirements, updates Appendix 1E sampling location map, updates Appendix 2 Table 11 monitoring program, and adds Appendix 3 Table 26 abbreviation M/T.
2022-06-02	Elkview Operations Saturated Rock Fill Nickel Trigger Response Plan Submission	Updates clause 5.2.2.1 Trigger Response Plan for Nickel

2022-06-28	Authorizing discharge of effluent from the Liverpool Antiscalant Addition System	Adds Appendix 5E Liverpool Antiscalant Addition System
2022-06-30	Authorizing discharge of effluent from the Upper Greenhills Creek Antiscalant Addition System	Changes Appendix 5B from Lower to Upper Greenhills Creek Antiscalant Addition System, adds clause 8.3.5 and 9.5 Greenhills Creek LAEMP
2022-01-31	Approval of the Nickel Benchmark Derivation Workplan	Adds date for submission of final nickel benchmark to clause 5.2.1.
2022-11-01	Approval of the Antiscalant Cumulative Effects Study Design	Changes date for submission of final Antiscalant Effects Assessment in clause 5.1.1.

Please note that the May 11, 2022 letter regarding the 2022 Implementation Plan submission is a standalone authorization amendment letter that remains an addendum to this amended permit. Also note that on August 22, 2022, the Lower Greenhills Creek Antiscalant Addition System ceased discharging and began decommissioning for relocation to Upper Greenhills Creek.

The new decisions being made with issuance of this permit are summarized below.

<b>Subject</b>	<b>Section</b>
Inclusion/update of standard clauses: veracity of data, split sample audit failure, annual status forms, sampling and analytical procedures, QA/QC Program, glossary term 'suitably tabulated'	9.12, 6.7, 9.13, 8.1.2.1, 8.1.2.1.2, and 1
Update Ministry names	9.2.5 and 11.2
Change several occurrences of 'shall' to 'must'	2, 6.5.1, 6.6, 7.3.1, 8.1.2.3, 8.2.2.1, 8.5.1, 8.9, 8.10, 9.2.4, 9.2.5, 9.6, 9.10, 10, 11.1,
Remove table footnote regarding re-evaluation of monitoring station with acceptance of GHO LAEMP study design	Appendix 2, Table 16
Change the date for submission of the 3-year Implementation Plan update, and associated terms of reference, from July 31 to April 30 as requested by the permittee to allow 3 months between submission of the IPA and CMP	7.1.1 and 7.1.3
Remove Sparwood Area Groundwater Supporting Study and Sparwood Area Groundwater Study Report as requested by the permittee. These requirements have been met and continued monitoring will be conducted under the Regional and EVO Site-Specific Groundwater Monitoring Programs	8.2.3 and 9.4.2

Add a linkage to annual reporting clause in LAEMP section	8.3
Clarify that discharge characteristics for listed parameters are determined by third-party qualified laboratory results	2, 4B1.2, 4C1.2, 4D1.2, and 4E1.3
Add clarifying statement that process modification notifications during commissioning of facilities is not required and operational refinements or adjustment of works as needed to optimize efficiency and/or effluent quality during commissioning is to be reported in the Commissioning Report.	4A1 and 4A4
Remove a redundant monitoring requirement for nitrate	4D3

This permit 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 permittee. This permit is issued pursuant to the provisions of the *Environmental Management Act* to ensure compliance with Section 120(3) of that statute, which makes it an offence to discharge waste, from a prescribed industry or activity, without proper authorization. It is also the responsibility of the permittee 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.

When a spill occurs, or there is an imminent risk of one occurring, the responsible person must ensure that it is reported in accordance with the Spill Reporting Regulation. Additional information on spill reporting requirements is available at [gov.bc.ca/reportaspill](http://gov.bc.ca/reportaspill)

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 permit will be carried out by staff from the Environmental Protection Division's Regional Operations Branch. Plans, data and reports pertinent to the permit are to be submitted by email or electronic transfer to the Director, designated Officer, or as further instructed.

Please be reminded that the director may require the permittee to do one or more of the following at any time:

- repair, alter, remove, improve or add to existing works, or to construct new works, and to submit plans and specifications for works specified in this authorization.
- conduct monitoring, and may specify procedures for monitoring and analysis, and procedures or requirements respecting the handling, treatment, transportation, discharge or storage of waste.
- provide security in the amount and form, and subject to the conditions, specified by the director.
- conduct studies and to report information in accordance with the specifications of the director.
- recycle certain wastes and recover certain reusable resources, including energy potential from wastes, in accordance with the specifications of the director.
- submit copies of reports and notifications to specified Indigenous Groups, within specified timelines, in accordance with the specifications of the director.

For more information about how the Ministry will assess compliance with your permit please refer to [gov.bc.ca/environmentalcompliance](http://gov.bc.ca/environmentalcompliance).

For more information about how to make changes to your permit and to access waste discharge amendment forms and guidance, please refer to [gov.bc.ca/wastedischarge-authorizations](http://gov.bc.ca/wastedischarge-authorizations).

Yours truly,



A.J. Downie, M.Sc., P.Ag.  
for Director, *Environmental Management Act*  
Mining Authorizations



**MINISTRY OF ENVIRONMENT  
AND CLIMATE CHANGE  
STRATEGY**

**PERMIT**

**107517**

*Under the Provisions of the Environmental Management Act*

**Teck Coal Limited**

**3300-550 Burrard ST  
Vancouver, BC V6C 0B3**

is authorized to discharge effluent to the land and water from five coal mine sites located within the Elk Valley near Elkford and Sparwood, British Columbia, subject to the terms and conditions listed below. Contravention of any of these conditions is a violation of the *Environmental Management Act* and may lead to prosecution.

The terms and conditions included in this permit are intended to ensure implementation of commitments and processes contained in the Elk Valley Area Based Management Plan approved November 18, 2014. Should any conflict exist between this permit and the Elk Valley Area Based Management Plan, the permit requirements take precedence.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
(most recent)

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


A.J. Downie, M.Sc., P.Ag.  
for Director, *Environmental Management Act*  
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APPENDIX 1:	TECK COAL LIMITED OPERATIONS MAPS
APPENDIX 2:	SURFACE WATER DISCHARGE AND RECEIVING ENVIRONMENT MONITORING PROGRAM
APPENDIX 3:	MONITORING PROGRAM NOTES AND EXPLANATIONS
APPENDIX 4:	SELENIUM AND NITRATE TREATMENT FACILITIES
APPENDIX 5:	CALCITE TREATMENT FACILITIES

Date issued: November 19, 2014  
Date amended: December 19, 2022  
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## 1. DEFINITIONS AND GLOSSARY

Unless otherwise defined, all terms used in this permit are defined as in the Area Based Management Plan titled “The Elk Valley Water Quality Plan”, approved November 18, 2014.

**ABMP:** Area Based Management Plan titled “The Elk Valley Water Quality Plan”.

**AMP:** Adaptive Management Plan

**AWTF:** Active Water Treatment Facility

**BCWQG FWAL:** British Columbia Water Quality Guideline for Fresh Water Aquatic Life

**Best Achievable Technology:** The technology that has been evaluated for its feasibility, reliability, control-effectiveness, and cost-effectiveness and is demonstrated to be best-suited to meet waste discharge standards for the protection of the environment and human health.

**CMO:** Coal Mountain Operations as described in the latest approved *Mines Act* Permit C-84

**Compliance Point:** an effluent monitoring location specified in the permit at which discharge limits apply

**Designated Area:** a portion of southeastern British Columbia that contains the Elk Valley Watershed and the portion of Koocanusa Reservoir within Canada, and is geographically defined by Ministerial Order M113 (references to the Elk Valley are references to the Designated Area)

**EVWQP:** The Area Based Management Plan titled “The Elk Valley Water Quality Plan”

**EMC:** Environmental Monitoring Committee

**EMS:** Environmental Monitoring System (provincial environmental quality data base)

**EVO:** Elkview Operations as described in the latest approved *Mines Act* Permit C-2

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Date amended: December 19, 2022  
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**FRO:** Fording River Operations as described in the latest approved *Mines Act* Permit C-3

**GHO:** Greenhills Operations as described in the latest approved *Mines Act* Permit C-137

**KNC:** Ktunaxa Nation Council

**LAEMP:** Local Aquatic Effects Monitoring Program

**LCO:** Line Creek Operations as described in the latest approved *Mines Act* Permit C-129, including Phase I and Phase II

**LCO Phase I:** permitted mining area in upper portion of Line Creek.

**LCO Phase II:** permitted mining area in LCO Dry Creek watershed.

**Operational Date:** The date when facility commissioning activities are completed.

**Order (the):** Ministerial Order number M113, which was the directive issued by the B.C. Minister of Environment in April 2013 requiring Teck Coal Limited to develop an Area Based Management Plan for the Designated Area in the Elk Valley.

**Order Constituents:** Identified in Ministerial Order M113: selenium, cadmium, nitrate, and sulphate.

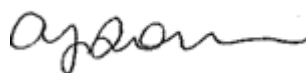
**Order station:** a monitoring location specified by the Order to monitor water quality in the Designated Area, at which site performance objectives apply

**Parameter of Concern:** any physical, chemical, or biological substance in air, soil or water at a concentration, or predicted to be at a concentration that exceeds regulatory thresholds, or may have an adverse effect on environmental or human health receptors

**Permitted Development Planning Period:** The period of time in which the permittee's permitted development activities in the Elk Valley are proposed to be carried out, plus the time required for the full effects (constituent loadings) of that development to report to the environment.

**RAEMP:** Regional Aquatic Effects Monitoring Program

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**Regulatory Document:** means any document that the permittee is required to provide to the director or the Province pursuant to:

- i. This authorization;
- ii. Any regulation made under the *Environmental Management Act* that regulates the facilities described in this authorization or the discharge of waste from those facilities; or
- iii. Any order issued under the *Environmental Management Act* directed against the permittee that is related to the facilities described in this authorization or the discharge of waste from those facilities.

**SPO:** Site Performance Objective

**SRF:** Saturated Rock Fill Water Treatment Facility

**Standing Water:** For Section 8.1.2.4, Table 8A, standing water is defined as pooled effluent in the Floodplain Widening Sediment Pond of at least 0.5 metre depth, with no decant occurring from the pond.

**Suitably Tabulated:** Data is to be clearly presented in a table, or a series of tables. The table(s) must include any applicable regulatory limits/guidelines e.g., permit limits, BCWQGs, CSR guidelines etc. Any exceedances of respective regulatory limits/guidelines must be clearly highlighted. Any missed sampling events/missing data must be identified with an explanation provided.

**WLC:** West Line Creek

Date issued: November 19, 2014  
Date amended: December 19, 2022  
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## 2. AUTHORIZED DISCHARGES

Sections 2.1 to 2.7 refer to compliance points that correspond to locations where all or most of the point and non-point discharges from a mine site or specified portions of a mine site are expected to accumulate. These accumulated discharges are subject to the concentration limits (the “limits”) at the compliance points.

For Sections 2.1 to 2.7, the limits are expressed as monthly average concentrations and/or specified daily maximums. The monthly average concentration is defined as the average value of measured concentrations for all samples collected in a calendar month at the sample location, except for months when there is an authorized bypass of a selenium and nitrate treatment facility and enhanced monitoring occurs. With enhanced monitoring, as per Appendix 4, the monthly average concentration must be calculated as follows:

$$CMo = [(\Sigma C24/N24)*(D24/Dmo)] + [(\Sigma CR/NR)*((Dmo-D24)/Dmo)]$$

Where:

- Cmo is the monthly average concentration;
- C24 are the concentrations of the samples collected during a 24-hour recirculation in the month;
- N24 are the number of samples collected during a 24-hour recirculation in the month;
- D24 is the number of days in 24-hour recirculation in the month;
- Dmo is the number of days in the month;
- CR are the concentrations of the routine samples collected in the month;
- and
- NR are the number of routine samples collected in the month

For months where only one result is collected, that result must be compared to both the monthly average and daily maximum limits. Daily maximums are defined as any single grab sample. Effluent characteristics for the listed parameters must be determined by a third-party qualified laboratory.

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**2.1 FORDING RIVER OPERATIONS – FORDING RIVER COMPLIANCE POINT (FR FRABCH)**

This section applies to effluent from Teck Coal Limited mine operations (Fording River Operations and the Greenhills Operations into the Fording River watershed) upstream of FRO Compliance Point (EMS E223753). The FRO Compliance Point (EMS E223753) is located approximately 100 m upstream of Chauncey Creek as shown in Appendix 1.

2.1.1 The characteristics of the effluent at the compliance point must not exceed the following monthly average limits:

MONTHLY AVERAGE PARAMETERS	EFFECTIVE DATE	
	Mar. 10, 2021	Dec. 31, 2023
Total selenium (µg/L)	85	58
Nitrate as N (mg/L)	18.0	12.0
Sulphate (mg/L)	577	605

2.1.2 The characteristic of the effluent at the compliance point must not exceed the following daily maximums:

DAILY MAXIMUM PARAMETERS	EFFECTIVE DATE	
	Dec.31, 2021	Dec. 31, 2023
Total selenium (µg/L)	100	67
Nitrate as N (mg/L)	21.0	14.0

2.1.3 The authorized works associated with this compliance point are tailings impoundments, sedimentation and infiltration ponds, diversions, ditches, pipelines and pumping, active water treatment facility, antiscalant addition systems, sewage treatment plants, and related appurtenances.

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**2.2 GREENHILLS OPERATIONS – FORDING RIVER COMPLIANCE POINT (GH FR1)**

This section applies to effluent from Teck Coal Limited mine operations (Fording River Operations, Greenhill Operations and Line Creek Operations) upstream of GHO Fording River Compliance Point (EMS 0200378). The GHO Fording River Compliance Point (EMS 0200378) is located 205 m downstream of Greenhills Creek as shown in Appendix 1.

2.2.1 The characteristics of the effluent at the compliance point must not exceed the following monthly average limits:


MONTHLY AVERAGE		EFFECTIVE DATE		
PARAMETERS	Nov. 19, 2014	Dec. 31, 2019	Dec. 31, 2023	
Total selenium (µg/L)	80	63	57	
Nitrate as N (mg/L)	20	14.0	11.0	

2.2.2 The characteristics of the effluent at the compliance point must not exceed the following daily maximums:

DAILY MAXIMUM		EFFECTIVE DATE		
PARAMETERS	Nov. 19, 2014	Dec. 31, 2019	Dec. 31, 2023	
Total selenium (µg/L)	100	78	62	
Nitrate as N (mg/L)	29	17.0	15.0	

2.2.3 The authorized works associated with this compliance point are tailings impoundments, sedimentation and infiltration ponds, diversions, sewage treatment plants, antiscalant addition system, and related appurtenances.

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2.3 **GREENHILLS OPERATIONS – ELK RIVER COMPLIANCE POINT (GH ERC)**

This section applies to effluent from Teck Coal Limited mine operations (Greenhills Operations into the Elk River watershed) upstream of GHO Elk River Compliance Point (EMS E300090). The GHO Elk River Compliance Point (EMS E300090) is located 220 m downstream of Thompson Creek as shown in Appendix 1.

2.3.1 The characteristics of the effluent at the compliance point must not exceed the following monthly average limits:

MONTHLY AVERAGE PARAMETERS	EFFECTIVE DATE	
	Immediately	Dec. 31, 2027
Total selenium (µg/L)	15	8
Nitrate as N (mg/L)	3.0	3.0

2.3.2 The authorized works associated with this compliance point are tailings impoundments, sedimentation and infiltration ponds, diversions, sewage treatment plants and related appurtenances.

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**2.4 LINE CREEK OPERATIONS – LINE CREEK COMPLIANCE POINT (LC LCDSSLCC)**

This section applies to effluent from Teck Coal Limited mine operations (Line Creek Operations into the Line Creek Watershed) above LCO Compliance Point (EMS E297110). The LCO Compliance Point (EMS E297110) is located approximately 1500 m downstream of the West Line Creek Active Water Treatment Facility (WLC AWTF) outfall as shown in Appendix 1.

2.4.1 The characteristics of the effluent at the compliance point must not exceed the following monthly average limits:

MONTHLY AVERAGE		EFFECTIVE DATE		
PARAMETERS	Nov. 19, 2014	Dec. 31, 2015	Dec. 31, 2033	
Total selenium (µg/L)	80	50	29	
Nitrate as N (mg/L)	14	7.0	3.0	

2.4.2 The characteristics of the effluent at the compliance point must not exceed the following daily maximums:

DAILY MAXIMUM		EFFECTIVE DATE		
PARAMETERS	Nov. 19, 2014	Dec. 31, 2015	Dec. 31, 2033	
Total selenium (µg/L)	95	58	33	
Nitrate as N (mg/L)	20	9.0	4.0	

2.4.3 The authorized works associated with this compliance point are tailings impoundments, sedimentation and infiltration ponds, active water treatment facility, diversions, sewage treatment plants, and related appurtenances.

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Date amended: December 19, 2022  
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**2.5 ELKVIEW OPERATIONS – HARMER CREEK COMPLIANCE POINT (EV\_HC1)**

This section applies to effluent from Teck Coal Limited mine operations (Elkview Operations into the Harmer Creek watershed) above EVO Harmer Compliance Point (EMS E102682). The EVO Harmer Compliance Point (EMS E102682) is located at the Harmer Spillway as shown in Appendix 1.

2.5.1 The characteristics of the effluent at the compliance point must not exceed the following monthly average limits:

MONTHLY AVERAGE PARAMETERS	EFFECTIVE DATE		
	Nov. 19, 2014	Dec. 31, 2017	Dec. 31, 2021
Total selenium (µg/L)	45	57	57
Nitrate as N (mg/L)	4	16.0	8.0
Sulphate (mg/L)	300	380	450

2.5.2 The authorized works associated with this compliance point are sedimentation and infiltration ponds, diversions, and related appurtenances.

**2.6 ELKVIEW OPERATIONS – MICHEL CREEK COMPLIANCE POINT (EV\_MC2)**

This section applies to effluent from Teck Coal mine operations (Elkview Operations into the Michel Creek watershed) above EVO Michel Creek Compliance Point (EMS E300091). The EVO Michel Creek Compliance Point (EMS E300091) is located at the Highway 3 bridge over Michel Creek as shown in Appendix 1.

2.6.1 The characteristics of the effluent at the compliance point must not exceed the following monthly average limits:

MONTHLY AVERAGE PARAMETERS	EFFECTIVE DATE		
	Nov.19, 2014	Dec. 31, 2021	Dec. 31, 2025
Total selenium (µg/L)	28	20	19
Nitrate as N (mg/L)	6.0	6.0	6.0

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2.6.2 The authorized works associated with this compliance point are sedimentation and infiltration ponds, tailings impoundments, saturated rock fill treatment facility, diversions, sewage treatment plants, and related appurtenances.

2.7 **COAL MOUNTAIN OPERATIONS (CMO) – MICHEL CREEK COMPLIANCE POINT (CM MC2)**

This section applies to effluent from Teck Coal Limited mine operations (Coal Mountain Operations) above CMO Compliance Point (EMS E258937). The CMO Compliance Point (EMS E258937) is located 50 m upstream of Andy Goode Creek as shown in Appendix 1.

2.7.1 The characteristics of the effluent at the compliance point must not exceed the following monthly average limits:

MONTHLY AVERAGE	EFFECTIVE DATE
PARAMETERS	Nov.19, 2014
Total selenium (µg/L)	19
Nitrate as N (mg/L)	5.0
Sulphate (mg/L)	500

2.7.2 The authorized works associated with this compliance point are sedimentation and infiltration ponds, diversions, sewage treatment plant, and related appurtenances.


2.8 **LCO DRY CREEK SEDIMENTATION PONDS TO DRY CREEK**

This section applies to the discharge of effluent from the LCO Dry Creek (2) Sedimentation Ponds to Dry Creek. The site reference number for this discharge is E295211.

2.8.1 Dry Creek Benthic Invertebrate Tissue Selenium Concentration

The characteristics of benthic invertebrate tissue immediately downstream of the LCO Dry Creek Sedimentation Ponds discharge pipe to Dry Creek at monitoring location E326678 must not exceed the following limit:

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for Director, *Environmental Management Act*  
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EFFECTIVE DATE	April 1, 2023	
PARAMETER	LIMIT	METHOD/NOTES
Benthic invertebrate tissue selenium concentration	11 µg/g (dry weight)	Average of 5 replicate composite samples representative of the benthic invertebrate community calculated from measurements collected during the same sampling event

Monitoring location E326678 spans the 500 m long reach of Dry Creek between the following UTM locations as shown in Appendix 11a. The permittee must ensure sampling locations are distributed throughout the following 500 m long reach of stream representing exposure of fish to dietary selenium in this part of Dry Creek:

Location	Easting	Northing	coord_type_code
LC_DCDS (upstream extent)	657766	5542073	UTM_11N
500 m d/s LC_DCDS (downstream extent)	657548	5542477	UTM_11N

#### 2.8.1.1 Monitoring

The permittee must conduct quarterly monitoring of benthic invertebrates at E326678. Each monitoring event must include the collection of five replicate composite samples that represent the benthic invertebrate community collected on the same day. Samples must be analyzed for abundance and taxonomy, and selenium tissue concentration. A photograph must be taken of the benthic invertebrates collected for each sample sent for tissue analysis, and the location within each sampling reach must be recorded.

If environmental conditions prevent the permittee from collecting the samples during a quarter, the permittee must document the effort and reason that the samples could not be collected within the quarter.

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### 2.8.1.2 Reporting

The permittee must evaluate quarterly results from monitoring defined in Section 2.8.1.1 at E326678 against the benthic invertebrate tissue selenium concentration limit and submit a report to the director as per Sections 9.2.4 and 9.2.5 of this permit. The written quarterly report submitted in accordance with Section 9.2.4 must now include a summary of any benthic invertebrate tissue selenium concentration limit exceedances at E326678 and actions taken in response to any exceedances. The annual report submitted in accordance with Section 9.2.5 must now include a summary of all benthic invertebrate tissue selenium data collected throughout Dry Creek, including appropriate graphs and comparison of results to the permit limit, a description of actions taken in response to any exceedances, any new mitigation measures that were implemented, the status of investigations into alternative mitigation measures, and a schedule for proposed improvements.

For clarity, although the tissue selenium limit does not come into full effect until April 1, 2023, the permittee is required to fulfill the reporting requirements noted above beginning in the next quarter (Q2 2022), including identification of any levels above the future limit and associated actions taken to achieve the future limit.

- 2.8.2 The authorized works are the upper LCO Dry Creek Valley ditches, sumps, pumps, LCO Dry Creek rock drain, diversion embankment structure, dual lined head pond with leak detection and recovery system and spillway for flows in excess of Q10 up to Q200 flows, transfer pipeline, two dual lined sedimentation ponds with leak detection and recovery system and spillway for flows in excess of Q10, bypass works, return channel, decant structure, flocculant addition station, fish barrier and related appurtenances.
- 2.8.3 The location of the facilities from which the discharge originates and the location of the point of discharge is Lot 1 District Lot 4588, Kootenay District Plan NEP 21818. PID 019-075-308.

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2.8.4 Controlled Bypasses to LCO Dry Creek

Bypass of the LCO Dry Creek Sedimentation Ponds via the bypass works is authorized by Permit 5353 on a seasonal basis, during non-freshet flows to reduce or avoid the generation of bioavailable selenium. A record of bypass of the LCO Dry Creek Sedimentation Ponds must be presented in the quarterly and annual reports.

2.9 **LCO DRY CREEK SEDIMENTATION PONDS TO FORDING RIVER**

This section applies to the discharge of effluent from a diffuser and conveyance pipeline from the LCO Dry Creek (2) Sedimentation Ponds to the Fording River. The site reference number for this discharge is E295231.

2.9.1 The maximum authorized rate of discharge is the Q10 flow of 1.8 cubic meters per second.


2.9.2 The characteristics of the discharge must not exceed:

<b>Parameter</b>	<b>Limit</b>
Total Dissolved Solids	1,982 mg/L
Nitrate	141 mg/L
Total Cadmium	0.0014 mg/L
Total Selenium	0.32 mg/L
Sulphate	1067 mg/L

2.9.3 The authorized works are the upper LCO Dry Creek Valley ditches, sumps, pumps, LCO Dry Creek rock drain, diversion embankment structure, dual lined head pond with leak detection and recovery system and spillway for flows in excess of Q10 up to Q200 flows, transfer pipeline, two dual lined sedimentation ponds with leak detection and recovery system and spillway for flows in excess of Q10, return channel, decant structure, flocculant addition station, conveyance pipeline, outfall, diffuser, fish barrier and related appurtenances.

2.9.4 The location of the facilities from which the discharge originates is Lot 1 District Lot 4588, Kootenay District Plan NEP 21818. PID 019-075-308 and the location of the point of discharge is Lot 1 District Lot 4588, Kootenay District Plan 11279 except plans 572, 12976, NEP70655 and NEP70656.

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### 3. SITE PERFORMANCE OBJECTIVES

#### 3.1 SITE PERFORMANCE OBJECTIVES FOR ORDER STATIONS

The following Site Performance Objectives (SPO) are established at the Order Stations. It is expected that SPOs will be maintained during all timeframes shown in the tables or immediately maintained if no date is indicated. Site performance objectives are expressed as monthly average concentrations. The monthly average concentration is defined as the average of all samples collected in a calendar month.

ORDER STATION {Teck ID} (EMS number)	ORDER DESCRIPTION (Teck location description)	PARAMETER	UNIT	Nov. 19, 2014 <sup>3</sup>	Dec. 31, 2019 <sup>3</sup>	Dec. 31, 2023 <sup>3</sup>	Dec. 31, 2025 <sup>3</sup>	Dec. 31, 2028 <sup>3</sup>
FR4 {GH_FR1} (0200378)	Fording River Downstream of Greenhills Creek	Total Selenium	µg/L	-	63	57	57	57
		Nitrate as N <sup>2</sup>	mg/L	20	14.0	11.0	11.0	11.0
		Sulphate	mg/L	429	429	429	429	429
		Dissolved Cadmium <sup>1</sup>	µg/L	0.39	0.39	0.39	0.39	0.39
FR5 {LC_LC5} (200028)	Fording River at the Mouth (Fording River downstream of Line Creek)	Total Selenium	µg/L	-	51	40	40	40
		Nitrate as N <sup>2</sup>	mg/L	18	10.0	10.0	10.0	10.0
		Sulphate	mg/L	429	429	429	429	429
		Dissolved Cadmium <sup>1</sup>	µg/L	0.39	0.39	0.39	0.39	0.39
ER1 {GH_ER1} (206661)	Elk River downstream of Greenhills Operations (Upstream of Boivin Creek)	Total Selenium	µg/L	19	19	19	19	19
		Nitrate as N	mg/L	3	3.0	3.0	3.0	3.0
		Sulphate	mg/L	309	309	309	309	309
		Dissolved Cadmium <sup>1</sup>	µg/L	0.24	0.24	0.24	0.24	0.24
ER2 {EV_ER4} (200027)	Elk River from Fording River to Michel Creek (upstream of Grave Creek)	Total Selenium	µg/L	23	23	19	19	19
		Nitrate as N	mg/L	-	4.0	4.0	3.5	3.0
		Sulphate	mg/L	429	429	429	429	429
		Dissolved Cadmium <sup>1</sup>	µg/L	0.24	0.24	0.24	0.24	0.24
ER3 {EV_ER1} (200393)	Elk River downstream of Michel Creek	Total Selenium	µg/L	19	19	19	19	19
		Nitrate as N	mg/L	-	3.0	3.0	3.0	3.0
		Sulphate	mg/L	429	429	429	429	429
		Dissolved Cadmium <sup>1</sup>	µg/L	0.24	0.24	0.24	0.24	0.24

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ER4 {RG_ELKORES} (E294312)	Elk River at Elko Reservoir	Total Selenium	µg/L	19	19	19	19	19
		Nitrate as N	mg/L	-	3.0	3.0	3.0	3.0
		Sulphate	mg/L	429	429	429	429	429
		Dissolved Cadmium <sup>1</sup>	µg/L	0.24	0.24	0.24	0.24	0.24
LK2 (4)	Koocanusa Reservoir south of the Elk River	Total Selenium	µg/L	2	2	2	2	2
		Nitrate as N	mg/L	3	3.0	3.0	3.0	3.0
		Sulphate	mg/L	308	308	308	308	308
		Dissolved Cadmium <sup>1</sup>	µg/L	0.19	0.19	0.19	0.19	0.19

<sup>1</sup> Cadmium SPOs are hardness dependent based on the following formula:  
Cd (in µg/L) =  $10^{0.83\log_{10}(\text{hardness})-2.53}$  where hardness is in mg/L of CaCO<sub>3</sub>

<sup>2</sup> Nitrate SPOs for FR4 {GH\_FR1} as of 2023 and FR5 {LC\_LC5} as of 2019 are hardness dependent based on the following formula:

Level 1 benchmark for the Fording River N as mg/L =  $10^{1.0003\log_{10}(\text{hardness})-1.52}$  where hardness is in mg/L of CaCO<sub>3</sub>

For the purposes of calculating the targets above, hardness is based on the following concentrations:

FR4{GH\_FR1}, FR5{LC\_LC5}, and ER1{GH\_ER1} – 360 mg/L  
ER2{EV\_ER4}, ER3{EV\_ER1}, and ER4{RG\_ELKORES} – 200 mg/L  
LK2{RG\_DSELK} – 150 mg/L

<sup>3</sup> Effective Date

<sup>4</sup> These SPOs are compared to the average of all samples collected on the transect as described in Tables 2A and 26, and according to the following calculation:

$$CKMo = [\Sigma(\Sigma CD/ND)]/Nmo$$

Where:

- CKMo is the monthly average concentration at Koocanusa Reservoir Order station LK2;
- CD are the concentrations of samples collected at transect locations at all depths sampled on the same day;
- ND are the number of samples collected at transect locations at all depths sampled on the same day; and
- Nmo are the number of days sampled in the month.

### 3.2 TRIGGERS FOR REASSESSMENT OF LIMITS

In the event that a site performance objective listed in Section 3.1 is exceeded without an exceedance of limits in Section 2, the permittee must:

- Immediately notify the director and KNC of the exceedance;

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- ii. Re-sample within 7 days of receiving data to confirm results;
- iii. If the results continue to exceed an SPO, the permittee must re-assess discharge sources and determine appropriate limits for the compliance points detailed in Section 2, or new compliance points based on the re-assessment of discharge sources; and
- iv. Provide to the director and KNC an explanation of the temporary exceedance or an application for an amendment of this permit with new or revised Section 2 limits within 3 months.

The director may specify additional monitoring in the event of a continued exceedance.

### 3.3 SITE PERFORMANCE OBJECTIVES FOR COMPLIANCE POINTS

The following Site Performance Objectives (SPOs) are established at the Compliance Points for sites where permit limits have not been specified in Section 2. It is expected that the SPOs will be maintained during all time frames.

COMPLIANCE POINT	SITE PERFORMANCE OBJECTIVE	
GHO Fording River, GHO Elk River, LCO, EVO Michel Creek	Sulphate: BCWQG FWAL <sup>1</sup> (hardness dependent)	
	WATER HARDNESS <sup>2</sup> (mg/L)	SULPHATE GUIDELINE (mg/L)
	Very Soft (0-30)	128
	Soft to moderately soft (31-75)	218
	Moderately soft/hard to hard (76-180)	309
	Very hard (181-250)	429
	In addition, the following water quality benchmark as developed for the ABMP will be applied:	
Very hard (>250)	429	
All Compliance Points	Cadmium: $Cd \text{ (in } \mu\text{g/L)} = 10^{\{0.83(\log[\text{hardness}]) - 2.53\}}$ where hardness is in mg/L of CaCO <sub>3</sub>	

<sup>1</sup>BC Water Quality Guideline for Freshwater Aquatic Life

<sup>2</sup>Hardness is in mg/L CaCO<sub>3</sub>

Site performance objectives are expressed as monthly average concentrations. The monthly average concentration is defined as the average of the samples collected in a month.

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### 3.4 SITE PERFORMANCE OBJECTIVES – CALCITE


The permittee must manage calcite levels in streams in Management Units 1, 2, 3, and 4 for streams that are fish bearing, provide fish habitat or flow directly into fish bearing streams and are not scheduled by an Environmental Assessment Certificate or *Mines Act* Permit to be buried. These streams must meet the following Site Performance Objectives:

- 1) By December 31, 2024  $CI_{Conc} \leq 0.50$
- 2) By December 31, 2029  $CI_{total} \leq 0.50$

***Where:***

CI <sub>total</sub> :	Calcite Index (total)	=	CI <sub>Conc</sub> + CI <sub>Pres</sub>
CI <sub>Conc</sub> :	Calcite Concretion	=	$\frac{\text{Sum of pebble concretion scores}}{\text{Number of pebbles counted}}$
CI <sub>Pres</sub> :	Calcite Presence	=	$\frac{\text{Number of pebbles with calcite}}{\text{Number of pebbles counted}}$

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### 3.5 LCO DRY CREEK WATER MANAGEMENT AND SITE PERFORMANCE OBJECTIVES

#### 3.5.1 LCO DRY CREEK WATER MANAGEMENT PLAN

The Permittee shall develop and implement an LCO Dry Creek Water Management Plan to achieve Site Performance Objectives while maintaining Minimum Instream Flow Requirements in order to minimize impacts to fish habitat. The Plan must clearly identify proposed works, management actions and contingencies to ensure that the Site Performance Objectives and Minimum Instream Flow Requirements will be met.

3.5.1.1 Approval of the Dry Creek Water Management Plan (dated December 23, 2015) was subject to the following conditions:

- i. Teck will participate in a process with KNC and MOE to establish long-term Site Performance Objectives (SPO) and in-stream Flow Requirements for LCO Dry Creek and provide the required information for review in a timely manner. In this regard, reference is made to the recommended actions found in Table 1 of the MOE memo dated February 10, 2015 (S. Reddekopp to J. Carmody-Fallows). Teck is requested to provide submissions for a decision making framework for this process by September 30, 2015.
- ii. All inflows into the LCO Dry Creek Sediment Ponds must discharge through the return channel back into LCO Dry Creek until December 31, 2019, with the exception of the commissioning period and during scheduled maintenance of the ponds.
- iii. For the purposes of commissioning the sediment ponds (diverting water to fill the ponds) and routine maintenance of the ponds Teck must maintain a minimum instream flow requirement of 20% MAD in LCO Dry Creek.
- iv. Teck will provide the predicted monthly mean SPO constituent concentrations at the SPO location (E295210) and at the mouth of LCO Dry Creek (E288270), for all months up to January 1, 2020. This summary shall be submitted to the Director by May 30, 2015.

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- v. Teck will update the December 15, 2014 LCO Nitrate Management Plan to control nitrate releases from the site. The updated Nitrate Management Plan must be implemented and submitted to the Director by June 1, 2015.
- vi. Teck shall take reasonable efforts to collect at least two years of continuous monitoring at the East Tributary of LCO Dry Creek (E288274) and at LCO Dry Creek near its Mouth (E288270) for the purposes of updating the streamflow model. Teck shall develop and implement contingencies to maintain continuous data collection at the LCO Dry Creek Station.

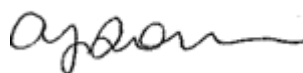
Teck must report on and provide detail demonstrating how mine affected surface and sub-surface water is being captured by the lined head pond and embankment in its next annual report (2015), and provide an estimate of the proportion of mine-affected water (surface and sub-surface) that is not captured by the system in its subsequent annual reports, required initially by OIC Permit 106970, and currently by Permit 107517.

### 3.5.1.2 Updated LCO Dry Creek Water Management Plan

The updated Dry Creek Water Management Plan will include proposed long-term SPOs and IFRs for LCO Dry Creek along with proposed timing for when they come into effect and a plan and schedule for implementation of active water treatment. The submission date for the updated LCO Dry Creek Water Management Plan is April 30, 2020, with the following conditions:

- 1) Teck Coal Ltd. Shall continue to provide bi-weekly updates to the Director and members of the Structured Decision-Making Process and studies to date until the SDM process is complete. Once the SDM process is completed Teck shall provide updates on water quality results and the status of work in Dry Creek related to the DCWMP to the Director, KNC, and EMLI at a minimum on a quarterly basis between October and April each year and on a monthly basis during bypass of the LCO Dry Creek Sedimentation Ponds via the bypass works.
- 2) Teck will provide a progress report on the SDM process to the Director on December 15, 2019. The progress report must include:
  - a. Summary of the investigations to date;

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- b. Mitigation measures and a schedule for implementation to prevent/reduce selenium bioaccumulation in aquatic species; and
- c. Updated schedule for the SDM process to ensure submission of the updated plan by April 30, 2020.

3) Teck must provide a comprehensive findings report from its investigations and studies regarding the unexpected Se concentrations and unexpected Se bioaccumulation in LCO Dry Creek to the working group and Director in support of the updated LCO Dry Creek Water Management Plan on April 30, 2020.

### 3.5.2 INSTREAM FLOW REQUIREMENTS

3.5.2.1 Minimum Instream Flow Requirements (IFRs) for LCO Dry Creek will be developed by the Director for the protection of fish habitat. Minimum IFRs shall be developed in consultation with the Permittee. Minimum IFRs for LCO Dry Creek must be met each and every year once waste rock placement in the LCO Dry Creek watershed commences.

#### 3.5.2.2 Interim Instream Flow Requirements

Commencing on January 1, 2020, Interim Instream Flow Requirements for LCO Dry Creek must be met if the Permittee discharges to Fording River through the LCO Dry Creek Water Management System. These Interim Flow Requirements for LCO Dry Creek will be the values outlined below or as otherwise specified by the Director as the result of a process with KNC and MOE to establish long-term SPO and Instream Flow Requirements for LCO Dry Creek.

- Aug 1 – Apr 1, 20% Mean Annual Discharge (MAD); for the purpose of summer rearing and overwintering periods
- Apr 15 – Apr 30, 50% MAD; for the purpose of natural freshet ramp-up
- May 1 – May 14, 100% MAD; for the purpose of braided areas, side channel connectivity
- May 15 – June 14, 209% MAD for the purpose of migration and spawning
- June 15 – July 14, 105% MAD for the purpose of out-migration
- July 15 – July 31, 40% MAD for the purpose of out-migration, incubation

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3.5.2.3 The Mean Annual Discharges for LCO Dry Creek and the East Tributary are as follows:

LCO Dry Creek – 0.382 m<sup>3</sup>/s

East Tributary – 0.113 m<sup>3</sup>/s

3.5.2.4 In the event that the stream flow in the East Tributary drops below East Tributary IFRs, a LCO Dry Creek IFR adjustment shall be calculated using the following equation:

$$\text{(Modified DryCreekIFR)} = \text{(Dry Creek IFR)} * \frac{\text{(EastTributaryStreamFlow)}}{\text{(EastTributaryIFR)}}$$

### 3.5.3 SITE PERFORMANCE OBJECTIVES

The following Site Performance Objectives (SPOs) are established for LCO Dry Creek, Unnamed Creek and Grace Creek:

Parameter	Objective
Total Selenium	<0.010 mg/L
Total Cadmium	<10 [log 1-0.83*(log 700 – log H)] To a maximum of 0.00038 mg/L (H = site water hardness as CaCO <sub>3</sub> )

3.5.3.1 The requirement to meet SPOs for LCO Dry Creek in Section 3.5.3 is suspended until January 1, 2020. Prior to this date the Director may re-establish or set alternative SPOs as deemed necessary by the Director for the protection of the environment. The permittee may convey water to the Fording River to maintain any established SPOs provided IFRs are maintained.

A plan and schedule for implementation of active water treatment to the Director’s satisfaction must be submitted to the Director by December 31, 2019, or earlier if required by the Director.

3.5.3.2 The Director may require the Permittee to develop and implement a plan to achieve the Site Performance Objectives at the mouth of Unnamed Creek (E295213) and/or at Grace Creek upstream of the CP rail tracks (E288275). The plan shall be to the satisfaction of the Director.

3.5.3.3 The Permittee must undertake a comprehensive review of the Site Performance Objectives every three years. The review should consider all available general and site-specific data and science, including but not

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limited to: The Elk Valley Area Based Management Plan, B.C. Water Quality Guidelines and standards from other jurisdictions, water quality sampling and Aquatic Effects Monitoring Program results, mixtures toxicity testing results, the Upper Fording River Westslope Cutthroat Trout Population Study, and other special studies and relevant research. Terms of Reference for the first review must be submitted to the Director for approval, by March 31, 2017. The next review of Site Performance Objectives must be submitted to the Director by March 31, 2023. The Director may require an earlier review if significant information becomes available.

**3.5.4 ESTABLISHING LONG-TERM SITE PERFORMANCE OBJECTIVES AND INSTREAM FLOW REQUIREMENTS**

To support the process for developing long term SPOs and IFRs for LCO Dry Creek, Teck is required to undertake the following:

- i. Completion of an Interim Report for the Tributary Management Plan by July 31, 2017.
- ii. Compilation of all available chronic toxicity and water quality monitoring data through August 31, 2016. The data must be provided to the Director and KNC for review by September 30, 2016.
- iii. Submission of the report to the Director validating the Westslope Cutthroat Trout Habitat Suitability Index Model as required by Condition 13 of EAC #13-02 by August 31, 2016.
- iv. Submission of the instream flow needs study required by Condition 14 of EAC#13-02 but August 31, 2017. In addition, Teck must include a review of frequency analysis, using intensity-duration-frequency curves, to ensure appropriateness and applicability.
- v. Submission of an updated streamflow model (based on the UBC Watershed Model) using all available data to September 30, 2016.
- vi. Submission of an options analysis on the SPOs and IFRs and the DCWMP by October 30, 2016, which shall include the following:
  - a. An evaluation of the resultant flow impacts to LCO Dry Creek under differing SOP values ranging from the original SPO in OIC 106970 (10 ug/L) to that proposed in the 2014 DCWMP for the date December 23, 2024 (70 ug/L), and timelines for when conveyance might be required to meet the specific SPO.

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- b. An evaluation of other potential mitigations explored by Teck to meet both instream flow requirements and site performance objectives.
- c. Proposed triggers for construction of active water treatment, conveyance or other necessary mitigations.
- vii. Teck shall provide progress reports to MOE and KNC on July 30, 2015, and January 31, 2016, regarding the above requirements.
- viii. An additional progress report regarding the requirements of the LCO Dry Creek Water Management Plan approval must be made to the Director and to KNC by November 30, 2016.

### 3.5.5 Best Achievable Technology Assessment

The permittee must cause a Qualified Professional to complete two site-specific Best Achievable Technology (BAT) assessments in accordance with ENV's Best Achievable Technology Assessment policy and the terms of reference provided in Appendix A. The 2022-2025 BAT assessment must be submitted to the director by January 17, 2022 and the 2026 BAT assessment must be submitted to the director by February 28, 2022.

The purpose of the BAT assessments is to (1) identify the potential technologies that could be implemented to mitigate mining-related effects in Dry Creek, (2) assess each option to understand its feasibility, reliability, control-effectiveness, cost-effectiveness, and implementation timelines, and (3) select the option(s) demonstrated to be best-suited to meet waste discharge standards in Dry Creek. The permittee must use the selected option(s) and additional strategies, if appropriate, to develop a complete mitigation strategy for Dry Creek. The permittee must predict receiving environment water quality for the mitigation strategy at monitoring station LC\_DCDS using the 2020 Regional Water Quality Model.

### 3.5.6 Initial Dilution Zone Assessment

For the proposed conveyance and supplementation project the permittee must cause a Qualified Professional to complete an Initial Dilution Zone (IDZ) assessment in accordance with the methodology described in the December 10, 2021 technical memo prepared by Golder Associates Ltd. Entitled *Proposed Fording River Diffuser, Initial Dilution Zone* and ENV's *Technical Guidance 11 – Development and Use of Initial Dilution Zones in Effluent Discharge Authorizations* and submit it to the director by January 28, 2022. The assessment must include an analysis of the incremental effect of the discharge and IDZ on aquatic health in the Fording River.

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#### 4. TRIBUTARY EVALUATION AND MANAGEMENT

The permittee must develop and implement a phased study design for a Tributary Evaluation Program and develop and implement a Tributary Management Plan. The Tributary Evaluation Program and the Tributary Management Plan must include all tributaries affected or potentially influenced by the permittee's current operations and future development plans in Management Units 1, 2, 3, and 4, as defined in the Elk Valley Water Quality Plan.

The Tributary Evaluation Program is intended to evaluate the ecological value of tributaries to the Elk and Fording Rivers to support identification of tributaries that play a significant role in supporting the health of the ecosystem as a whole. The Tributary Evaluation Program must include the following elements:

- i. Inventory of tributaries to the Elk and Fording Rivers that are located in Management Units 1, 2, 3, and 4 that are affected or potentially influenced by the permittee's current and future development plans;
- ii. Maps of Management Units 1, 2, 3, and 4 showing the locations of the tributaries of the Elk and Fording Rivers, and identifying the tributaries that are affected or potentially influenced by the permittee's current and future development plans;
- iii. Collation of existing and readily available data and information on each tributary, including surface-water chemistry, surface-water toxicity, sediment chemistry, sediment-toxicity, calcification, flow, habitat value ranking, benthic invertebrate community structure, and habitat use by fish and/or sensitive aquatic dependent wildlife (i.e., water birds);
- iv. Evaluation of historical (i.e. conditions relevant to the 1980 timeframe, where available) and current habitat value, based on surface-water quality, sediment quality, extent of calcification, flow, amount of habitat available, habitat types, physical features, connectivity to fish habitat, status of riparian habitat, and habitat use by fish and sensitive aquatic dependent wildlife species;
- v. Evaluation of the potential for rehabilitation of aquatic and riparian habitat and potential for improvement of water quality conditions; and
- vi. Prioritization of each tributary for ongoing protection and/or restoration based on the evaluation of current ecological value, potential for rehabilitation, and potential to contribute to the objectives of the EVWQP.

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The purpose of this evaluation is to provide context for the development of specific management objectives for tributaries included in the Tributary Management Plan. As the Tributary Evaluation Program will also provide essential information for assessing the potential effects of planned mine expansions and new projects, the components of the program that relate to the upper Fording River and the Michel Creek watershed should be completed on a priority basis as part of the phased study design.

Following the evaluation of the tributaries, the permittee must develop and implement a Tributary Management Plan. The Tributary Management Plan is intended to incorporate protection and rehabilitation goals for tributaries that will support achieving the area-based objectives of the Elk Valley Water Quality Plan. In development of the Tributary Management Plan, those tributaries that are not impacted by mining activities, that provide relatively high habitat value, and/or support ongoing habitat use by fish and sensitive aquatic dependent wildlife (i.e. directly or indirectly through food production) shall be identified as the highest priority tributaries for permanent protection. Those tributaries that have been impacted by mining, provide or have the potential to provide relatively high habitat value, and/or support or could support habitat use by fish and sensitive aquatic dependent wildlife shall be identified as the highest priority tributaries for restoration/rehabilitation. The Tributary Management Plan will consider the permittee's future mine development plans. The scope of the Tributary Management Plan excludes tributaries that have been permanently removed or severely altered (e.g., covered by waste spoils or other mine infrastructure or dewatered) by mining activities within the permittee's current mine permit boundaries. Loss of habitat for such tributaries is governed by requirements under the Federal *fisheries Act* and the provincial mitigation policy.

The Tributary Evaluation Program and Tributary Management Plan will complement the Elk Valley Water Quality Plan and clearly detail any proposed management of water quality conditions, flows and ecological values within the tributaries affected or influenced by the permittee's current operations and planned developments in Management Units 1, 2, 3, and 4, as defined in the Elk Valley Water Quality Plan.

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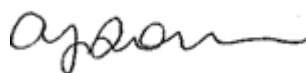


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The following development and implementation timelines apply:

- 1) A Phased Study Design for the Tributary Evaluation Program, including a listing of all tributaries to be evaluated, must be submitted to the EMC by May 1, 2015.
- 2) The Phased Study Design for the Tributary Evaluation Program must be submitted for acceptance to the director by May 31, 2015.
- 3) The Terms of Reference for the Tributary Management Plan must be submitted to the EMC by March 31, 2016.
- 4) Data collected during the Tributary Evaluation Program for current ecological value of tributaries within Management Units 1, 2, 3 and 4 must be compiled into a written report and submitted to the EMC by March 31, 2016.
- 5) Analysis and interpretation of Tributary Evaluation Program data, assessment of potential for rehabilitation and/or mitigation, and prioritization of tributaries for potential future habitat rehabilitation must be compiled into a written interim report and submitted to the EMC by August 31, 2016.
- 6) Interim Tributary Management Plan report must be submitted to the EMC by July 31, 2017. The Tributary Management Plan must be submitted for acceptance to the director by December 31, 2017. The Tributary Management Plan must be implemented by March 1, 2018.
- 7) An updated Tributary Management Plan must be submitted for acceptance to the director by July 31, 2020. Thereafter, the Plan must be updated and submitted for acceptance to the director by July 31<sup>st</sup> every three years. Updated Tributary Management Plans must be prepared in consultation with the EMC. The updates shall, at a minimum, incorporate any changes to the permittee's current and future development plans.
- 8) The accepted Tributary Management Plan must be implemented, and an annual implementation report must be submitted to the director and to the EMC by January 31<sup>st</sup> of each year. The annual report must describe implementation activities undertaken in tributaries in the Designated Area including those under the Tributary Management Plan itself, other legal requirements and other supporting programs, in the previous 12 months to rehabilitate impacted tributaries and protect high value, unimpacted tributaries.

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## 5. CONTAMINANT MANAGEMENT PLANS

### 5.1 CALCITE MANAGEMENT PLAN

The permittee must update and submit the Calcite Management Plan to the satisfaction of the director, as outlined in Chapter 7 of the Elk Valley Water Quality Plan, by July 31, 2016 and every three years thereafter. The Calcite Management Plan must include a list of streams that according to Section 3.4 must meet the Calcite Site Performance Objectives and provide a schedule for implementation of mitigation measures. Mitigation measures must be implemented according to the schedule.

Refer to Appendix 5 for calcite treatment facility operational requirements.

#### 5.1.1 Antiscalant Effects Assessment

The permittee must develop and implement a study design for assessing the cumulative effects of regional antiscalant application in parallel to work being undertaken by the permittee in accordance with Sections 3.4 and 5.1. The study design must be reviewed by the EMC prior to submission to the director. The assessment must include the permittee's operating calcite treatment facilities and future planned calcite treatment facilities as outlined within the 2022 Calcite Management Plan.

The purpose of this assessment is to evaluate the potential effects of planned calcite treatment projects on a regional scale. The assessment must address the potential toxic effects of exposure of ecological and human receptors to antiscalant addition as well as to modelled concentrations of metal constituents typically attenuated during calcite formation. Should the assessment demonstrate that the planned calcite treatment projects represent an unacceptable level of risk to the environment or human health, the director may require submission of an interim Calcite Management Plan.

The following timelines apply:

- i. A study design for the Antiscalant Effects Assessment must be submitted to the director, for approval, by April 20, 2022.
- ii. Analysis and an integrated interpretation of Antiscalant Effects Assessment data in the Elk River Watershed and evaluation of

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the potential for antiscalant cumulative effects must be compiled into a written report and submitted to the director and the EMC by June 2, 2023. The assessment must be accompanied by recommendations from a Qualified Professional regarding whether any changes or updates are needed to the most recent version of the Calcite Management Plan.

## 5.2 NICKEL MANAGEMENT

### 5.2.1 Development of Nickel Benchmark

The permittee must develop a nickel benchmark derivation workplan and submit it to the director for approval by August 31, 2021. The workplan must incorporate feedback from the EMC and include proposed methodologies and timelines for the derivation of a nickel benchmark that could be applied in the receiving environment of the Elk Valley.

The permittee must provide the final nickel benchmark to the director for approval by August 31, 2022.

Once the final nickel benchmark is approved, the director may require additional mitigation to be implemented.

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## 5.2.2 ELKVIEW OPERATIONS

### 5.2.2.1 Trigger Response Plan for Nickel

The permittee must develop and implement a Trigger Response Plan (TRP) for nickel. The July 14, 2021 EVO SRF Nickel TRP must be updated and submitted by June 3, 2022 to the director for approval. The permittee must notify the director at least 15 days prior to implementing any proposed changes to the TRP once approved. The TRP must describe the operational and management actions to be taken if total nickel concentrations in the effluent exceed an initial trigger value of 36 µg/L, calculated as a quarterly (13-week) rolling average at the Effluent Retention Pond Outlet (F2\_BPO, E321812), and any updated triggers, when the SRF is discharging to Erickson Creek.

The purpose of the TRP is to ensure that procedures to manage nickel concentrations in the effluent are implemented in a timely manner to minimize risks associated with elevated nickel concentrations in the receiving environment of Erickson Creek. The TRP procedures must include, but not be limited to, specific management actions to be implemented where trigger exceedances are confirmed, and a schedule for implementation of the management actions.

The permittee must cause a Qualified Professional to complete a Best Achievable Technology (BAT) Assessment in accordance with the June 2, 2022 Terms of Reference and submit it to the director by October 28, 2022. The purpose of the BAT Assessment is to (1) identify the potential technologies or options that are feasible and could be implemented to manage nickel concentrations in EVO SRF Phase 2 effluent with the objective of achieving or improving upon the level 2 nickel interim screening value for invertebrates at EV\_ECOUT (E321814), (2) evaluate each feasible technology or option, including for reliability, control-effectiveness, cost-effectiveness and implementation timeframe, and (3) recommend a technology or option that could be implemented in the interim before long-term nickel BAT can be recommended and verified.

The permittee must review and update the TRP by June 1, 2023. The updated TRP must be submitted to the director and must include consideration of:

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- i. The final approved nickel benchmark as per Section 5.2.1,
- ii. Results from the Elkview Operations Local Aquatic Effects Monitoring Program as per Section 8.3.5, and
- iii. any other relevant plans, data or information.


### 5.3 NITROGEN SOURCE CONTROL PLAN

The permittee must develop a Nitrogen Source Control Plan that applies to operations at each of the Teck Coal Mine Sites in the Designated Area prepared by a Qualified Professional. The Nitrogen Source Control Plan must be submitted to the director by May 31, 2021. The plan must include, at a minimum, the following:

- i. A discussion of the current state of understanding of the physical and biogeochemical processes occurring within and downgradient of waste rock spoils as a result of loss of nitrogen species to the environment from blasting practices.
- ii. A discussion of nitrogen speciation, interaction effects with other Parameters of Concern, changes to concentrations over time, etc.
- iii. A description of management strategies that have been and will be implemented to prevent the loss of nitrogen species to the environment. Each nitrogen management strategy must be coupled with measurable key performance indicators (KPIs) and/or management performance metrics, with timelines for achievement, that will allow the success of each management strategy to be measured.

The submitted Nitrogen Source Control Plan must be implemented and any updates to the plan must be submitted to the director within 30 days of adoption.

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## 6. GENERAL REQUIREMENTS

### 6.1 MAINTENANCE OF WORKS AND EMERGENCY PROCEDURES

The permittee must inspect the authorized works regularly and maintain them in good working order. In the event of a condition or emergency which prevents effective operation of the authorized works, leads to unauthorized discharge, or results in a permit exceedance, the permittee must:

- i. Comply with all applicable statutory requirements, including the Spill Reporting Regulation;
- ii. Immediately contact the director or an officer designated by the director by e-mail and/or telephone;
- iii. Take immediate appropriate remedial action for the prevention or mitigation of pollution; and
- iv. Submit written documentation of any malfunction or emergency condition. The report must include all the corrective and preventative actions that will be taken, a schedule of implementation of actions and the date the findings as to the cause of the incident will be reported to the director and KNC. This information must be submitted with the next quarterly report required in Section 9 unless otherwise required by the director.

During an emergency event, the director may suspend conditions under this permit where the emergency event will prevent compliance with a requirement of this permit.

During and/or after the emergency event or condition, the permittee must conduct appropriate sampling and analysis of discharges, which may be more stringent than the monitoring requirements of this permit and/or applicable statutory requirements. As the results of such sampling become available, the permittee must provide the results to the director or a designated officer. The director may require additional monitoring or reporting at any time by specifying such in writing to the permittee.

The director may specify contingency actions to be implemented to protect human health and the environment while authorized works and/or standard operating procedures are being restored.

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## 6.2 EFFLUENT NON-TOXICITY

- 6.2.1 Effluent is not acutely toxic if it does not cause greater than 50% mortality in 96 hr Rainbow Trout (*Oncorhynchus mykiss*) single concentration toxicity tests (EPS 1/RM/13 2<sup>nd</sup> edition, December 2000) or greater than 50% mortality in 48 hr *Daphnia magna* single concentration toxicity tests (EPS 1/RM/14 2<sup>nd</sup> edition, December 2000).
- 6.2.2 Where acute toxicity testing is required at discharge monitoring sites in Appendix 2 Tables 10 through 25, effluent must not be acutely toxic, as per Section 6.2.1.

## 6.3 CONTROLLED BYPASSES

Bypass of the authorized works, except for the two (2) LCO Dry Creek Sedimentation Ponds seasonally during non-freshet flows as per Section 2.8.3, calcite treatment facilities as per Appendix Section 5A3 and selenium and nitrate treatment facilities as per Appendix Sections 4C3.5, 4D2.3, and 4E2.3 is prohibited unless the prior approval of the director is obtained and confirmed in writing. The director may specify conditions to address the bypass.

## 6.4 QUALIFIED PROFESSIONAL

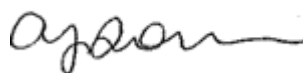
A qualified professional is defined as follows:

"Qualified Professional" means an applied scientist or technologist specializing in an applied science or technology applicable to the duty or function, including, but not limited to agronomy, biology, chemistry, engineering, geology or hydrogeology and who:

- i. is registered with the appropriate professional organization, is acting under that organization's code of ethics and is subject to disciplinary action by that organization, and
- ii. through suitable education, experience, accreditation and/or knowledge, may be reasonably relied on to provide advice within their area of expertise.

All documents submitted to the director by a Qualified Professional must be signed by the author(s).

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## 6.5 ENVIRONMENTAL EMERGENCY RESPONSE PLAN

The permittee must maintain an Environmental Emergency Response Plan which includes effective procedures for responding to all probable environmental emergencies associated with the Teck Coal operations and mine site areas, including the suspension of discharge of effluent(s) where appropriate, if required. The permittee must keep this plan up to date and provide the director with any updates to this plan within 30 days of adoption of the plan update.

The director may require periodic review of the response plan, and/or a report on any emergency event associated with the mine operation or occurring at the mine site.

### 6.5.1 The Emergency Response Plan must at a minimum include:

- i. Identification of Environmental Aspects as defined by the ISO 14001 Environmental Management System Standards that pose a risk to the environment or public safety;
- ii. An evaluation of the identified environmental aspects including a fate and effects assessment where applicable;
- iii. Maps identifying areas of high environmental sensitivity around the mine sites including along the transportation corridors, and areas downstream of water-crossings where spilled materials can reasonably be anticipated to impact;
- iv. Site specific spill response tactics, including the required training and resources to implement those tactics for each of the identified materials or risks during an emergency event;
- v. Requirements and procedures for spill reporting and/or emergency notification to various levels of government, including the KNC; and
- vi. Procedure for establishing formal interagency communication for the duration of the emergency and clean-up as necessary.

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- 6.5.2 The permittee must maintain an Environmental Emergency Response Plan and ensure:
- i. Adequate equipment caches are available at each operation, at a minimum, to enable timely and effective response to the identified highly sensitive areas and implementation of the plan;
  - ii. Identify, train and have available a sufficient number of emergency responders to effectively and efficiently respond and implement the identified emergency response tactics;
  - iii. Conduct regularly scheduled emergency response drills and exercises to test and refine the plan; and
  - iv. Participate in efforts to harmonize spill response kits and plans with other industrial operators and municipalities.

6.6 **PUBLIC NOTIFICATION REGARDING POTABLE WATER USE IN ELK VALLEY**

The permittee must provide annual notification to all current water users (specifically surface and shallow groundwater users along the Fording and Elk Rivers) downstream of the Teck Operations, where impacts from mining are causing exceedances of the British Columbia Drinking Water Quality Guidelines. The notification must:

- i. Advise current water users in the Elk Valley of the risks for drinking water sources to exceed drinking water guidelines
- ii. Remind all water users to have their source water sources tested to identify if treatment is required prior to drinking;
- iii. Have the same information accessible and maintained on the Internet; and
- iv. Annually by March 31, submit a written report to the director describing compliance with the requirements of this section for the previous year.

A draft of the notification must be submitted to Interior Health (email: [hbe@interiorhealth.ca](mailto:hbe@interiorhealth.ca)) and to the director 30 days prior to distribution. This notification requirement must continue until such time as water quality in the affected areas improves such that BC Drinking Water Quality Guidelines are achieved for mining-related Parameters of Concern determined through the Regional Groundwater Monitoring Program.

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## 6.7 SPLIT SAMPLE AUDIT FAILURE

The permittee may be required to participate in a split sample audit, in accordance with the Environmental Data Quality Assurance Regulation. If the Ministry determines the results of the Split Sample Audit to be a failure, the permittee will be notified.

In the event of a split sample audit failure, the permittee must immediately, following receipt of the notification of the failure, conduct an investigation into the root cause of the failure. A report summarizing the current results of this investigation must be submitted to the director as part of the Annual Report for the year in which the notification of the split sample audit failure was issued to the permittee. This report must include, but not necessarily be limited to, the following information:

- a) Cause of failure; and
- b) Steps taken and/or planned to prevent reoccurrence.

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## 7. ABMP COMMITMENTS

The following section identifies specific commitments made by the permittee in the Elk Valley Area Based Management Plan.

The permittee must aggressively pursue all viable approaches for reducing contaminant loadings to the environment and implement in a timely manner. Treatment approaches include passive and active water treatment.


### 7.1 IMPLEMENTATION PLAN

7.1.1 The permittee must cause a Qualified Professional to develop an Implementation Plan and submit it to the director, with a copy provided to the Ministry of Energy, Mines and Low Carbon Innovation Chief Permitting Officer, by July 31, 2022, April 30, 2025 and every third year after that.

The Implementation Plan must:

- 7.1.1.1 Demonstrate how the Compliance Point limits and Site Performance Objectives for Compliance Points and Order Stations for the Order Constituents will be met, using the most recent Regional Water Quality Model described in Section 9.9, the most recent permitted development for the permittee's five Elk Valley coal mine sites, and by implementing Best Achievable Technology, including effluent treatment technologies that have been accepted for use in mitigation planning;
- 7.1.1.2 Clearly identify the proposed location, treatment sources, capacity, and Operational Date for each proposed effluent treatment facility;
- 7.1.1.3 Provide water quality projections for Order Constituents at Compliance Points and Order stations for the Permitted Development Planning Period;
- 7.1.1.4 Be modified or amended by a Qualified Professional as required by the director, and the permittee must, within the timeframe specified by the director, resubmit to the director the Implementation Plan with any required modifications or amendments; and,

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7.1.1.5 Be developed in accordance with the approved Terms of Reference described in Section 7.1.3.

7.1.2 The permittee must submit Regional Water Quality Model output data in digital spreadsheet format (i.e., Microsoft Excel) for the Implementation Plan scenario including projected monthly average concentrations under the range of projections used for mitigation planning.

7.1.3 The permittee must develop a Terms of Reference for the Implementation Plan update. The Terms of Reference must describe the treatment-related model assumptions used, the sensitivity scenarios, and other expectations for the update. The permittee must submit the initial Terms of Reference to the director, with a copy provided to the Ministry of Energy, Mines and Low Carbon Innovation Chief Permitting Officer, for approval, by April 30, 2024, and updates must be provided every third year thereafter.

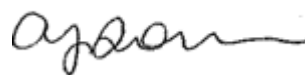
7.1.4 The director may consider the Implementation Plan and/or request additional information to update other requirements such as those in Section 7.2 of this permit.

## 7.2 TREATMENT

### 7.2.1 ACTIVE WATER TREATMENT FACILITIES

The permittee must design, construct and operate the following active water treatment facilities (AWTF) or alternative water treatment technology as approved by the director, by the date shown. The permittee must employ best achievable technology in the development of these treatment facilities. Phosphorus treatment must be included if necessary, to ensure BC Water Quality Guidelines for chlorophyll -a for freshwater aquatic life in streams is met.

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TREATMENT FACILITY	TREATMENT SCOPE	APPROXIMATE CAPACITY OF AWTF	OPERATIONAL DATE
Fording River South	Cataract, Swift, Kilmarnock Creeks	20,000 m <sup>3</sup> /day	December 31, 2018
Elkview Phase I*	Bodie, Gate, Erickson Creeks	30,000 m <sup>3</sup> /day	December 31, 2020
Fording River North	Clode Creek, North Spoil, Swift Pit	15,000 m <sup>3</sup> /day	December 31, 2022
Elkview Phase II	Erickson	20,000 m <sup>3</sup> /day	December 31, 2024
Greenhills	GHO West Spoil (Thompson, Leask, Wolfram), Greenhills Creek	7,500 m <sup>3</sup> /day	December 31, 2026
Fording River North Phase II	Swift Pit Discharge	15,000 m <sup>3</sup> /day	December 31, 2030

\*Elkview Operations SRF Phase 2 replaces Elkview Phase I

Notwithstanding the above requirements to construct and operate active water treatment facilities, the permittee must ensure that all necessary active water treatment works or alternative water quality mitigation works are designed, constructed and operated in sufficient time and at sufficient capacity to meet targets and timeframes for water quality consistent with the ABMP.

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## 7.3 RESEARCH AND TECHNOLOGY DEVELOPMENT

### 7.3.1 RESEARCH ACTIVITIES

- i. The permittee must conduct a research and technology development program aimed at:
  - a) Identifying, evaluating, and verifying measures to minimize the release of selenium, nitrate, sulphate, cadmium, calcite, and any other Parameters of Concern designated by the director; and
  - b) Developing mitigation strategies to improve the management of water quality and calcite within the Designated Area.
- ii. Research and technology development activities must specifically include research to identify, evaluate, and validate measures to reduce the reliance on long term active water treatment.
- iii. Research areas must include, but not be limited to, the following topics:
  - a) geochemical release mechanisms, release rates and relationships between factors that influence contaminant release;
  - b) saturated and unsaturated flow mechanisms in waste piles;
  - c) mine waste rock management and dump design alternatives;
  - d) cover systems including soil and vegetative covers, complex soil covers and geomembranes;
  - e) water capture, diversion and conveyance systems;
  - f) active and semi-passive water treatment, including partially saturated waste rock fills;
  - g) water treatment residuals management;
  - h) treatment strategies for phosphorus reduction;
  - i) treatment strategies for sulphate and cadmium reduction, if needed in the future;
  - j) nitrate reduction through treatment and improved blasting practices; and,
  - k) predictive tools and treatment/management technologies for calcite formation.

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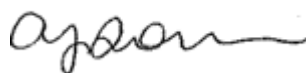
- iv. All on-site field trials for mitigation strategies and on-site piloting work for water treatment must be discussed with the director to determine whether they will require permit amendments before proceeding.

### 7.3.2 REPORTING

The permittee must submit an annual Research and Technology Development Progress Report by March 31<sup>st</sup> of each year that contains:

- i. A detailed rationalization of the overall research program including reasons why specific research areas are/are not being investigated in a given year;
- ii. Detailed information on research objectives, study designs, data collected, results and interpretation, and plans for future research and technology development;
- iii. An evaluation of the technologies relative to their potential for implementation at specific locations within the Designated Area;
- iv. A timeframe for implementation of technologies at pilot and at full-scales and for integration into the Adaptive Management Plan; and,
- v. Portions of the report that contain proprietary information must be marked "Confidential – Proprietary." Release of information is subject to the Freedom and Information Privacy Act.

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## 8. MONITORING REQUIREMENTS

The director may alter the monitoring and reporting requirements in this permit as needed. The need for changes to the programs will be based on results submitted as well as any other information obtained by the director in connection with the discharges.

### 8.1 DISCHARGE AND RECEIVING ENVIRONMENT MONITORING PROGRAMS

The permittee must sample the parameters at the sampling sites at the specific frequencies as defined in Appendix 2 Tables 10 through 25. The permittee must sample flow at the sites listed and at the frequency recommended in Appendix B in the approved Regional Surface Flow Monitoring Plan. The discharge and receiving environment water sampling sites are located approximately as shown in Appendix 1.

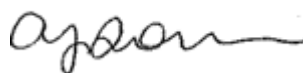
#### 8.1.1 SAMPLING SITES

Discharge and receiving environment sample collection locations are described and numerically identified in Tables 1 through 8.

**TABLE 1: COMPLIANCE POINTS SAMPLING LOCATIONS (APPENDIX 1C)**

<i>EMS #</i>	<i>TECK IDENTIFIER</i>	<i>SITE</i>	<i>SITE DESCRIPTION</i>
E223753	FR_FRABCH	FRO	Fording River, approximately 100 m upstream of Chauncey Creek
0200378	GH_FR1	GHO	Fording River, approximately 205 m downstream of Greenhills Creek
E300090	GH_ERC	GHO	Elk River, approximately 220 m downstream of Thompson Creek
E297110	LC_LCDSSLCC	LCO	Line Creek, immediately downstream of South Line Creek Confluence (approximately 1500 m downstream of the WLC WTP outfall)
E102682	EV_HC1	EVO	Harmer Spillway
E300091	EV_MC2	EVO	Michel Creek, at Highway 3 Bridge
E258937	CM_MC2	CMO	Michel Creek, approximately 50m upstream of Andy Goode Creek

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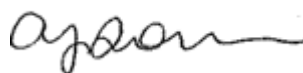
**TABLE 2: ORDER STATIONS SAMPLING LOCATIONS (APPENDIX 1D AND 1E)**

<i>EMS #</i>	<i>ORDER STATION (TECK IDENTIFIER)</i>	<i>SITE DESCRIPTION</i>
0200378	FR4 (GH FR1)	Upper Fording River, downstream of Greenhills Creek
0200028	FR5 (LC LC5)	Lower Fording River, downstream of Line Creek
E206661	ER1 (GH ER1)	Elk River, upstream of Boivin Creek
0200027	ER2 (EV_ER4)	Elk River, upstream of Grave Creek (from Fording River to Michel Creek)
0200393	ER3 (EV_ER1)	Elk River, downstream of Michel Creek
E294312	ER4 (RG_ELKORES)	Elk River, at Elko Reservoir
	LK2	Koocanusa Reservoir transect, south of the Elk River, refer to Table 2A for individual transect sampling locations

**TABLE 2A: KOOCANUSA RESERVOIR ORDER STATION LK2 – TRANSECT SAMPLING LOCATIONS (APPENDIX 1E)**

<i>EMS #</i>	<i>TECK IDENTIFIER</i>	<i>SITE DESCRIPTION</i>
E300230	RG_DSELK	Koocanusa Reservoir south of Elk River, middle transect sampling location
E327371	RG_DSELK_L2	Koocanusa Reservoir south of Elk River, transect sampling location 250 m towards left downstream bank from RG_DSELK
E327372	RG_DSELK_L1	Koocanusa Reservoir south of Elk River, transect sampling location 125 m towards left downstream bank from RG_DSELK
E327373	RG_DSELK_R1	Koocanusa Reservoir south of Elk River, transect sampling location 125 m towards right downstream bank from RG_DSELK
E327374	RG_DSELK_R2	Koocanusa Reservoir south of Elk River, transect sampling location 250 m towards right downstream bank from RG_DSELK

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**TABLE 3: FORDING RIVER OPERATIONS DISCHARGE, RECEIVING ENVIRONMENT, AND OTHER SAMPLE LOCATIONS (APPENDIX 1F)**

<i>EMS #</i>	<i>TECK IDENTIFIER</i>	<i>SITE DESCRIPTION</i>
E102475	FR_TP1	Tailings Slurry to North Tailings Pond
E206660	FR_TP3	Tailings Slurry to South Tailings Pond
E102476	FR_NL1	North Loop Settling Pond Decant to the Fording River
E102478	FR_MS1	Maintenance and Services Settling Pond Decant to the Fording River
E102480	FR_EC1	Eagle Settling Pond Decant to the Fording River
E102481	FR_CC1	Clode Settling Pond Decant to the Fording River
E208394	FR_SKP1	South Kilmarnock Settling Pond Decant - Phase 1
E208395	FR_SKP2	South Kilmarnock Settling Pond Decant- Phase 2
E216781	FR_HP1	Henretta Pit Effluent into the Henretta diversion culverts
E261897	FR_SP1	Smith Ponds Decant to the Fording River
E217403	FR_3PIT	Swift Pit Effluent to the Fording River
E320694	FR_SCOUT	Discharge from the pipeline conveying the combined, untreated mine-influenced flow from Swift-Cataract dosed with antiscalant, and Swift Clean Water Diversion at the FRO-S AWTF Outfall Structure
E304835	FR_LP1	Liverpool Sediment Pond Decant to the Fording River
E304750	FR_PP1	Post Sediment Pond Decant to the Fording River
E306924	FR_LMP1	Lake Mountain Sediment Pond Decant to Lake Mountain Creek
E325311	FR_FWP1	Floodplain Widening Sediment Pond Decant to the Fording River
E325312	FR_FWP1H	Floodplain Widening Sediment Pond in-pond sample location
0200201	FR_FR2	Fording River upstream of Kilmarnock Creek
E320695	FR_SCOUTDS	Fording River downstream (approx. 100 m) of FRO-S AWTF Outfall Structure
E300071	FR_FRCP1	Fording River, approximately 525 m downstream of Cataract Creek
0200251	FR_FR1	Fording River downstream of Henretta
E216777	FR_UFR1	Fording River upstream of Henretta
E216778	FR_HC1	Henretta Creek at mouth
E300096	FR_HC3	Henretta Creek upstream of McQuarrie Creek
E300097	FR_FRRD	Fording River near Fording River Road
0200252	FR_KC1	Kilmarnock Creek at mouth

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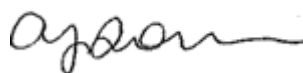
**TABLE 4: GREENHILLS OPERATIONS DISCHARGE AND RECEIVING ENVIRONMENT SAMPLE LOCATIONS (APPENDIX 1G)**

<i>EMS #</i>	<i>TECK IDENTIFIER</i>	<i>SITE DESCRIPTION</i>
E287438	GH TPS	Tailings Pond Water
E102709	GH GH1	Greenhills Creek Sediment Pond Decant to Greenhills Creek
E207436	GH TC2	Thompson Creek Sediment Pond Decant to Thompson Creek
0200385	GH PC1	Porter Creek Sed. Pond Decant to Porter Creek
E257795	GH WC1	Wolfram Creek Sediment Pond Decant to the Elk River
E257796	GH LC1	Leask Creek Sediment Pond Decant to the Elk River
E207437	GH RLP	Rail Loop Sediment Pond Decant
0200388	GH MC1	Mickelson Creek at LRP Road
E287433	GH WADE	Wade Creek at LRP Road
E305855	GH WOLF SP1	Wolf Creek Sediment Pond Decant to the Elk River
E305854	GH WILLOW SP1	Willow Creek Sediment Pond Decant to the Elk River
0200389	GH ER2	Elk River upstream of Greenhills Operation
E102714	GH TC1	Thompson Creek at LRP Road
E287432	GH COUGAR	Cougar Creek at LRP Road
E287437	GH BR F	Branch F at LRP Road
E305875	GH NNC	No Name Creek
E305876	GH ER1A	Elk River Side Channel downstream of Wolfram Creek
E305877	GH ERSC2	Elk River downstream of Thompson Creek
E305878	GH ERSC4	Elk River Side Channel upstream of Wolfram Creek

**TABLE 5: LINE CREEK OPERATIONS PHASE I DISCHARGE AND RECEIVING ENVIRONMENT SAMPLE LOCATIONS (APPENDIX 1H)**

<i>EMS #</i>	<i>TECK IDENTIFIER</i>	<i>SITE DESCRIPTION</i>
E221268	LC LC9	No Name Creek Diversion and Sediment Pond Decant
E216144	LC LC7	MSA North Ponds to Line Creek
E304613	LC LC7DSTF	MSA North Ponds to Line Creek Alternate
E219411	LC LC8	Contingency Treatment System to Line Creek
0200044	LC LC4	Line Creek upstream of Process Plant (~5,550 m downstream of WLC AWTF outfall)
0200337	LC LC3	Line Creek downstream of West Line Creek (~200 m downstream of WLC AWTF outfall)
0200335	LC LC2	Line Creek upstream of Rock Drain
E293369	LC LCUSWLC	Line Creek upstream of West Line Creek, below rock drain (~ 140 m upstream of WLC AWTF outfall)
E216142	LC LC1	Line Creek upstream MSA North Pit
E282149	LC SLC	South Line Creek West Side of Main Rock Drain
E261958	LC WLC	West Line Creek
E223240	LC LC12	North Horseshoe Creek Near Mouth

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**TABLE 6: LINE CREEK OPERATIONS PHASE II DISCHARGE AND RECEIVING ENVIRONMENT SAMPLE LOCATIONS (APPENDIX 1H)**

<i>EMS #</i>	<i>TECK IDENTIFIER</i>	<i>SITE DESCRIPTION</i>
E295211	LC SPDC	LCO Dry Creek Sedimentation Ponds to Dry Creek
E295231	LC SPFR	LCO Dry Creek Sedimentation Ponds to Fording River
E295313	LC DSSW	Diversion Structure Spillway
E295314	LC SP1SW	Sedimentation Pond 1 Spillway
E295315	LC SP2SW	Sedimentation Pond 2 Spillway
E295316	LC SP3SW	Sedimentation Pond 3 Spillway
E288274	LC DCEF	East Tributary of LCO Dry Creek
E288273	LC DC3	LCO Dry Creek upstream of East Tributary Creek
E295210	LC DCDS	LCO Dry Creek downstream of sedimentation ponds
E288270	LC DC1	LCO Dry Creek near mouth (at bridge)
E295213	LC UC	Unnamed Creek
E288275	LC GRCK	Grace Creek upstream of the CP rail tracks
E295232	LC FRUS	Fording River 100m upstream of conveyance outfall
E288271	LC_FRUSDC	Fording River upstream of LCO Dry Creek, 100m downstream of conveyance outfall
E288272	LC FRSDC	Fording River downstream of LCO Dry Creek
E295214	RG CH1	Chauncey Creek

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**TABLE 7: ELKVIEW OPERATIONS DISCHARGE, RECEIVING ENVIRONMENT AND OTHER SAMPLE LOCATIONS (APPENDIX 1I)**

<i>EMS #</i>	<i>TECK IDENTIFIER</i>	<i>SITE DESCRIPTION</i>
E296310	EV GH1	West Fork Tailings Impoundment to ground
0200097	EV EC1	Erickson Creek at Mouth to Michel Creek
E296311	EV SP1	South Pit Creek Sedimentation Pond Decant to Michel Creek
E208057	EV MG1	Lower Milligan Creek Sedimentation Pond Decant to Michel Creek
E206231	EV GT1	Gate Creek Sedimentation Pond Decant to Michel Creek
E102685	EV BC1	Bodie Creek Sedimentation Pond Decant to Bodie Creek
E302170	EV AQ6	Aqueduct Pond Control Structure to Aqueduct Creek
E102679	EV_OC1	Otto Creek Sedimentation Pond, measured 70 m upstream of the confluence with the Elk River
E208043	EV_GC2	Goddard Creek Sedimentation Pond Decant to Elk River via Goddard Marsh
E258135	EV LC1	Lindsay Creek Infiltration Pond to ground
E298590	EV DC1	Dry Creek Sedimentation Pond Decant to Harmer Creek
E102681	EV SM1	6 Mile Creek Sedimentation Pond Decant to Elk River
0200203	EV MC3	Michel Creek upstream of Erickson Creek
0200111	EV ER2	Elk River upstream of Michel Creek
E298592	EV BLM2	Balmer Creek at CFI Road
E298591	EV FC1	Fennelon Creek at CFI Road
E298594	EV SPR2	Spring Creek upstream of confluence with Aqueduct Creek
E298593	EV TC1	Thresher Creek at Milligan Road

**TABLE 8: COAL MOUNTAIN OPERATIONS DISCHARGE AND RECEIVING ENVIRONMENT SAMPLE LOCATIONS (APPENDIX 1J)**

<i>EMS #</i>	<i>TECK IDENTIFIER</i>	<i>SITE DESCRIPTION</i>
E102488	CM SPD	Main Interceptor Sedimentation Ponds Decant to Corbin Creek
E206438	CM CCPD	Corbin Sedimentation Pond Decant to Corbin Creek
E298733	CM PC2	Pengelly Channel to Corbin Creek
E298734	CM SOW	Sowchuck Sump
E258175	CM MC1	Michel Creek upstream of Operations
0200209	CM CC1	Corbin Creek near confluence with Michel Creek

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**TABLE 9: KOOCANUSA RESERVOIR RECEIVING ENVIRONMENT  
SAMPLE LOCATIONS (APPENDIX 1E)**

<i>EMS #</i>	<i>TECK IDENTIFIER</i>	<i>SITE DESCRIPTION</i>
E300095	RG KERRRD	Koocanusa Reservoir, downstream of Kikkoman Creek
E300092	RG GRASMERE	Koocanusa Reservoir, west of Grasmere
E300093	RG USGOLD	Koocanusa Reservoir, upstream of Gold Creek
E300094	RG BORDER	Koocanusa Reservoir, upstream of the Canada/US border

### 8.1.2 SAMPLING AND ANALYTICAL PROCEDURES

The following sections apply to the monitoring required as per Section 8 of this permit.

#### 8.1.2.1 SAMPLING PROCEDURES & LAB ANALYSES


The permittee must carry out sampling 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, 2013 Edition” or most recent edition, or by alternative procedures as authorized by the director.

A copy of the above manual is available on the Ministry web page at <https://www2.gov.bc.ca/gov/content/environment/research-monitoring-reporting/monitoring/laboratory-standards-quality-assurance/bc-field-sampling-manual>.

The permittee must carry out analyses in accordance with procedures described in the “British Columbia Environmental Laboratory Manual, 2020 Edition”, or the most recent edition or by alternative procedures as authorized by the director.

A copy of the above manual is available on the ministry web page at <https://www2.gov.bc.ca/gov/content/environment/research-monitoring-reporting/monitoring/laboratory-standards-quality-assurance/bc-environmental-laboratory-manual>.

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8.1.2.1.1 *Minimum Detection Limit*

Minimum analytical detection limits for each parameter required by this permit must be suitable for comparison with the applicable standards listed in the most recent Approved and Working Water Quality Guidelines prepared by the ministry or other applicable limits acceptable to the director.

8.1.2.1.2 *Quality Assurance/Quality Control (QA/QC) Program*

The permittee must implement a Quality Assurance and Quality Control program in accordance with the Environmental Data Quality Assurance Regulation and guidance provided in the “British Columbia Field Sampling Manual for Continuous Monitoring and the Collection of Air, Air-Emissions, Water, Wastewater, Soil, Sediment, and Biological Samples”, and “British Columbia Environmental Laboratory Manual.” The permittee must submit samples to analytical laboratory(ies) that meet the definition of a qualified laboratory under the Environmental Data Quality Assurance Regulation unless otherwise instructed by the director.

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### 8.1.2.2 FLOW MONITORING

#### 8.1.2.2.1 *Flow Calculation*

Flow calculation methods for receiving streams or creeks where flow measurements are not taken must be based on a regional hydrological evaluation and recommendations made by a qualified professional. Appropriate current and historical stream gauging data should be utilized. Methods must be updated at a frequency and in a manner recommended by a qualified professional and acceptable to the director.

For the purposes of permit fee calculation, mean annual flows for the previous calendar year will be used.

#### 8.1.2.2.2 *Flow Measurement*

Flow monitoring programs must be designed and implemented, and flow measurements conducted, with the intent of achieving acceptable data quality standards as defined in the approved Regional Surface Flow Monitoring Plan.

In order to appropriately determine data quality, flow measurement must be conducted in accordance with the Manual of British Columbia Hydrometric Standards (RISC, 2018), or by suitable alternative procedures as authorized by the director. The "British Columbia Field Sampling Manual for Continuous Monitoring Plus the Collection of Air, Air-Emission, Water, Wastewater, Soil, Sediment, and Biological Samples" may also be used in conjunction with the Hydrometric Standards to provide more detailed guidance on monitoring of flow using rated structures, or as a reference for alternative monitoring methods.

#### 8.1.2.2.3 *Metadata Summary*

The permittee must compile flow monitoring station metadata for all mine sites and Elk Valley monitoring locations, including:

- i. Station lat/long, elevation, basin area and median basin elevation;
- ii. Measurement method;

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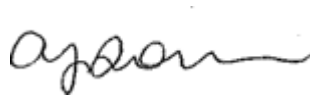
- iii. Measurement frequency;
- iv. Rating curve established, and stability of rating curve;
- v. Identify where benchmarks and staff gauge are installed;
- vi. Identify where flow is measured and where it is calculated (by summing/subtracting/scaling other gauged flows);
- vii. Identify where data is collected to meet a permit condition;
- viii. Identify qualitatively where station information is considered representative of “mine affected” or “natural” catchments;
- ix. Targeted RISC data grade as defined in the approved Regional Surface Flow Monitoring Plan;
- x. identify the percent contribution of mean annual flow to nearest downstream order station listed;
- xi. identify qualitatively where station information likely representative of total watershed yield, and if not, list the known issues affecting the ability of the station to represent total watershed yield;
- xii. a general site description of each hydrometric monitoring station including a photo(s) of the station; and,
- xiii. The permittee must submit an updated Metadata Summary every three years, beginning February 28, 2021.

#### 8.1.2.2.4 *Regional Surface Flow Monitoring Plan*

The permittee must develop a Regional Surface Flow Monitoring Plan. The intent of the Regional Surface Flow Monitoring Plan is to review the permittee’s flow monitoring network in the Elk Valley (including receiving environment and discharge locations) to define the appropriate temporal and spatial frequency of flow monitoring locations. The plan should include:

- i. Definition of the assessment criteria and associated data requirements for the different types of flow monitoring locations
- ii. An assessment of each existing flow monitoring location, identification of stations not meeting the assessment criteria; and identification of locations where additional flow monitoring is needed; and,

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- iii. A plan with timelines to implement or modify flow monitoring locations based on results of the assessment, including definition of the appropriate measurement methods and acceptable data quality standard for each type of flow monitoring location.
- iv. The permittee must submit an updated version of the Regional Surface Flow Monitoring Plan for approval by the director every three years, beginning December 31, 2020. Updates must include, when appropriate, changes to the location, frequency and grading of monitoring stations and to data needs and grading criteria. In the interim if changes to the monitoring program are recommended that result in a reduction in monitoring requirements these changes must be approved by the director prior to adoption.

8.1.2.3 TEMPORARY MODIFIED SAMPLING SCHEDULE FOR THE LCO  
MSX SHORT DUMP PROJECT

- i. Site E304613 shall be temporarily used to collect water samples only when access to E216144 is restricted due to safety concerns with the progression of the MSX Short Dump.
- ii. At least twice per year during the duration of the MSX Short Dump Project, paired samples must be taken from the site E304613 and E216144 when safe access is available to E216144. The results should be compared in the Annual Report.
- iii. During the duration of the MSX Short Dump Project, water samples do not have to be collected when access to 0200335 is restricted due to safety concerns with the progression of the MSX Short Dump. In the event regular scheduled sampling times cannot be met every effort must be made to obtain the number of samples normally required for a 6-month period. Missed samples and non-routine sampling times must be itemized in the Quarterly Report.

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8.1.2.4 TEMPORARY SAMPLING SCHEDULE FOR THE FLOODPLAIN  
WIDENING SEDIMENT POND

The permittee must conduct the additional monitoring and sampling for the Floodplain Widening Sediment Pond as described in Table 8A below:

**TABLE 8A – FORDING RIVER OPERATIONS FLOODPLAIN WIDENING  
SEDIMENT POND TEMPORARY SAMPLING SCHEDULE**

	FLOODPLAIN WIDENING SEDIMENT POND INLET	FLOODPLAIN WIDENING SEDIMENT POND IN- POND SAMPLE LOCATION
<i>EMS Number</i>	<i>E329272</i>	<i>E325312</i>
<i>Teck Station ID</i>	<i>FR_FWP2</i>	<i>FR_FWP1H</i>
<b>PARAMETER</b>		
Field Parameters <sup>(a)</sup>	M	As per Table 13
Conventional Parameters <sup>(b)</sup>	M	As per Table 13
Major Ions <sup>(c)</sup>	M	As per Table 13
Nutrients <sup>(d)</sup>	M	As per Table 13
Total and Dissolved Metals ScI <sup>(e)</sup>	M	As per Table 13
Visual Observation	M	W(2)
Dissolved and Total Organic Carbon	-	M(1)
Selenium Speciation <sup>(i)</sup>	-	M(1)
Chlorophyll- <i>a</i>	-	M(1)

- 1) Sample collection must be conducted immediately during the growing season (March 15 to October 31) if: standing water is present in the pond for > 1 week; and the most recent sample results received for either the pond inlet or in-pond samples show elevated levels of dissolved selenium ( $\geq 2.0 \mu\text{g/L}$ ) and total phosphorus ( $\geq 0.010 \text{ mg/L}$ ).
- 2) Weekly observations from March 15 to October 31 of each year.

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## 8.2 GROUNDWATER MONITORING PROGRAM

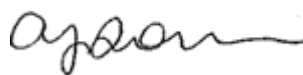
### 8.2.1 REGIONAL GROUNDWATER MONITORING

The permittee must implement a comprehensive regional groundwater monitoring program for Management Units 1, 2, 3, 4 and relevant portions of 5, as defined in the Elk Valley Water Quality Plan, prepared by a Qualified Professional. The intent of the program is to monitor groundwater and groundwater systems within the valley bottom unconsolidated deposits along the mainstems in the Elk Valley and where appropriate, underlying bedrock, outside the mine operations boundaries.

The program must include the following as they pertain to the regional program:

- i. A program to establish and maintain a groundwater monitoring well network in the Elk Valley, with wells (single/multi-level in unconsolidated deposits and bedrock, as appropriate for intended purpose) installed in locations that are representative of background and mine-impacted conditions.
- ii. An ongoing monitoring program, developed in accordance with the BC Water and Air Baseline Monitoring Guidance Document for Mine Proponents and Operators (ENV, 2016).
- iii. A conceptual hydrogeological model for the Elk Valley, developed and updated by integrating all available groundwater information collected as part of the regional and site-specific groundwater monitoring programs, relevant operational field investigations, and relevant conceptual and numerical modelling studies carried out for diverse purposes (e.g., as part of permitting applications, water supply assessments and geotechnical investigations). The conceptual hydrogeological model must include, but is not limited to, a description of the following, where relevant: aquifer characteristics (e.g., location, extent and geometry and hydraulic properties), regional groundwater flow patterns (directions, gradients and velocities), recharge and discharge areas, groundwater interactions with surface water, the effects of surface and groundwater withdrawals, groundwater quality and the transport of mine-related parameters of concern. Seasonal fluctuations and trends of all

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relevant hydrogeological variables must also be included in the hydrogeological characterization.

- iv. An evaluation of the regional effects of the permittee's operations on groundwater and where relevant on surface water, as a result of surface water – groundwater interaction, in Management Units 1, 2, 3, 4 and relevant portions of 5, by comparison to all applicable standards.
- v. Identification of limitations and data gaps and recommendation of additional field activities and/or studies to fill in gaps, where possible, and to refine the conceptual hydrogeological model.
- vi. A proposed schedule for the additional recommended field activities and studies described in point v.
- vii. Where appropriate, identify activities, studies and investigations proposed to be discontinued or existing monitoring infrastructure to be decommissioned/removed in order to optimize/improve the program.


The plan must be updated every three years starting in 2017 and submitted to the director by September 30 for approval. Each update must consider relevant changes to permit requirements and results of special studies.

#### 8.2.2 SITE SPECIFIC GROUNDWATER MONITORING

The permittee must develop and implement a comprehensive groundwater monitoring program at each mine site (Fording River Operations, Greenhills Operations, Line Creek Operations, Elkview Operations, Coal Mountain Operations), prepared by a Qualified Professional. The intent of each program is to monitor groundwater and groundwater systems within the valley bottom unconsolidated deposits and, where appropriate, the bedrock downgradient of potential mine-related sources of groundwater contamination within or in proximity of the mine operations boundaries.

Updated Site-Specific Groundwater Monitoring Plans must be submitted to the director for approval by October 31, 2021. Thereafter, the plans must be updated and submitted to the director for approval by October 31 every three years. The plans must include points i. to vii. in Section 8.2.1, as they pertain to each mine site.

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8.2.2.1 LINE CREEK MINE PHASE II GROUNDWATER MONITORING PROGRAM

The Permittee must develop and implement a comprehensive groundwater monitoring program for the Line Creek Mine Phase II area, prepared by a qualified professional. This program must be conducted to the satisfaction of the Director and should achieve the following objectives at a minimum:

- i. Characterize the groundwater resource (including water quality, quantity, flow characteristics, hydraulic conductivity of the affected aquifer(s), and relationship to surface water system);
- ii. Identify (and if necessary, quantify) impacts to groundwater from mining-related activities;
- iii. Provide the information necessary to support the development and verification of water quality predictions for the mine site (as per Section 9.9);

The Terms of Reference for the monitoring program shall be submitted to the Director, Environmental Protection by January 31, 2013.

The monitoring program must be submitted to the Director for approval by March 31, 2014. Monitoring activities must commence in 2014.

Monitoring results and interpretation must be compiled into a written report and submitted on an annual basis for each calendar year to the Director, Environmental Protection, by March 31 of the following year. Included in the submission must be a Study Design for the next year.

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### 8.2.3 CEDAR NORTH IN-PIT BACKFILL EXTENSION

8.2.3.1 The permittee must develop a study design to refine the hydrogeological characterization of fault F42 and to obtain site-specific estimates of hydraulic conductivity in the weathered bedrock located between Cedar North Pit and the Elk River and Michel Creek valley bottom. The study design must be developed by a Qualified Professional and should include, but not be limited to:

- i. estimating hydraulic conductivity using hydraulic testing methods, along the F42 fault alignment south of the interception with the conveyor tunnel, and along a hypothetical fault extension towards Michel Creek;
- ii. estimating hydraulic conductivity of the weathered bedrock to obtain site-specific estimates of hydraulic conductivity between Cedar North Pit and the Elk River valley bottom; and
- iii. establishing monitoring well(s) along the F42 fault alignment south of the interception with the conveyor tunnel at the hydraulic testing site(s), if the results indicate a potential for the fault to convey mine-impacted groundwater, currently or as a result of future mining activities.

A study design for the completion of the field activities described at i. and ii. must be submitted to the director for approval by October 31, 2021. The permittee must implement the approved study design.

8.2.3.2 The permittee must update the BRE Project groundwater flow model by adding the following as calibration targets:

- i. the groundwater levels collected as part of the activities outlined in Section 8.2.3.1; and
- ii. the streamflow and groundwater level data set collected from the hydrometric stations and monitoring wells located near the model's west – southwest boundary, on Lindsay Creek, Goddard Creek, Otto Creek, Aqueduct Creek, Bodie Creek and Gate Creek.

The BRE Project groundwater flow model update must also include the simulation of faults in the model.

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8.2.3.3 The permittee must use the information obtained from activities outlined in Section 8.2.3.1 and 8.2.3.2 to refine the groundwater flow component of the water balances for the Cedar North Pit and EVO Dry Creek catchments.

### 8.3 **LOCAL AQUATIC EFFECTS MONITORING PROGRAM (LAEMP)**

The permittee may be required to develop, with input from the EMC, and implement a Local Aquatic Effects Monitoring program (LAEMP) to determine the effects of a mining effluent discharge(s) on the receiving environment. The permittee must prepare and submit annual reports as per Section 9.5.

#### 8.3.1 LINE CREEK OPERATIONS

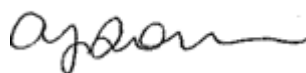
##### 8.3.1.1 LCO Phase I

The permittee must develop and implement a Local Aquatic Effects Monitoring program to determine the effects of the Line Creek discharge on the receiving environment. An annual study design for the program must be prepared in consultation with the EMC and submitted to the director for approval by May 1 each year. Any changes to the approved study design must be reported in the annual LAEMP report.

##### 8.3.1.2 LCO Phase II

The Permittee must develop and implement a Local Aquatic Effects Monitoring Program to determine the effects of mining activities from Line Creek Phase II in the LCO Dry Creek, Grace Creek and Unnamed Creek receiving environments. An annual study design for the program must be prepared in consultation with the EMC and submitted to the director for approval by May 1 each year. Any changes to the approved study design must be reported in the annual LAEMP report.

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### 8.3.2 FORDING RIVER OPERATIONS

The permittee must complete to the satisfaction of the director a study design for a LAEMP which will focus on the upper Fording River for 2021-2023 by April 1, 2021. The study design must be reviewed by the EMC and be designed to an appropriate temporal scale to capture short term, local effects to the immediate receiving environment. Any changes to the approved study design must be reported in the annual LAEMP report.

### 8.3.3 COAL MOUNTAIN OPERATIONS

The permittee must complete to the satisfaction of the director, a study design for a LAEMP by February 28, 2019. The study design must be reviewed by the EMC and be designed to assess the magnitude and extent of influence from CMO on water quality, calcite and benthic invertebrate communities downstream of CMO and to assess what factors are contributing to the observed effects. Any changes to the approved study design must be reported in the annual LAEMP report.

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#### 8.3.4 ELKVIEW OPERATIONS

The permittee must develop and implement a LAEMP to determine the magnitude and extent of influence from EVO SRF discharge on water quality (including temperature), calcite and benthic invertebrate communities to assess what factors are contributing to the observed effects. The study design must be reviewed by the EMC and submitted to the director for approval by June 30, 2021. The LAEMP must be designed to an appropriate temporal scale to capture short term, local effects to the immediate receiving environment, and must consider the possibility of impacts resulting from potential selenium speciation. The LAEMP must focus on Erickson Creek from EV\_ECOUT (E321814) to EV\_EC1 (0200097) and Michel Creek between EV\_MC3 (0200203) and EV\_MC2 (E300091) for 2021-2023.


Until the 2021-2023 LAEMP study design is approved and implemented, the permittee must continue the pre-operational aquatic effects monitoring program as outlined in Section 8.2.2 the EVO SRF Phase 2 Operations application.

The permittee must notify the director at least 15 days prior to implementing any proposed changes to the approved LAEMP. Any changes to the approved study design must be reported in the annual LAEMP report.

#### 8.3.5 GREENHILLS CREEK

The permittee must implement the monitoring program as described in the approved monitoring program “Greenhills Creek Aquatic Effects Assessment and Monitoring Program” (Greenhills Creek LAEMP). Changes to the aquatic effects monitoring program must be outlined in a study design that is reviewed by the EMC. The permittee must submit the study design to the director prior to implementation and must describe how EMC advice was considered.

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8.4 **REGIONAL AQUATIC EFFECTS MONITORING PROGRAM (RAEMP)**

The permittee must implement the Regional Aquatic Effect Monitoring Program as per the November 14, 2014 approval or the latest director approved program. A final Study Design for each subsequent three-year cycle must be submitted to the director by February 28 in the first year of each three-year cycle.

8.5 **CALCITE MONITORING**

8.5.1 CALCITE MONITORING PROGRAM


- i. The permittee must continue to conduct annual calcite monitoring following the methods in the approved monitoring program.
- ii. The permittee must submit, for director's approval, changes to the monitoring program by April 15 of the data collection year.

8.5.2 SEASONAL CALCITE SUPPORTING STUDY – 2015/2016

The permittee must have a Qualified Professional develop a monitoring program to assess seasonality of calcite formation and potential dissolution. The program must, at minimum, include multiple locations and assess seasonal variation in the rate of calcite formation or dissolution, water quality, and presence and density of algae, and the presence and density of benthic invertebrates.

- i. An Initial Study Design for the program must be submitted to the Environmental Monitoring Committee for input prior to submission to the director for acceptance by March 1, 2015.
- ii. Monitoring results and interpretation for the 2015 program must be compiled into a written report with a study design for the 2016 program and submitted to the satisfaction of the director by March 31, 2016.
- iii. Monitoring results and interpretation of the 2016 program must be compiled into a written report and submitted to the satisfaction of the director by March 31, 2017.

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## 8.6 SELENIUM SPECIATION MONITORING PROGRAM

The permittee must develop and implement a Selenium Speciation Monitoring Program. The Selenium Speciation Monitoring Program is intended to:

- Identify sites in the Designated Area, affected or potentially influenced by the permittee's current operations, where organic and reduced forms of selenium are occurring or are likely to occur;
- Investigate the physical and/or biogeochemical mechanisms driving selenium speciation and the generation of organic and reduced forms of selenium species; and
- Assess the site-specific bioaccumulation of selenium in biological resources.

The Selenium Speciation Monitoring Program must include the following elements:

- i. Assessment of water quality and selenium tissue concentrations in benthic invertebrates; and
- ii. Characterization of factors that lead to enhanced selenium bioaccumulation in the receiving environment, as applicable.

The following timelines apply:

- 1) A written report of selenium speciation data collected to-date within the Designated Area, that includes analysis and interpretation of the data, must be compiled and submitted to the EMC and the director by March 31, 2021.
- 2) Selenium Speciation Monitoring Program Study Design must be reviewed by the EMC prior to submission to the director, for approval, by July 30, 2021. Thereafter, the study design must be updated and submitted, for approval, to the director by July 30th every three years.

The approved Selenium Speciation Monitoring Program Study Design must be implemented, and an annual report must be submitted to the director and to the EMC as per Section 9.11.

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8.7 **KOOCANUSA RESERVOIR WORKING GROUP**

A Koochanusa Reservoir Monitoring and Research Working Group will be established under the BC & Montana government to government Memorandum of Understanding. The permittee must participate fully in the Koochanusa Reservoir Monitoring and Research Working Group.

The permittee is required to contribute to the costs of the Koochanusa Reservoir Monitoring and Research Program as operated by the Koochanusa Reservoir Monitoring and Research Working Group

8.8 **KOOCANUSA RESERVOIR BURBOT BASELINE STUDY 2015**

The permittee shall undertake a sampling program in Koochanusa Reservoir to evaluate the potential for selenium related effects in Burbot. The permittee shall make reasonable efforts to collaborate with Ktunaxa Nation representatives to identify suitable fishing locations in Koochanusa Reservoir, to develop a sampling plan, and to implement the program.

The sampling must be initiated in February 2015 and include the following:

- i. Sampling will occur at representative locations within Koochanusa Reservoir and should consider areas upstream of Elk River, near the mouth of the Elk River, and near of the mouth of Gold Creek.
- ii. All fish captured during the sampling program will be identified and enumerated with results captured on field sheets and sexually mature burbot measured and sampled in the field as follows:
  - a) Field examination of condition of each fish for external deformities, erosions, lesions, or tumors with condition recorded on field sheets
  - b) Muscle tissue will be sampled from each fish
  - c) Collection of eggs from up to 10 ripe female burbot from the three sampling locations where available.
- iii. Tissue and eggs will be analysed for metals using a high-resolution inductively coupled plasma mass spectrometry.
- iv. Results will be reported on a dry weight basis along with the moisture content.

Results of the sampling program shall be submitted to the director by July 31, 2015.

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The permittee will evaluate the human health risk with respect to Ktunaxa consumers specific to the burbot tissue data.

## 8.9 **CHRONIC TOXICITY TESTING PROGRAM**

The permittee must develop and implement a toxicity testing program for receiving environments affected by coal mining operations. The purpose of the program is to evaluate chronic toxicity at the compliance points and other locations throughout the Elk Valley.

The program must be planned and implemented by qualified professionals using methods that have documented test procedures, reliability, and quality assurance.

The toxicity testing program must include, at a minimum, the following elements:

- i. Once every three years beginning in 2015, bioassays must be conducted to evaluate the survival and development (incidence of deformities) of targeted aquatic species using gametes obtained from species using habitats in the Elk River, the Fording River, their tributaries, and associated lentic habitats, and the Koocanusa Reservoir. The concentrations of selenium in the eggs of each female spawned must be measured.
- ii. For the purposes of the following requirements the listed mine-influenced stations must include:
  - FR\_FRCP1 (EMS E300071),
  - FR\_FRABCH (EMS 223753),
  - GH\_FR1 (EMS 0200378),
  - LC\_LC5 (EMS E200028),
  - GH\_ERC (E300090),
  - CM\_MC2 (EMS E258937),
  - EV\_MC2 (EMS E300091),
  - EV\_HC1 (EMSE102682),
  - LC\_LCDSSLCC (EMS E297110),
  - LC\_LC3 (EMS 200337), and

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- LC\_DCDS (EMS E295210).

Appropriate reference stations must be determined in consultation with the Environmental Monitoring Committee.

The following toxicity test must be conducted during each semi-annual (spring and fall) sampling event at all listed mine-influenced stations plus multiple reference stations:

- 30-day early life-stage test with the rainbow trout (*Oncorhynchus mykiss*; EPS1/RM/28) using <24-hour post-fertilization eggs; endpoints: survival, viability, length, wet weight (plus documentation of observed deformities or behavioral changes); and
- 28-day water-only test with amphipod, *Hyaella azteca* (adapted from USEPA 2000, with appropriate supplementation of halides); endpoints: survival, growth.

The following toxicity tests must be conducted during each semi-annual (summer and winter) sampling event at all listed mine-influenced stations plus multiple reference stations:

- 30-day early life-stage test with the fathead minnow, *Pimephales promelas* (USEPA 1996) using <24-hour post-fertilization eggs; endpoints: survival, normal development, length, biomass (plus documentation of observed deformities or behavioral changes).

The following toxicity tests must be conducted during each quarterly sampling event at all listed mine-influenced stations plus multiple reference stations:

- 7-day water-only test with the cladoceran, *Ceriodaphnia dubia* (EPS1/RM/21); endpoints: survival, reproduction; and
- 72-hour test with the alga, *Pseudokirchneriella subcapitata* (EPS1/RM/25); endpoints: growth inhibition.

- iii. Toxicity testing methods must be consistent with Environment Canada's, U.S. Environmental Protection Agency's, or ASTM's approved biological test methods. Waters used for fathead minnow (*Pimephales promelas*) and rainbow trout (*Oncorhynchus mykiss*) 30-day early life-stage tests may be augmented with up to, and not exceeding, 20 ug/L copper to control for fungi and microbial pathogens. Ameliorating factors that influence copper toxicity (e.g., water hardness, dissolved organic carbon, and major ions) must be considered when determining the lowest and most effective dose below this limit.

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- iv. A Quality Assurance/Quality Control component.
- v. A proposed schedule of dates that coincide with water quality sampling and that target predicted worst-case times such as low flow, during flocculant use, or when discharge quality is expected to be reduced.

The suite of toxicity tests will be reviewed on an annual basis by the EMC and recommendations provided to the director for consideration.

#### 8.9.1 SULPHATE TOXICITY AT HIGH HARDNESS CONCENTRATIONS

The permittee must develop with input from the EMC and implement a toxicity testing program specifically to assess sulphate toxicity at high hardness concentrations. Results will be used to support finalization of long-term sulphate site performance objectives.

The following toxicity test shall be conducted as a component of the Sulphate toxicity testing program.


- 30-day early life-stage test with the fathead minnow, *Pimephales promelas* (USEPA 1996) using <24-hour post-fertilization eggs; endpoints: survival, hatching, growth, deformity.
- Other sensitive species (amphibian, trout, water flea, etc.) shall be included.

Monitoring results and interpretation must be compiled into a written report and submitted to the satisfaction of the director by December 31, 2017.

#### 8.9.2 SUBLETHAL TOXICITY STUDY

The permittee must develop with input from the EMC and implement a sublethal toxicity study to confirm that surface waters meeting the Site Performance Objectives for the order stations are not toxic to sensitive aquatic receptors. The permittee must submit the study design to the director by April 30, 2015.

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## 8.10 HUMAN HEALTH RISK ASSESSMENT

The permittee must conduct a Human Health Risk Assessment (HHRA), in consultation with the EMC to examine the potential effects of mine-related parameters of concern including selenium, mercury cadmium, chromium, copper, manganese, nickel, vanadium and zinc for the Designated Area. The permittee is responsible for developing the HHRA design and addressing any concerns raised by the Interior Health Authority.

A draft terms of reference and a work plan for the HHRA must be discussed at the EMC. A final terms of reference and work plan for the HHRA shall be submitted by May 31, 2015 and be of a quality acceptable to the director.

The Human Health Risk Assessment must follow the BC Contaminated Sites Regulation approved methodologies and levels of acceptable risk for Human Health Risk Assessment.

The permittee must provide the results of the HHRA by March 31, 2016 to the EMC. The permittee must provide the results of the HHRA to the director by March 31, 2016. The risk assessment must be to the satisfaction of the director.

The assessment must determine the exposure pathways and potential human health risks from selenium and other mine-related parameters of concern which may be present in vegetation, fish and wildlife that are potentially used for food or medicinal sources, or present in currently known potable water sources. The assessment must take into consideration First Nations consumption patterns and risk sensitivities.

The study must incorporate information available from a variety of sources such as: traditional use studies, consultation records, consumption surveys, and baseline and monitoring data for mine-related parameters of concern.

Wherever possible, the assessment must incorporate data obtained from established monitoring programs. If required for the assessment, additional sampling programs must be implemented to ensure data gaps are addressed.

The conclusions and findings of the Human Health Risk Assessment must be risk ranked and prioritized and include recommended risk management controls and other mitigation actions to address human health risks identified

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in the human health risk assessment for inclusion in the adaptive management plan for the area.

8.11 **SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT**

The permittee shall re-evaluate the Screening Level Ecological Risk Assessment. The Screening Level Ecological Risk Assessment re-evaluation must address the following points:

- i. some contaminants of potential concern exceeded the criteria for negligible risk,
- ii. there was an incorrect use of tissue concentrations as indicators of toxicity, and
- iii. multiple food type dietary exposure was not incorporated.

The re-evaluation must be conducted by an approved Contaminated Sites Approved Professional (CSAP) or follow the BC Contaminated Sites Regulation approved methodologies. If the re-evaluation is not conducted by an approved CSAP, the re-evaluation must be submitted to the director for review and acceptance. The re-evaluation shall be submitted by July 31, 2015.

In the event that this re-evaluation determines changes to the monitoring requirements, this information shall be shared with the EMC and a report with recommendations provided to the director regarding the outcome of the re-evaluation.

8.12 **DETAILED ECOLOGICAL RISK ASSESSMENT**

A Detailed Ecological Risk Assessment may be required.

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## 9. REPORTING REQUIREMENTS

### 9.1 SUBMISSION RESULTS

The permittee must submit water quality and benthic invertebrate tissue selenium concentration data of all effluent discharge and water analyses, and biological sampling associated with monitoring programs required in this permit, collected at sites with EMS site identification numbers. Data is to be directly uploaded to the Ministry's Environmental Management System (EMS) database using the appropriate EMS site identification numbers within the following timelines:

- i. surface water quality data within 30 days of the end of the quarter in which the samples were collected;
- ii. groundwater quality data within 60 days of the end of the quarter in which the samples were collected;
- iii. benthic invertebrate tissue selenium concentration data within 60 days of the end of the quarter in which the samples were collected; and
- iv. flow data is to be submitted annually.

For instructions on the electronic submission process or for more information visit the Ministry website:

<https://www2.gov.bc.ca/gov/content/environment/waste-management/waste-discharge-authorization/comply>

All data and calculations required in this permit, whether or not required to be uploaded to EMS, must be managed by the permittee and provided to the director or member of the EMC upon request in a format specified by the director or member of the EMC. The permittee must provide all requested data within 10 business days of the original request or within the timeline agreed upon by both the permittee and the requestor.

All data lab sheets are to be kept on site and are to be provided in an electronic format to the director or member of the EMC upon request.

All deliverables required by Section 9 must not exceed manageable file sizes or must be divided into smaller files prior to submittal.

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## 9.2 DISCHARGE AND RECEIVING ENVIRONMENT MONITORING DATA

### 9.2.1 NON-COMPLIANCE NOTIFICATION

The permittee must immediately notify the director or designate by e-mail ([ENVSECoal@gov.bc.ca](mailto:ENVSECoal@gov.bc.ca)) of any non-compliance with the requirements of this permit, including requirements within the appendices, by the permittee and take appropriate remedial action to remedy any effects of such non-compliance.

The permittee must provide the director and KNC with written confirmation of all such non-compliance events, including available test results within 24 hours of the original notification unless otherwise directed by the director.

### 9.2.2 NON-COMPLIANCE REPORTING

If the permittee fails to comply with any of the requirements of this authorization, the permittee must, within 30 days of such non-compliance, submit to the director and KNC, a written report that is satisfactory to the director and includes, but is not necessarily limited to, the following:

- i. all relevant test results obtained by the permittee related to the noncompliance,
- ii. an explanation of the most probable cause(s) of the noncompliance, and
- iii. a description of remedial action planned and/or taken by the permittee to prevent similar noncompliance(s) in the future.

The permittee must submit all non-compliance reporting required to be submitted under this section by email to ([ENVSECoal@gov.bc.ca](mailto:ENVSECoal@gov.bc.ca)).

### 9.2.3 MONITORING AND REPORTING FOLLOWING TOXICITY NON-COMPLIANCE

In addition to Section 9.2.1, for any acute toxicity test failure in the effluent, the permittee must:

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- i. Immediately conduct a confirmatory test on the effluent using multiple concentrations (i.e. 96 hr LC50 for Rainbow Trout or 48 hr LC50 for *Daphnia magna*, as appropriate). The director may require a Toxicity Identification Evaluation (TIE) to be initiated to determine the cause of the effluent toxicity,
- ii. Immediately take corrective action, and
- iii. Forward all test results including raw laboratory data sheets to the director as soon as they are available. As soon as possible, submit a full report indicating the cause and effects of the incident, which identifies all actions taken by the permittee to correct, restore and prevent a similar event from occurring in the future. This report must be submitted with the next quarterly report or as otherwise instructed by the director.

#### 9.2.4 QUARTERLY REPORTING

The permittee must submit a written quarterly report to the director or designate, due within 30 days of the end of the quarter in which the samples were taken. The quarterly report must include:

- i. Effluent water quality results used to calculate monthly averages for the limits in Section 2, if applicable;
- ii. Effluent water quality results exceeding limits and targets or other criteria, such as daily maximums or as specified by the director;
- iii. Identification of all missing data and all QA/QC issues;
- iv. All toxicity test results and raw laboratory data sheets for all mortality results;
- v. All reportable spills or other incidents related to water quality, occurring in the quarter;
- vi. Explanation of the most probable cause(s) of any non-compliances;
- vii. All measures taken to reduce or eliminate non-compliances;
- viii. All other reports or documentation as specified by this permit to be submitted quarterly; and
- ix. Any additional sampling results for the compliance points identified in Section 2 obtained for any reason, whether compliance, maintenance, or operational purposes. All test data must be reported

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within 30 days of the end of the quarter in which sampling occurred. These additional results may be reported in summary form. Further information on the testing event may be requested in writing by the director.

- a) Any data collected at the compliance points in Section 2 for research-oriented activities that do not meet the analytical requirements in Section 8.1.2.1 of the Permit must be submitted separate from Quarterly Reports in a project report at the completion of the applicable study.
- x. A summary of measures taken under the Nitrogen Source Control Plan, Section 5.3.
- xi. An appendix containing the LK2 Order station transect discrete sample results for each sampling event, the reason samples could not be collected, and whether stratification was observed.

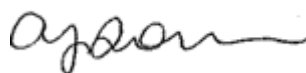
The format of the quarterly report must be suitable for review by the public.

#### 9.2.5 ANNUAL REPORTING

The permittee must prepare on an annual basis a report or series of reports summarizing activities, incidents, and discharge/receiving environment monitoring results. The report(s) must include but is not limited to:

- i. A map of monitoring locations with EMS and permittee descriptors.
- ii. A summary of non-compliances with the permit conditions for the previous calendar year. This must include interpretation of significance, and the status of corrective actions and/or ongoing investigations.
- iii. A summary of measured parameters including all collected monitoring data for the reporting year suitably tabulated (i.e., excel spreadsheets), appropriate graphs and comparison of results to limits, Approved and Working Water Quality Guidelines, Site Performance Objectives, or other criteria and benchmarks as specified by the director.
- iv. An analysis and discussion of early warning triggers for management action as developed under the Adaptive Management Plan for surface water quality. This analysis will include order

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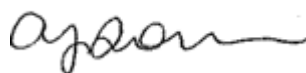
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constituents and non-order parameters of concern at key receiving environment sites as identified in the AMP and an evaluation of upstream source sites and activities when monitoring results exceed the early warning trigger criteria.

- v. All acute toxicity test-specific reports from the laboratory and an interpreted summary and discussion of results, including recommendations and all subsequent actions.
- vi. All acute toxicity test lab reports must include data and/or observations for hardness, alkalinity, pH, temperature, and formation of precipitate either in the vessel or on the organism.
- vii. A summary of all QA/QC issues during the year.
- viii. The following hydrology information:
  - a) A description of measurement methods, field procedures or data calculation that deviate from the information provided in the Metadata Summary.
  - b) A summary table of the discharge measurements recorded during the year. The summary must include staff gauge measurements, calculated flow values from a stage-discharge rating curve, and manual flow measurements.
  - c) A hydrograph(s) at a scale appropriate for visually comparing flow values between stations.
  - d) A data quality grade for each monitoring station using the Manual of British Columbia Hydrometric Standards (RISC, 2018) methodology, and comparison of the grade to target grades as listed in the Regional Surface Flow Monitoring Program.
  - e) In conjunction with the submission of the annual report, final non-continuous flow data will be uploaded to the EMS database while final continuous flow data records and associated rating curves will be provided in Excel format.
- ix. An interpreted summary and discussion of the effectiveness of measures taken under the Nitrogen Source Control Plan, Section 5.3.

The Annual Report must be submitted to the director by March 31 of each year following the data collection calendar year.

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The format of the Annual Report must be suitable for review by the public. The Permittee must post a copy of the report to the Teck website annually, within six months of submission. Copies must be made available for the Ministry of Energy, Mines and Low Carbon Innovation and Ktunaxa First Nation. The Permittee may omit proprietary information from the publicly available annual report in accordance with the Freedom of Information and Protection of Privacy Act, as agreed to by the Director.

### 9.3 TOXICITY REPORTING

All acute toxicity test lab reports must include data and/or observations for pH, temperature, and formation of precipitate either in the vessel or on the organism. Lab reports for the 48-hour *Daphnia magna* single concentration toxicity test must also include data and/or observations for hardness and alkalinity.

The permittee must prepare on an annual basis a report summarizing all acute and chronic toxicity data from the laboratory and an interpreted summary and discussion of results, including recommendations and subsequent actions. The report is to be submitted to the director by April 30 of each year following the data collection calendar year.

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## 9.4 GROUNDWATER

### 9.4.1 ANNUAL GROUNDWATER MONITORING REPORTING

The permittee must prepare on an annual basis a report or series of reports summarizing monitoring activities and results for the Regional and Site-Specific Groundwater Monitoring Programs. The annual report(s) must be submitted to the director by March 31<sup>st</sup> of each year following the data collection calendar year.

The annual report(s) must include, but is not limited to:

- i. A map of surface and groundwater monitoring locations with EMS and permittee descriptors;
- ii. Cross sections showing well installation details, stratigraphy, groundwater elevations, and where relevant surface water elevations and inferred groundwater flow direction(s). Cross sections should be in the direction of groundwater flow and/or perpendicular to groundwater flow, as appropriate;
- iii. Drawings showing locations and water quality data of groundwater sampling points;
- iv. Summary of program modifications relative to previous years and additional one-time activities, such as the installation of new monitoring wells;
- v. Summary of measured parameters, including appropriate graphs and comparison of results to, Approved and Working Water Quality Guidelines, or other criteria and benchmarks as specified by the director;
- vi. If applicable, a summary of exceedances of screening benchmarks;
- vii. Evaluation and discussion of spatial patterns and temporal trends;
- viii. Evaluation and discussion of the correlation between the monitoring results of surface water and groundwater monitoring stations, where relevant, in terms of spatial distribution and temporal changes;
- ix. Relevant information from specific studies on surface water and groundwater to support the hydrogeological characterization;
- x. A summary of all QA/QC issues during the year; and
- xi. Recommendations for further study or measures to be taken.

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## 9.5 LAEMP

The LAEMP Annual Reports must be reported on in accordance with generally accepted standards of good scientific practice in a written report and submitted to the director of each year following the data collection calendar year on the following dates:

- i. LCO and LCO Dry LAEMP: April 30
- ii. FRO LAEMP: May 31
- iii. CMO LAEMP: June 30 (The first report is due June 30, 2020)
- iv. EVO LAEMP: June 30 (The first report is due June 30, 2022)
- v. Greenhills Creek LAEMP: June 30

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## 9.6 RAEMP

The RAEMP report for the first approved cycle under the ABMP must be submitted to the director by September 30, 2017 and by November 30 of the final year of each subsequent three-year monitoring cycle.

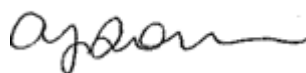
The permittee must submit a report that contains a detailed rationalization of the overall RAEMP including reasons why specific monitoring areas are/are not being monitored in a given year. The report may include a discussion and analysis of the results of the previous cycle of monitoring of the following components:

- i. Water quality
- ii. Sediment quality and calcite
- iii. Water and sediment toxicity testing
- iv. Periphyton productivity and community structure
  - v. Benthic invertebrate community structure and tissue contaminants
- vi. Fish population metrics and tissue contaminants
- vii. Amphibian and bird egg tissue contaminants
- viii. QA/QC

Each report will also discuss cumulative effects by providing an integrated interpretation of conditions in the Elk River Watershed.

Each report will, on a three-year cycle, verify and calibrate the selenium bioaccumulation model using the most recent three years of water quality, aquatic effects and other data from any special studies undertaken.

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### 9.7 CALCITE

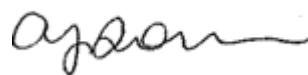
A Calcite Monitoring Annual Report must be submitted to the director by April 15 of each year following the data collection calendar year. The report must include the following, at minimum:

- i. A map of monitoring locations;
- ii. A summary of background information on that year's program, including discussion of program modifications relative to previous years;
- iii. Results of stream selection reassessment – highlight streams added/removed;
- iv. Summary of where sampling followed the methodology in the monitoring plan document, and details where sampling deviated from the approved methodology;
- v. Statement of results for the period over which sampling was conducted;
- vi. Reference to the raw data, provided as appendices;
- vii. General discussion of observations, including summary tables of sites with increasing and decreasing deposition indices;
- viii. Interpretation of location, extent, and any other observations;
- ix. A summary of any QA/QC issues during the year;
- x. Recommendations for sites to add, sites to remove, modifications to methodology, monitoring frequency adjustments; and
- xi. A statistical evaluation of monitoring data to evaluate the presence of short and long term calcite related trends in the Elk Valley main stems and select tributaries.

### 9.8 KOOCANUSA RESERVOIR

The permittee must prepare on an annual basis a report summarizing activities and monitoring results. The report must be submitted to the Koochanusa Reservoir Monitoring and Research Working Group (Koochanusa Reservoir Working Group) and the EMC by June 30 of each year.

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## 9.9 WATER QUALITY MODELLING

The permittee must update the regional water quality model and complete a water quality prediction report for each mine site and the Designated Area as a whole to be submitted to the director.

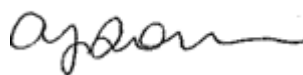
This report must be updated every 3 years starting October 31, 2017, or more frequently as required, based on changes to the mine plan, when observed water quality and water quantity are regularly and significantly different from predicted values, or as otherwise required by the director in writing. The report must include data collected from the monitoring programs described in Section 8 as well as any other special studies undertaken to investigate water quality in the Designated Area.

On a three-year cycle, verify and, failing verification, calibrate the Elk Valley Regional Water Quality Model using the most recent three years of water quality data and regional flow data from appropriate (e.g., Environment Canada regional) hydrometric data stations.

The report must provide:

- i. Current and projected (through the next twenty years) bank cubic meters of waste rock at the mine, detailed by affected drainage;
- ii. Hydrology modelling information, detailed by affected drainage:
  - a) Identify the specific hydrology information used in the modeling work;
  - b) An evaluation of the relative data accuracy/precision and overall confidence in the data used. The evaluation should consider any relative bias that a station may introduce (e.g., a stations' ability to represent total watershed yield). Documentation must clearly provide a rationale for why specific data was selected for use in the model;
- iii. Current and predicted concentrations of Parameters of Concern as required, in the surface water of affected drainages through the life of the mine based on current model, which incorporates waste rock volumes and local hydrology, compared to BC Water Quality Guidelines or water quality targets for selenium, nitrate, sulphate and cadmium;

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- iv. A description of the calibration and validation of the flow model and water quality;
- v. A sensitivity analysis for variation in flows and potential errors in measured input data;
- vi. Water quality and water quantity model output in electronic format;
- vii. A monitoring plan for continued evaluation of ii), iii) and iv) as the mine progresses;
- viii. Refined hydrology, hydrogeology and geochemical source term information (including refinements for cadmium source terms), together with any site-specific water balance models and hydrogeology studies;
- ix. Changes to the mine plan; and
- x. Information and outcomes from research and technology development studies that have been incorporated into the model.

#### 9.9.1 EVALUATION OF WATER QUALITY MODELLING FOR TRIBUTARIES (LCO)

- i. The permittee shall assess the conservatism and uncertainty associated with the scaling approach used to predict tributary concentrations in the EVWQP by independent comparison with predictions obtained from project specific model outputs and provide recommendation for evaluating future water quality in tributaries in the Elk River watershed.
- ii. During operations, the Permittee must track waste rock placement, water quality and flow monitoring data to enable calibration, updating and refinement of the water quality predictions and model. The Permittee must complete the first water quality prediction report for Line Creek Operations and submit it to the Director, Environmental Protection by March 31, 2014.
- iii. A report presenting the comparison and analysis of water quality modelling methods, as well as a list of tributaries where the scaling method was/or was not applied in the EVWQP shall be provided to the director by February 28, 2015.

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9.10 **ENVIRONMENTAL IMPACT ASSESSMENT - CHANGES TO MINE PLANS**

Where changes to a mine plan requires amendment of the *Mines Act* Permit for a site, the permittee must provide the director and KNC with a project description detailing the changes and results of water quality modelling that assesses the effects on water quality at the applicable order stations/compliance points. The director may require an environmental impact assessment to be completed to evaluate the effects of the changes on the environment.

9.10.1 FRO MINE PLAN

If FRO's mine plan changes such that FRO's total waste rock volume exceeds the maximum volume assessed in the Swift Environmental Assessment Certificate application and the North Spoil Re-handle screening-level assessment an environmental effects assessment be conducted.

9.11 **SELENIUM SPECIATION MONITORING PROGRAM**

The permittee must prepare an annual report documenting the activities and results of monitoring undertaken for each element of the Selenium Speciation Monitoring Program, as per Section 8.6. The report must be submitted to the director and the EMC by April 15<sup>th</sup> of each year.

9.12 **VERACITY OF DATA**

The permittee must ensure all information submitted as a requirement of this permit is accurate and free from mistakes or misleading statements. The permittee must include in any submission required under this permit an explanation for any data that:

- a) is required under the permit but is missing from the submission; and
- b) the permittee considers to be not representative of the actual discharge, conditions, or other circumstances the data is intended to measure.

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### 9.13 ANNUAL STATUS FORMS

The permittee must submit to the director an annual status report for each calendar year, in the form of the Annual Status Form template found on the Ministry website. The first Annual Status Form for 2023 must be submitted by March 31, 2024.


For each numbered requirement in the permit, the permittee must include the following information in the Annual Status Form:

- a) An assessment of compliance against the requirement for the previous year, determining whether the permittee was in compliance, out of compliance, or if the requirement did not apply for that year;
- b) Justification for the compliance determination; and
- c) If the Annual Report or other submissions made to the director support the compliance determination, identify the submission and relevant page or part of the submission.

### 10. ADAPTIVE MANAGEMENT

The permittee must develop and implement a detailed adaptive management plan (AMP) to support implementation of the ABMP, to achieve water quality targets including calcite targets, ensure that human health and the environment are protected, and where necessary, restored, and to achieve continuous improvement of water quality in the Elk Valley. The adaptive management cycle consists of six stages, as summarized below. Elements of the AMP required for this permit have been included in the ABMP, but other key components remain outstanding, as described below. The permittee must prepare and implement an AMP to the satisfaction of the director. The AMP must fulfill the following requirements at a minimum:

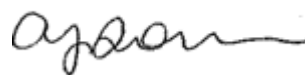
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- 1) Stage one – Assess and Define the Scope
  - a) Section 1.2 of the Elk Valley Area Based Management Plan identifies the following environmental management objectives that apply to the AMP: protection of aquatic ecosystem health; management of bioaccumulation of Parameters of Concern in the receiving environment (including fish tissue); protection of human health; and protection of groundwater.
  - b) The AMP should support continuous improvement of water quality conditions in the Elk Valley such that human health and ecosystem health are protected in the long-term, without restrictions or limitations on the use of water resources or associated biological resources.
  - c) Identify areas of uncertainty for further analysis and development of hypotheses to support adaptive management. Uncertainties may include effects on aquatic health, actual water quality conditions in space and time, treatment capability and results, R&D project success and implementation, efficacy of passive and semi-passive mitigation methods, etc.
  - d) The conceptual water quality model in Annex D of the ABMP should link management activities to effects to water quality and other components of the aquatic environment.
  - e) Select measurement end points for monitoring and determining what activities and/or actions could be adjusted to influence the measurement endpoints to improve water quality and the aquatic environment to meet the environmental management objectives of the ABMP.
  
- 2) Stage two – Design of Adaptive Management Plan
  - a) Review of existing monitoring programs in relation to uncertainties and alternative hypotheses developed above in 1.b and ensure that the monitoring will provide sufficient information to evaluate which hypothesis is most supported. Clear linkages between the AMP and the RAEMP, supporting studies, other monitoring and water quality modelling must be included.
  - b) Establish early-warning triggers for management action. If not already in place, identify the locations where the indicators will be monitored and develop a monitoring program to assess the status of these indicators.
  - c) An assessment framework for evaluating whether an outcome is acceptable or not must be provided. Monitoring and operational outcomes or indicators must be detailed and what responses will be taken as a result of exceedances

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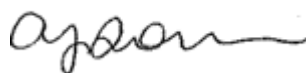


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of each indicator, as well as the order and timeframe in which the responses will be implemented.

- d) Develop and test hypotheses associated with alternative mitigation strategies. The intention is to evaluate applying active adaptive management to research and development activities related to non-active water treatment plant technologies and calcite management.
- 3) Stage three – Implement the Adaptive Management Plan
    - a) Implement the AMP as designed.
    - b) Document all deviations to the AMP including rationale and information considered in the decision to deviate.
  - 4) Stage four - Conduct Monitoring
    - a) Implement and follow the various monitoring programs and supporting studies in this permit and within the ABMP. Additional monitoring may be required as per 2.b above.
    - b) Identify how collected information/data will be managed to facilitate evaluation of hypotheses and status of indicators.
  - 5) Stage five – Evaluate the results of monitoring activities
    - a) Describe how the information/data from the monitoring programs and supporting studies will be analyzed/evaluated for the AMP.
    - b) Document exceedances of the indicators and the management responses that were undertaken.
    - c) Identify whether the results were expected, where results deviated from those expected, why the deviations occurred, and what lessons were learned.
    - d) Communicate results to the EMC (Section 11.2).
  - 6) Stage six – Adjust and Revise the Hypotheses and Management Strategies
    - a) Adjust the ABMP implementation plans and actions as required, including knowledge gained from Section 7.2 – Research and Development.
    - b) Communicate changes to ABMP implementation plans and activities to the EMC.

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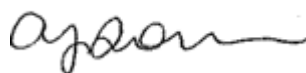
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- c) Reassess expected outcomes, potential impacts, and responses to these outcomes for an adjusted plan. Where plan components are related to impacts on Human Health, the permittee shall make reasonable efforts to consult with Interior Health (hbe@interiorhealth.ca).
- d) Adjust the AMP as required in consultation with the EMC.

The permittee must develop and implement an Adaptive Management Plan to ensure that the management goals in the approved ABMP are met. The permittee must deliver the following:

- i. The permittee must prepare a draft Terms of Reference (TOR) for the Adaptive Management Plan for discussion at the EMC by February 15, 2015.
- ii. The permittee must submit a final TOR by March 15, 2015 to the director for review and approval.
- iii. The permittee must prepare a draft AMP for discussion at the EMC by September 30, 2015.
- iv. The permittee must submit the final AMP by February 29, 2016 to the director for review and acceptance.
- v. The permittee must prepare and submit an annual report documenting the activities undertaken in each stage of the Adaptive Management Plan. The AMP report must be submitted to the director annually by July 31. The first AMP report is due July 31, 2016.
- vi. The permittee must update and revise the AMP every three years. The next update report is due December 15, 2021.
- vii. The permittee must implement the AMP to the satisfaction of the director.
- viii. The permittee must notify the director immediately regarding significant deviations from or adjustments to the accepted AMP (e.g., changes in triggers, responses, timeframes and/or study designs).

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## 11. DATA ANALYSIS ACCOUNTABILITY AND TRANSPARENCY

### 11.1 FIRST NATIONS REPORTING REQUIREMENT


Unless otherwise agreed to by the KNC and the permittee, the permittee must provide the KNC with information related to any material changes to the Initial Implementation Plan, Adaptive Management Plan, the Calcite Management Plan and the Research and Technology Development Plan. In addition, the permittee must provide the KNC with all data, information and/or reports generated during the implementation of these plans in accordance with this permit.

### 11.2 ENVIRONMENTAL MONITORING COMMITTEE (EMC)

The permittee must establish an Environmental Monitoring Committee (EMC), consisting of representatives from the Ministry of Environment and Climate Change Strategy, the Ministry of Energy, Mines and Low Carbon Innovation, Environment Canada, the Ktunaxa Nation, Interior Health Authority, and the permittee. The Committee will review submissions and provide technical advice to the permittee and director regarding monitoring submissions in Sections:

- 8.2.1 Groundwater Monitoring Program
- 8.3 Local Aquatic Effects Monitoring
- 8.4 Regional Aquatic Effects Monitoring
- 8.5 Calcite Monitoring
- 8.6 Selenium Speciation Monitoring Program
- 8.9 Chronic Toxicity Testing Program
- 8.10 Human Health Risk Assessment
- 10. Adaptive Management
- 11.3 Third-Party Audit

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The committee will also provide input to the permittee regarding reports which are required under Sections:

- 4 Tributary Evaluation and Management
- 8.8 Koochanusa Reservoir Burbot Baseline Study 2015
- 9.2.5 Annual Reporting
- 9.3 Toxicity Reporting
- 9.4 Groundwater
- 9.5 LAEMP
- 9.6 RAEMP
- 9.7 Calcite
- 9.8 Koochanusa Reservoir
- 9.9 Water Quality Modelling
- 9.11 Selenium Speciation Monitoring Program
- 10 Adaptive Management
- 11.3 Third-Party Audit

The EMC will convene a public meeting once per calendar year for the purpose of informing the public of information reviewed by the committee and any audit results as per Section 11.3.

The EMC will confirm the scope of third-party audit in Section 11.3 a minimum of 9 months prior to the audit submission deadline.

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### 11.3 THIRD-PARTY AUDIT

Monitoring data for this permit and its analysis is subject to the review and audit by a third-party qualified professional on a three-year cycle. The audit must include a review of monitoring data and data analysis for reports submitted under this permit relevant to at least three components (monitoring endpoints) of Teck's environmental monitoring programs undertaken as requirements of this permit for the previous three years and must address at least the following:

- i. Data quality and completeness;
- ii. Protocols and procedures from the QA/QC plan for the monitoring program; and,
- iii. Standard operating procedures and data handling protocols in place for Teck Coal Limited.

The audit objectives scope, components, and criteria must be selected in consultation with the EMC. Each Third-Party Audit Report must be submitted to the EMC and to the director, by October 31 of each audit year. The next Third-Party Audit Report must be submitted to the director by October 31, 2020. The Third-Party Audit Report must report on actions taken to address findings of previous reports.

### 12. SECURITY

Although financial security under the *Environmental Management Act* is not required at this time, the director may require security in the amount and form subject to the conditions the director specifies.

### 13. PUBLICATION OF DOCUMENTS

The Ministry publishes Regulatory Documents on its website for the purpose of research, public education, and to provide transparency in the administration of environmental laws. The permittee acknowledges that the Province may publish any Regulatory Document submitted by the permittee, excluding information that would be excepted from disclosure if the document was disclosed pursuant to a request under section 5 of the *Freedom of Information and Protection of Privacy Act*, and the permittee consents to such publication by the Province.

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APPENDICES 1A-1K: TECK COAL LIMITED OPERATIONS MAPS

**APPENDIX 1A – Teck Coal Limited Location Map**

**APPENDIX 1B – Teck Coal Limited Sampling Locations Overview Map**

**APPENDIX 1C – Teck Coal Limited Sampling Locations Map – Compliance Points**

**APPENDIX 1D – Teck Coal Limited Sampling Locations Map – Order Stations**

**APPENDIX 1E – Teck Coal Limited Sampling Locations Map – Koocanusa Reservoir**

**APPENDIX 1F – Teck Coal Limited Sampling Locations Map – Fording River Operations**

**APPENDIX 1G – Teck Coal Limited Sampling Locations Map – Greenhills Operations**

**APPENDIX 1H – Teck Coal Limited Sampling Locations Map – Line Creek Operations**

**APPENDIX 1I – Teck Coal Limited Sampling Locations Map – Line Creek Operations Phase II**

**APPENDIX 1Ia – Dry Creek Water Management System Benthic Invertebrate Tissue Monitoring Location Map – Line Creek Operations**

**APPENDIX 1J – Teck Coal Limited Sampling Locations Map – Elkview Operations**

**APPENDIX 1K – Teck Coal Limited Sampling Locations Map – Coal Mountain Operations**

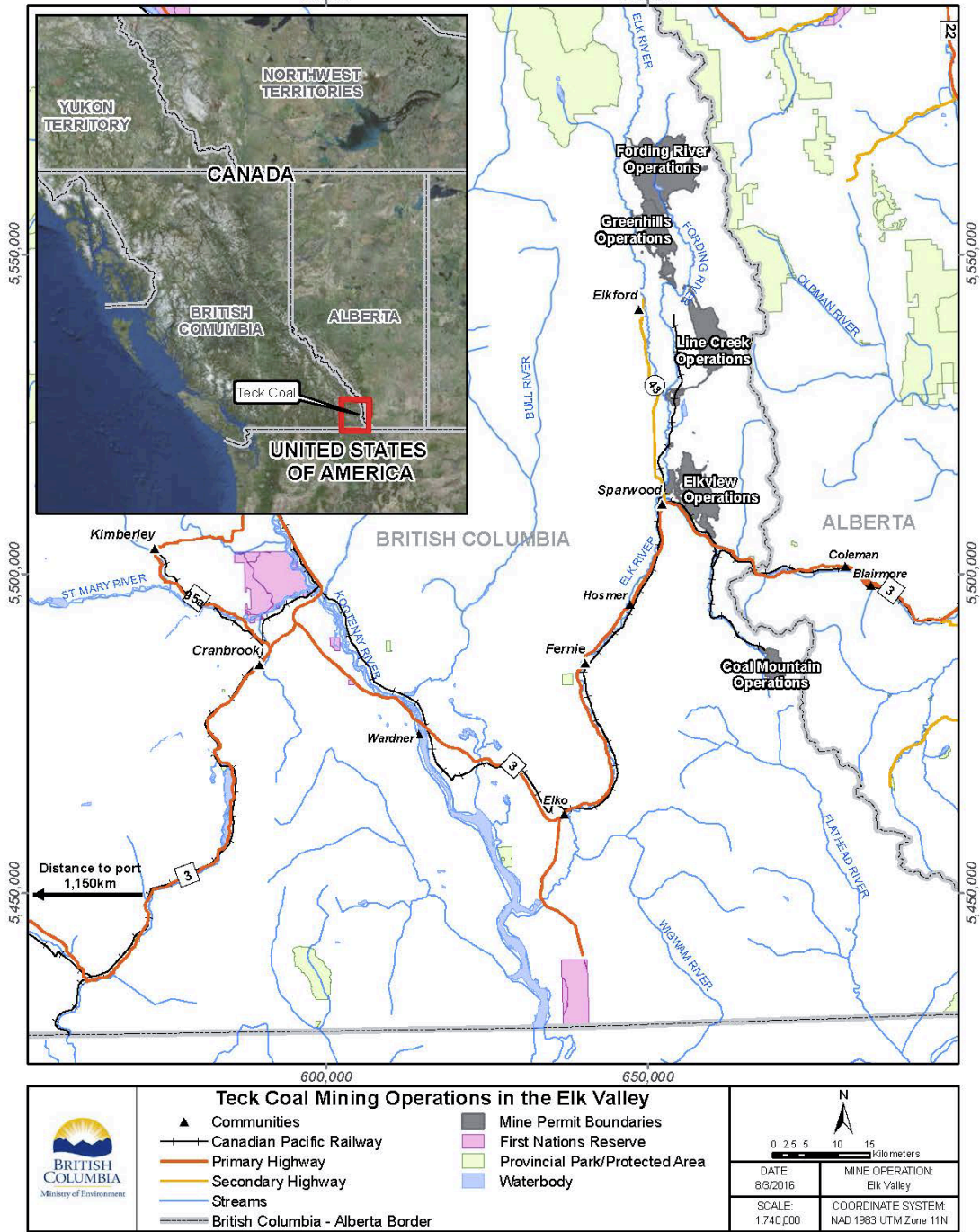
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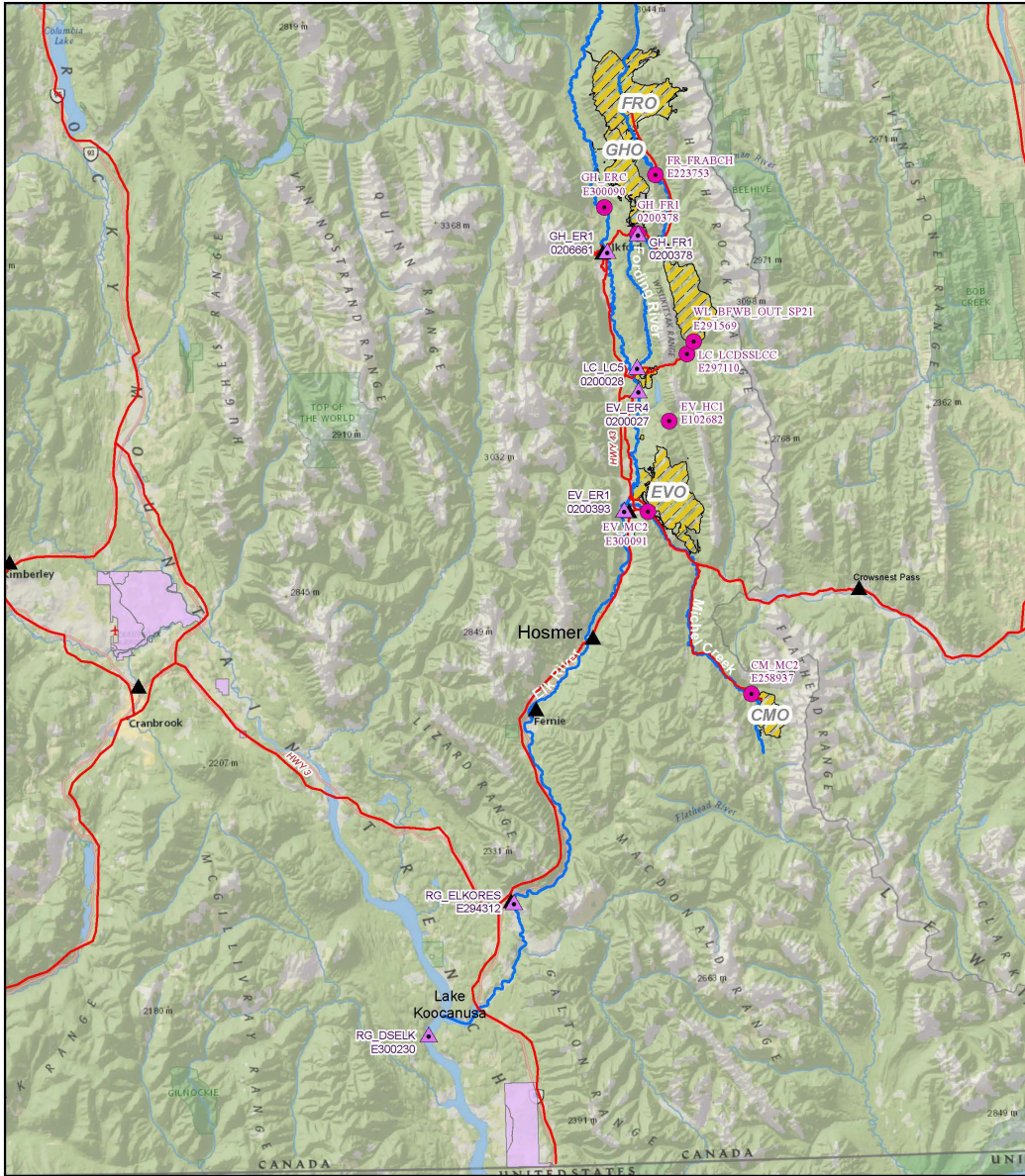
APPENDIX 1A – Teck Coal Limited Location Map



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APPENDIX 1B – Teck Coal Limited Sampling Locations Overview Map



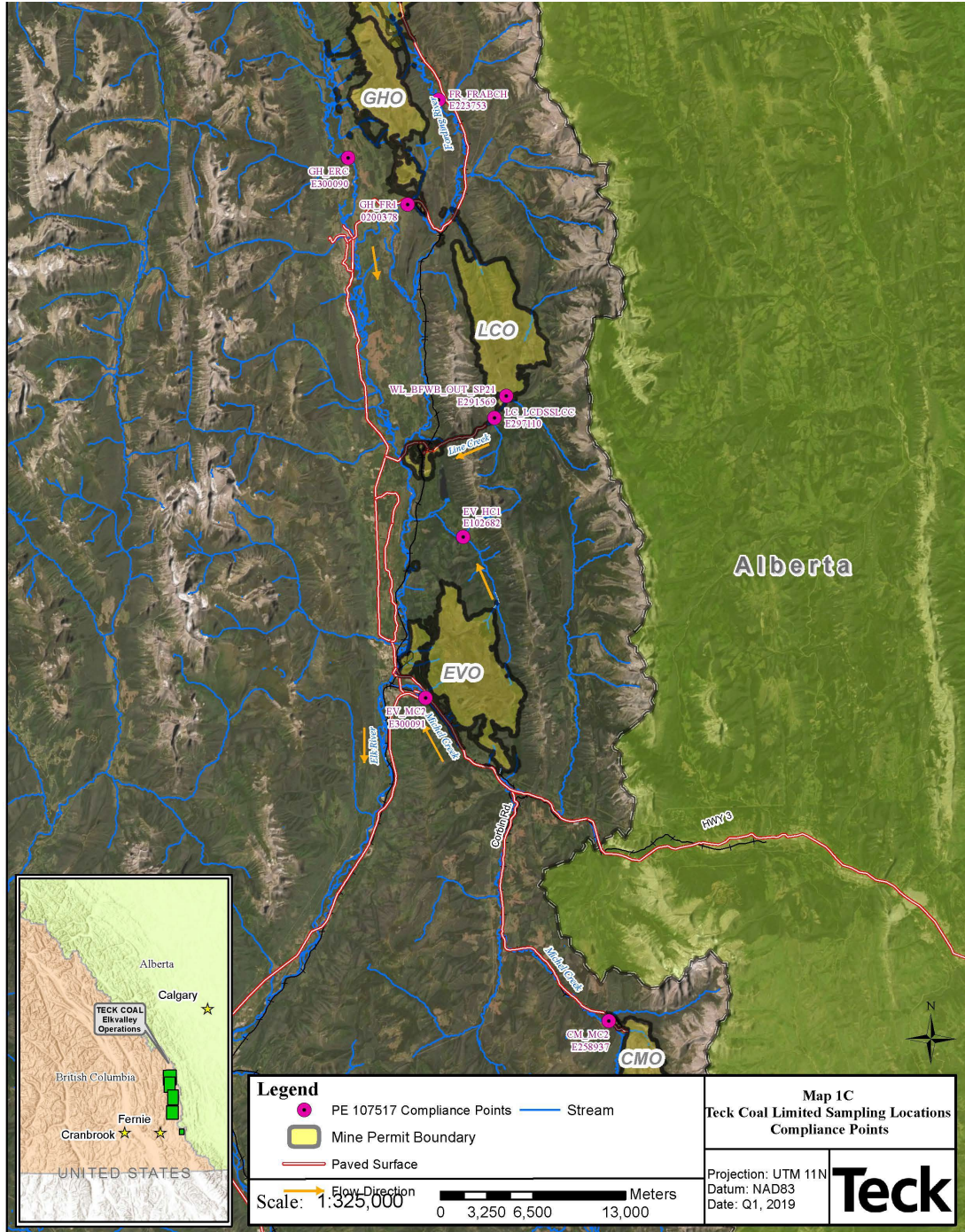
<p><b>Teck</b></p> <p>The maps and map data are provided 'as is' without any guarantee, representation, condition or warranty of any kind, either express, implied, or statutory. Teck Resources Limited assumes no liability with respect to any reliance the user places in the maps and map data, and the user assumes the entire risk as to the truth, accuracy, currency, or completeness of the information contained in the maps and map data.</p>	<p><b>Teck Coal Limited Sampling Locations</b></p> <ul style="list-style-type: none"> <li>▲ PE 107517 Order Station</li> <li>● PE 107517 Compliance Points</li> <li>▲ Communities</li> <li>— Highway</li> <li>— River</li> <li>▭ Mine Permit Boundaries</li> <li>▭ First Nations Reserve</li> </ul>	<p style="text-align: center;">N</p> <p style="text-align: center;">0 4 8 16 Kilometers</p> <table border="1"> <tr> <td>DATE: 10/21/2020</td> <td>MINE OPERATION: Teck Coal</td> </tr> <tr> <td>SCALE: 1:655,021</td> <td>COORDINATE SYSTEM: NAD 1983 UTM Zone 11N</td> </tr> </table>	DATE: 10/21/2020	MINE OPERATION: Teck Coal	SCALE: 1:655,021	COORDINATE SYSTEM: NAD 1983 UTM Zone 11N
DATE: 10/21/2020	MINE OPERATION: Teck Coal					
SCALE: 1:655,021	COORDINATE SYSTEM: NAD 1983 UTM Zone 11N					

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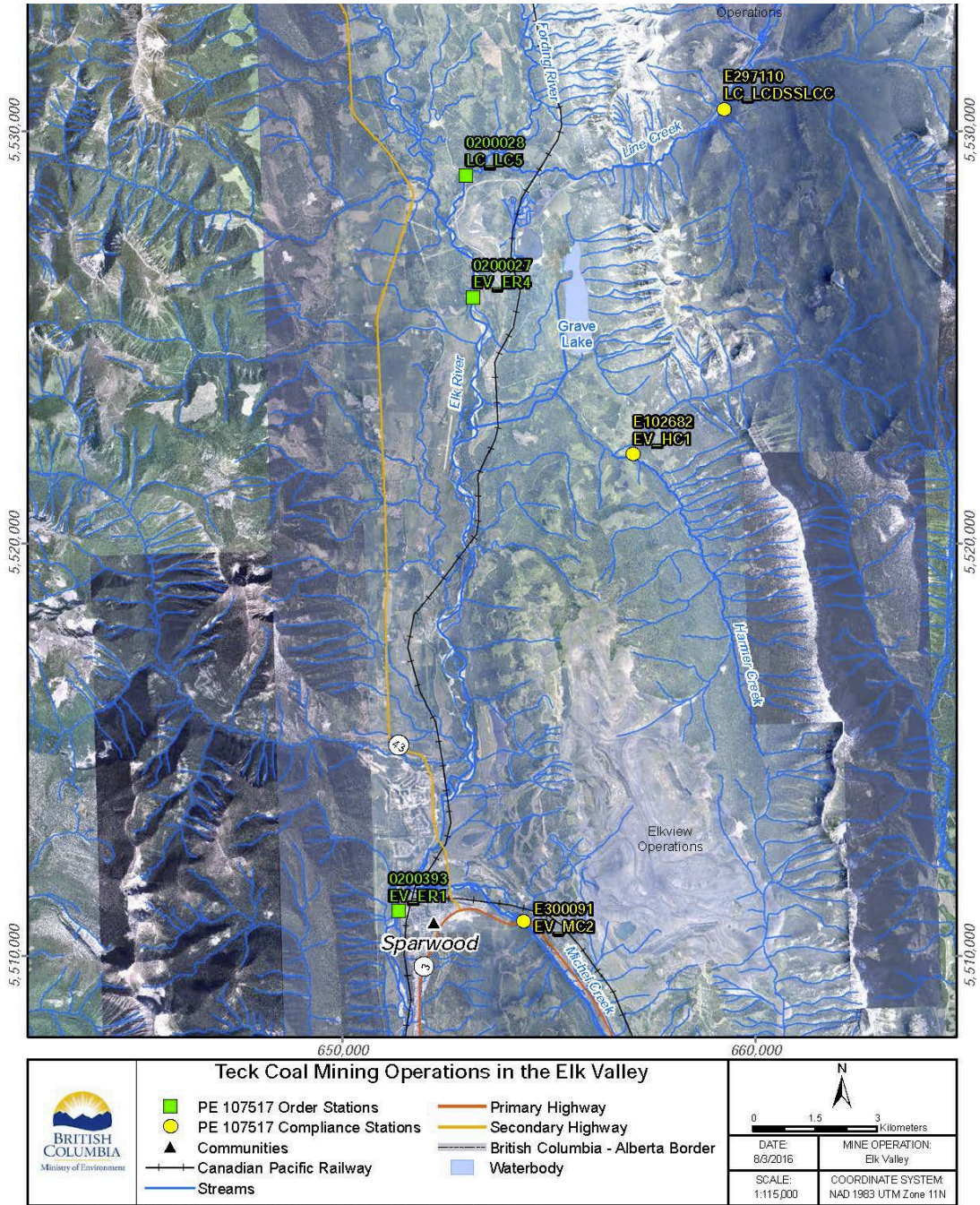
APPENDIX 1C – Teck Coal Limited Sampling Locations Map – Compliance Points



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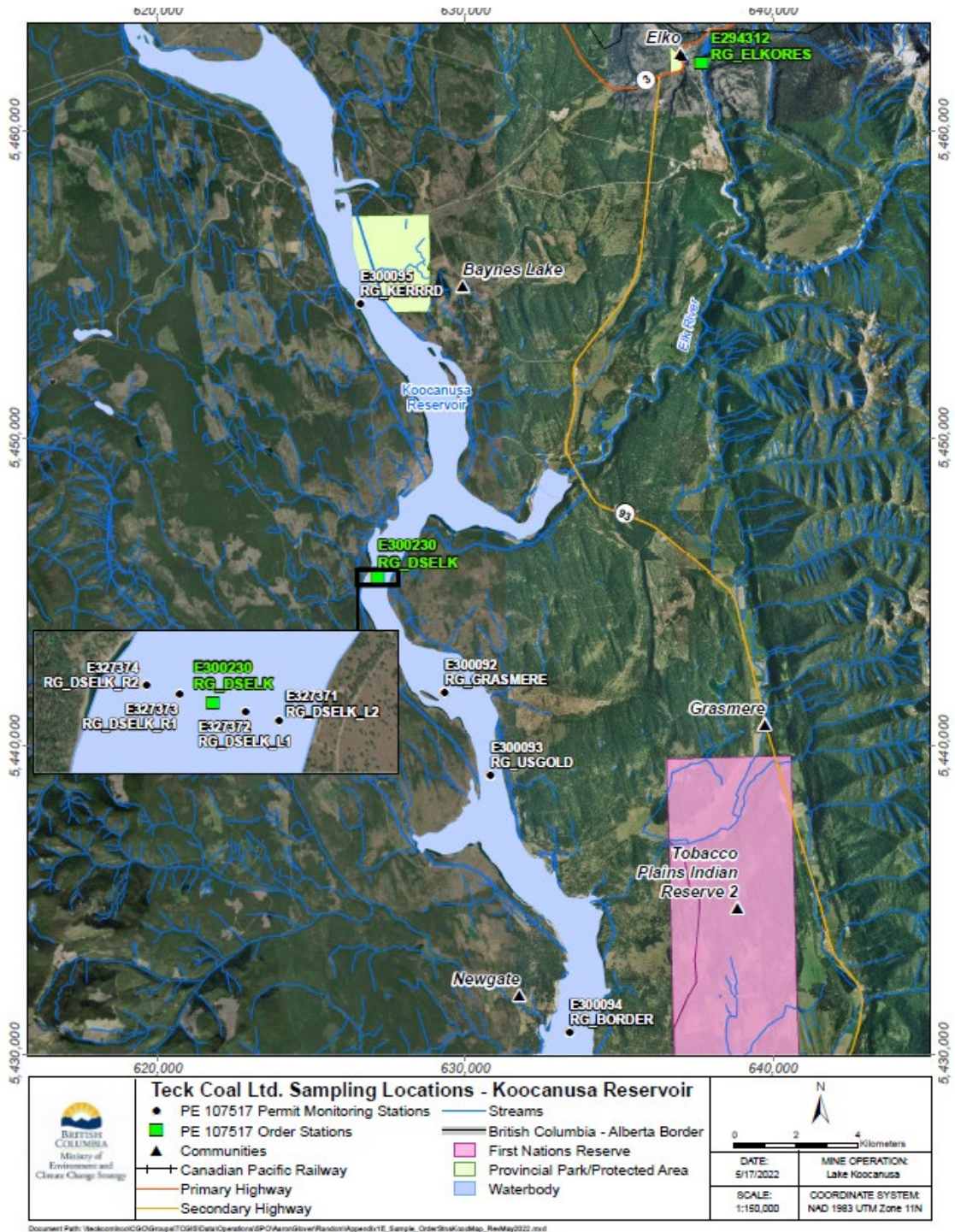
APPENDIX 1D – Teck Coal Limited Sampling Locations Map – Order Stations



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APPENDIX 1E – Teck Coal Limited Sampling Locations Map – Kooacanusa Reservoir

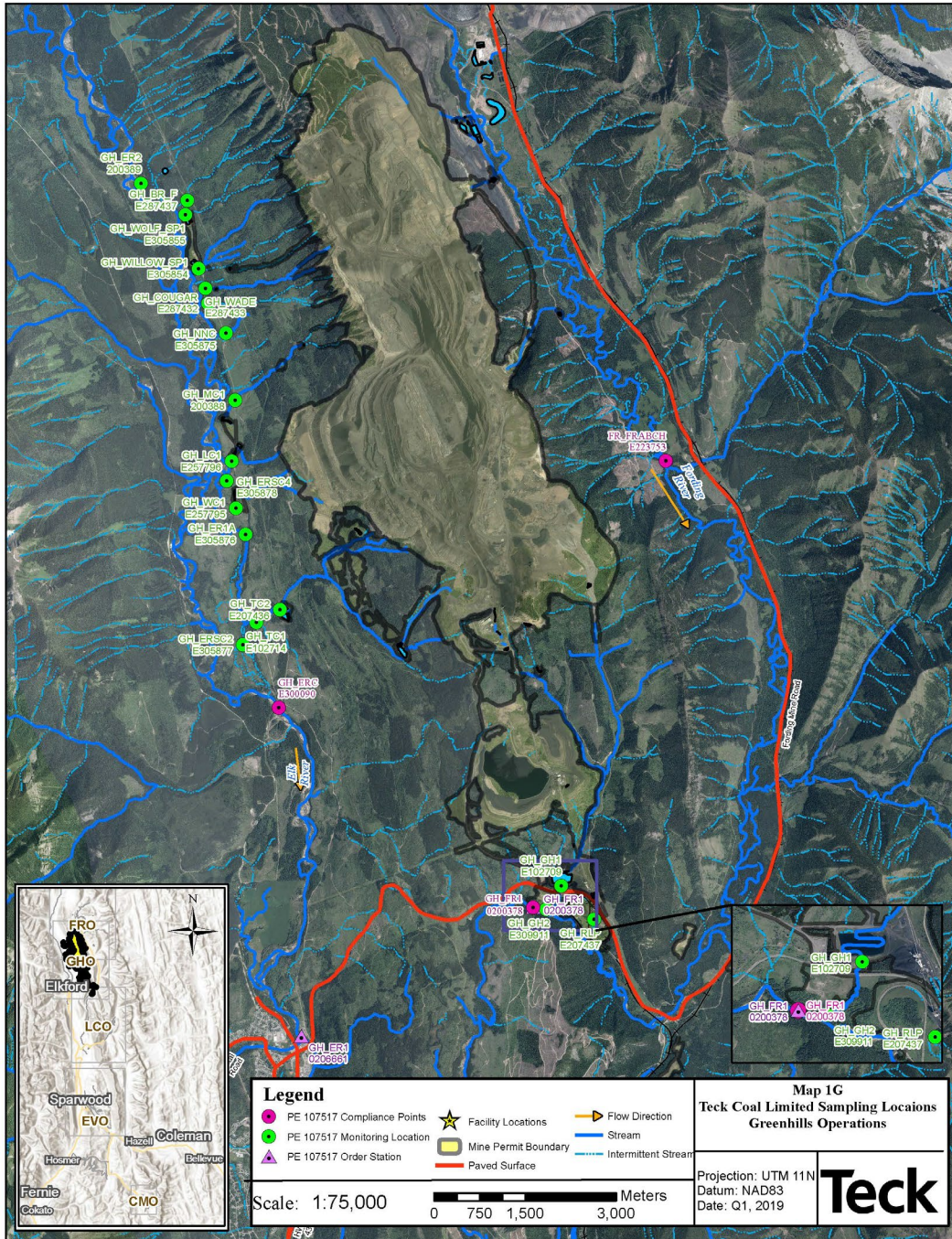


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APPENDIX 1G – Teck Coal Limited Sampling Locations Map – Greenhills Operations

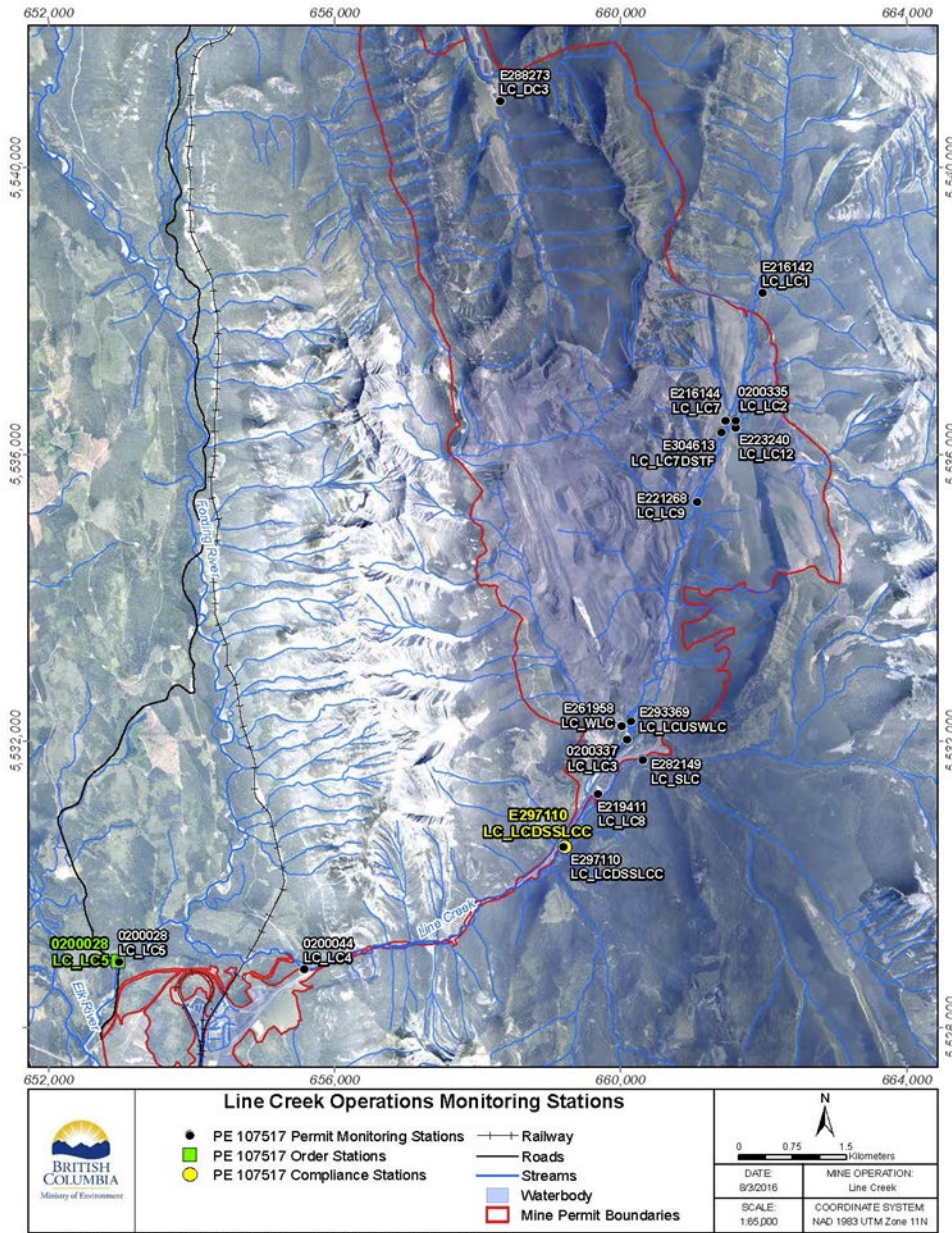


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**APPENDIX 1H – Teck Coal Limited Sampling Locations Map – Line Creek  
Operations Phase I**

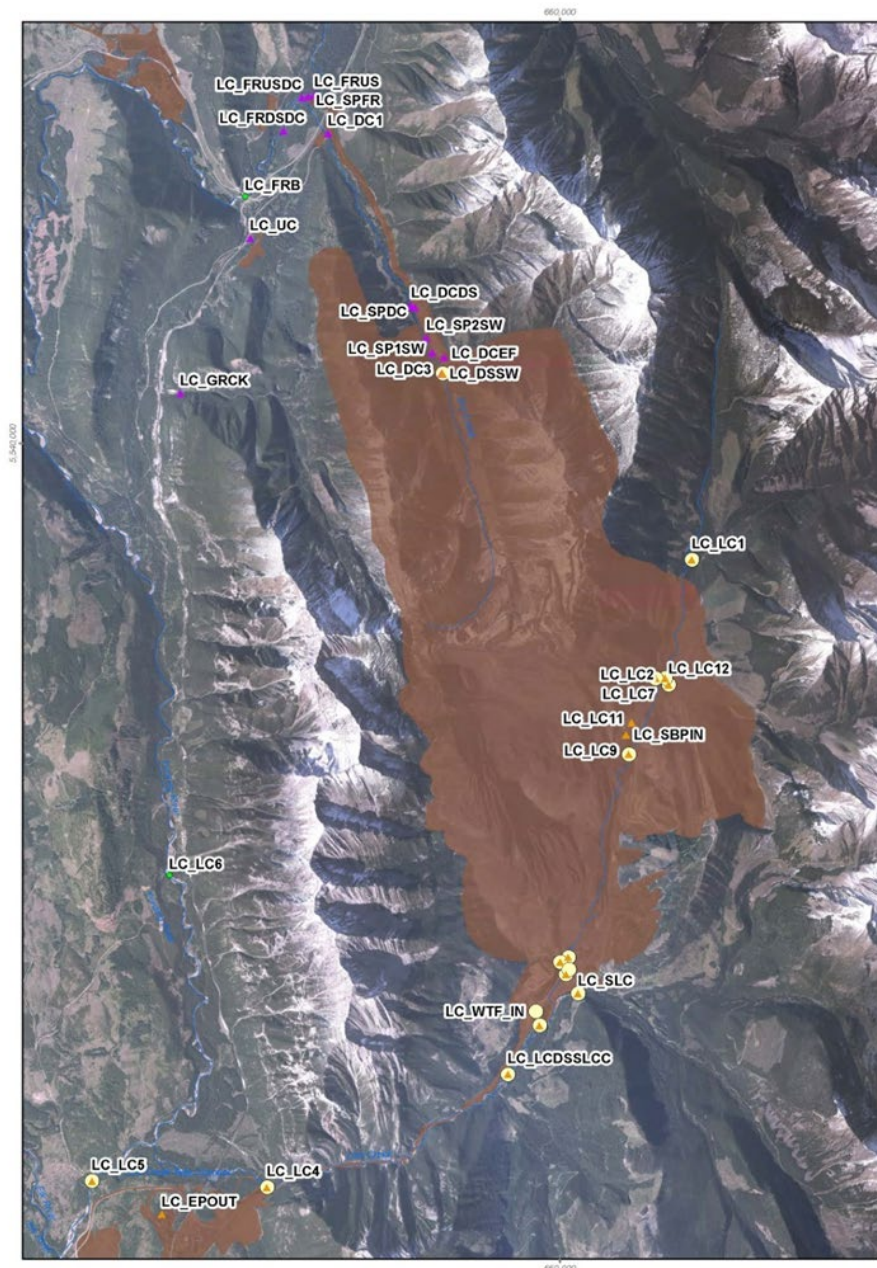


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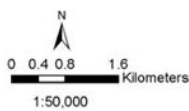
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## APPENDIX 11 – Teck Coal Limited Sampling Locations Map – Line Creek Operations Phase II



Line Creek Operations Monitoring Locations



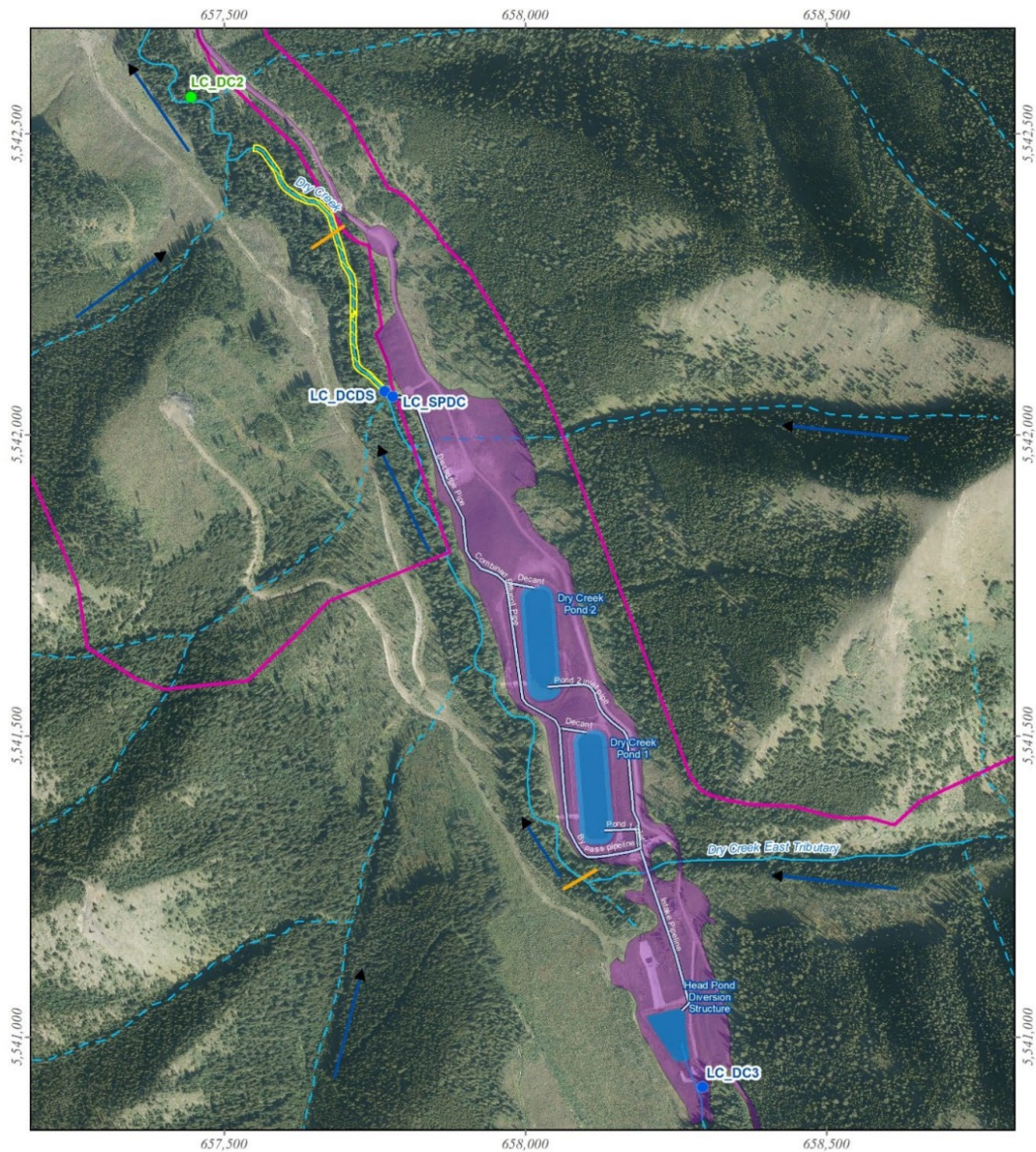
- ▲ PE 5353 Stations
- Other Stations
- ▲ PE 106970 Stations
- PE 107517 LineCreek Stations
- ▲ Communities
- Rivers
- Teck Coal Mine Operations
- Ministerial Order Boundary

Teck

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**APPENDIX 1Ia – Dry Creek Water Management System Benthic Invertebrate Tissue Monitoring Location Map – Line Creek Operations**

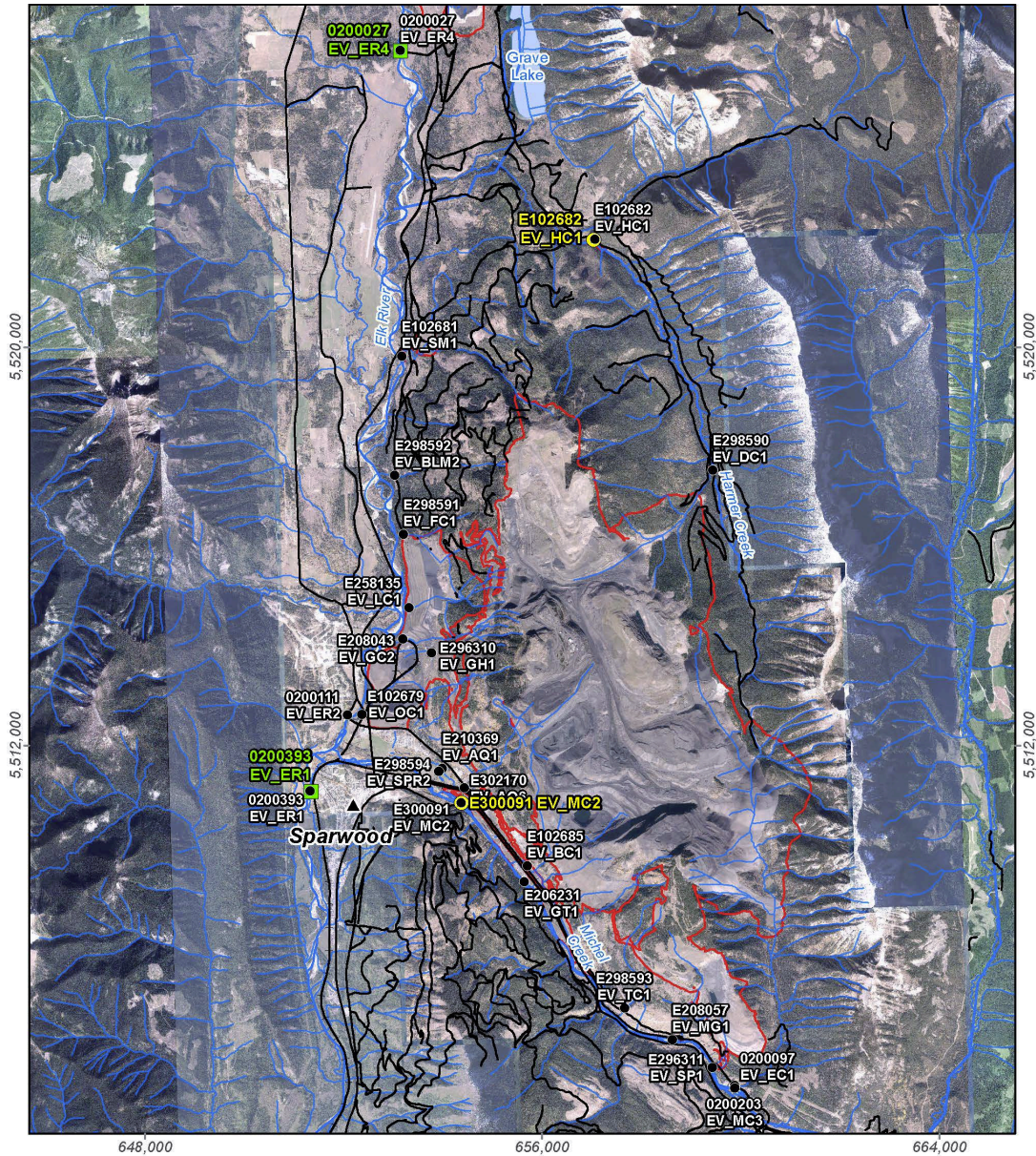












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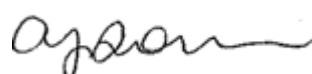
APPENDIX 1J – Teck Coal Limited Sampling Locations Map – Elkview Operations



Elkview Operations Monitoring Stations		 0 1.5 3 Kilometers	
	PE 107517 Permit Monitoring Stations		Railway
	PE 107517 Order Stations		Roads
	PE 107517 Compliance Stations		Streams
			Waterbody
			Mine Permit Boundaries
		DATE: 4/3/2017      MINE OPERATION: Elkview SCALE: 1:101,500      COORDINATE SYSTEM: NAD 1983 UTM Zone 11N	

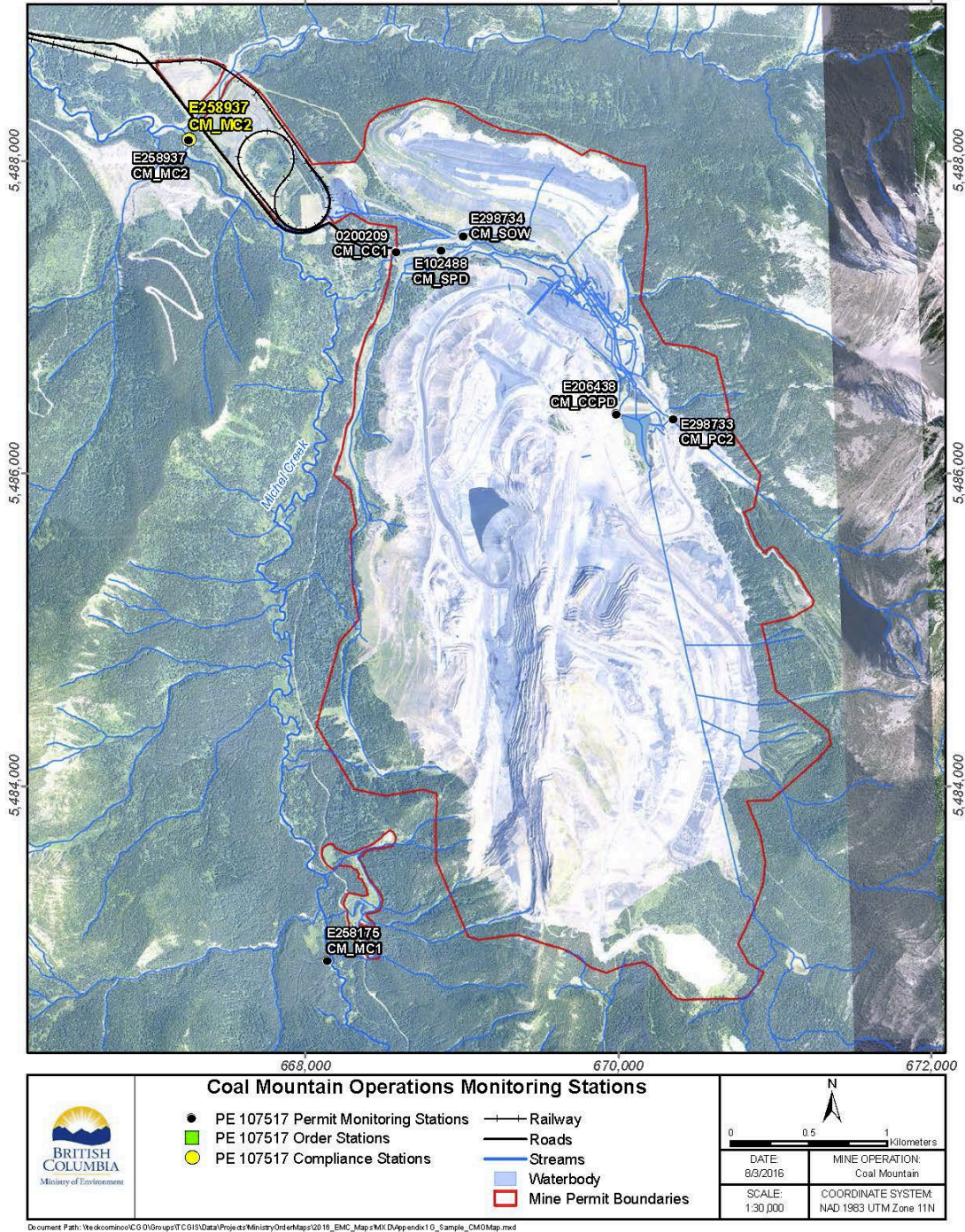
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APPENDIX 1K – Teck Coal Limited Sampling Locations Map – Coal Mountain



Date issued: November 19, 2014  
 Date amended: December 19, 2022  
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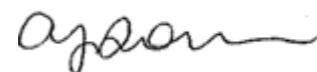
**APPENDIX 2: SURFACE WATER DISCHARGE AND RECEIVING ENVIRONMENT MONITORING PROGRAM**

**TABLE 10 - DESIGNATED AREA MONITORING PROGRAM – COMPLIANCE POINTS**

	FRO – FORDING RIVER ~100m UPSTREAM OF CHAUNCEY CREEK (4)	GHO – FORDING RIVER ~205m DOWNSTREAM OF GREENHILLS CREEK	GHO – ELK RIVER ~220m DOWNSTREAM OF THOMPSON CREEK	LCO – LINE CREEK IMMEDIATELY DOWNSTREAM OF SOUTH LINE CREEK CONFLUENCE	EVO – HARMER SPILLWAY	EVO – MICHEL CREEK AT HWY 3 BRIDGE (4)	CMO – MICHEL CREEK 50m UPSTREAM OF ANDY GOODE CREEK
<i>EMS Number</i>	<i>E223753</i>	<i>0200378</i>	<i>E300090</i>	<i>E297110</i>	<i>E102682</i>	<i>E300091</i>	<i>E258937</i>
<b>PARAMETER</b>							
Field Parameters(a)	W/M	W/M	W/M	W/M	W/M	W/M	W/M
Conventional Parameters (b)	W/M	W/M	W/M	W/M	W/M	W/M	W/M
Major Ions (c)	W/M	W/M	W/M	W/M	W/M	W/M	W/M
Nutrients (d)	W/M	W/M	W/M	W/M	W/M	W/M	W/M
Total and Dissolved Metals Scans (e)	W/M	W/M	W/M	W/M	W/M	W/M	W/M
BOD	-	-	-	M	-	-	-
Chlorophyll- <i>a</i>	-	-	-	Three times annually, between July 15 & Sept 30 annually	-	-	-
Total Phosphorus	-	-	-	Every two weeks beginning Jun 15 through Sept 30, annually	-	-	-
Bromate	-	-	-	W/M	-	-	-
Hydrogen Peroxide	-	-	-	W/M	-	-	-

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.
- 4) Monitoring location appears in two monitoring tables in this permit; therefore, monitoring data must be reported according to the requisite reporting requirements in both Section 9 and Appendix 4.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
(most recent)



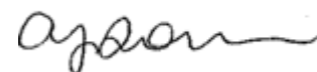
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for Director, *Environmental Management Act*  
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TABLE 11 – DESIGNATED AREA MONITORING PROGRAM – ORDER STATIONS

	FR4 GH FR1	FR5 LC LC5	ER1 GH ER1	ER2 EV ER4	ER3 EV ER1	ER4 RG ELKORES	LK2
	UPPER FORDING RIVER (DOWNSTREAM OF GREENHILLS CREEK)	LOWER FORDING RIVER (DOWNSTREAM OF LINE CREEK)	ELK RIVER UPSTREAM OF BOIVIN CREEK	ELK RIVER UPSTREAM OF GRAVE CREEK (FROM FORDING RIVER TO MICHEL CREEK)	ELK RIVER DOWNSTREAM MICHEL CREEK	ELK RIVER AT ELKO RESERVOIR	KOOCANUSA RESERVOIR TRANSECT SOUTH OF THE ELK RIVER (4)
<i>EMS Number</i>	0200378	0200028	E206661	0200027	0200393	E294312	
<b>PARAMETER</b>							
Field Parameters (a)	W/M	W/M	W/M	W/M	W/M	W/M	M/T
Conventional Parameters (b)	W/M	W/M	W/M	W/M	W/M	W/M	M/T
Major Ions (c)	W/M	W/M	W/M	W/M	W/M	W/M	M/T
Nutrients (d)	W/M	W/M	W/M	W/M	W/M	W/M	M/T
Total and Dissolved Metals Scan (e)	W/M	W/M	W/M	W/M	W/M	W/M	M/T
Secchi depth and chlorophyll-a	-	-	-	-	-	-	M/T

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.
- 4) Refer to Table 2A for transect sampling locations and EMS IDs.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
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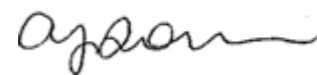
**TABLE 12 - DESIGNATED AREA MONITORING PROGRAM – KOOCANUSA RESERVOIR RECEIVING ENVIRONMENT STATIONS**

	KOOCANUSA RESERVOIR DOWNSTREAM OF KIKKOMAN CREEK	KOOCANUSA RESERVOIR WEST OF GRASMERE	KOOCANUSA RESERVOIR UPSTREAM OF GOLD CREEK	KOOCANUSA RESERVOIR UPSTREAM OF CANADA/US BORDER
<i>EMS Number</i>	<i>E300095</i>	<i>E300092</i>	<i>E300093</i>	<i>E300094</i>
<b>PARAMETER</b>				
Field Parameters (a)	M	M	M	M
Conventional Parameters (b)	M/EH	M/EH	M/EH	M
Major Ions (c)	M/EH	M/EH	M/EH	M
Nutrients (d)	M/EH	M/EH	M/EH	M
Total and Dissolved Metals Scan (e)	M/EH	M/EH	M/EH	M
Secchi depth and chlorophyll-a	M	M	M	M

Note: sample collection is based upon access; ice on the reservoir may prevent sample collection, if this is the case, the monitoring report must include a reason in the report

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
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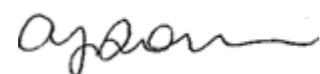
A.J. Downie, M.Sc., P.Ag.  
for Director, *Environmental Management Act*  
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TABLE 13 - FORDING RIVER OPERATIONS DISCHARGE MONITORING PROGRAM

	TAILINGS SLURRY TO NORTH TAILINGS POND	TAILINGS SLURRY TO SOUTH TAILINGS POND	NORTH LOOP POND DECANT (h)	MAINTENANCE AND SERVICES POND DECANT	EAGLE POND DECANT (h)	CLODE POND DECANT (h)	SOUTH KILMARNOCK POND DECANT – PHASE I (h)	SOUTH KILMARNOCK POND DECANT – PHASE II (h)	HENRETTA PIT EFFLUENT INTO DIVERSION CULVERTS (j)	SMITH PONDS DECANT (h)	SWIFT PIT EFFLUENT TO FORDING RIVER	SWIFT-CATARACT SED. POND DOSED WITH ANTISCALANT TO FORDING RIVER (4;5)	LIVERPOOL SED. PONDS DECANT (h)	POST SED. PONDS DECANT (h)	LAKE MOUNTAIN SED. PONDS TO LAKE MOUNTAIN CREEK	FLOODPLAIN WIDENING SED. POND DECANT (h)
<i>EMS Number</i>	<i>E102475</i>	<i>E206660</i>	<i>E102476</i>	<i>E102478</i>	<i>E102480</i>	<i>E102481</i>	<i>E208394</i>	<i>E208395</i>	<i>E216781</i>	<i>E261897</i>	<i>E217403</i>	<i>E320694</i>	<i>E304835</i>	<i>E304750</i>	<i>E306924</i>	<i>E325311</i>
(h) In-pond sample <i>EMS Number</i>	-	-	<i>E310046</i>	-	<i>E310047</i>	<i>E310048</i>	<i>E310049</i>	<i>E310050</i>	-	<i>E310051</i>	-	-	<i>E310052</i>	<i>E310053</i>	-	<i>E325312</i>
<b>PARAMETER</b>																
Field Parameters (a)	-	-	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Conventional Parameters (b)	SA	SA	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Major Ions (c)	SA	SA	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Nutrients (d)	SA	SA	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Total and Dissolved Metals Scan (e)	SA	SA	M	M	M	M	M	M	M	M	M	M	M	M	M	M
96 hour Rainbow Trout single concentration toxicity test (g)	-	-	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	-	Q	Q
48 hour <i>Daphnia magna</i> single concentration toxicity test (g)	-	-	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	-	Q	Q

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.
- 4) Monitoring location appears in two monitoring tables in this permit; therefore, monitoring data must be reported according to the requisite reporting requirements in both Section 9 and Appendix 5.
- 5) Samples are to be collected only when there is discharge via overflow from the FRO-S AWTF Swift Creek Intake. If the discharge is initiated because of a recirculation event at FRO-S AWTF, the monitoring program is not effective during the first four (4) hours of the recirculation event.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
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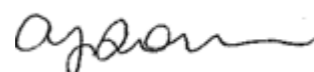


TABLE 14 – FORDING RIVER OPERATIONS RECEIVING ENVIRONMENT AND OTHER MONITORING PROGRAM

	FORDING RIVER U/S OF KILMARNOCK CREEK	FORDING RIVER D/S OF FRO-S AWTF OUTFALL STRUCTURE (4)	FORDING RIVER ~525 m D/S OF CATARACT CREEK	FORDING RIVER D/S OF HENRETTA	FORDING RIVER U/S OF HENRETTA	HENRETTA CREEK AT MOUTH	HENRETTA CREEK UPSTREAM OF MCQUARRIE CREEK	FORDING RIVER NEAR FORDING RIVER ROAD	KILMARNOCK CREEK AT MOUTH
<i>EMS Number</i>	0200201	E320695	E300071	0200251	E216777	E216778	E300096	E300097	0200252
<b>PARAMETER</b>									
Field Parameters (a)	W/M	W/M	W/M	M	M	W/M	M	M	M
Conventional Parameters (b)	W/M	W/M	W/M	M	M	W/M	M	M	M
Major Ions (c)	W/M	W/M	W/M	M	M	W/M	M	M	M
Nutrients (d)	W/M	W/M	W/M	M	M	W/M	M	M	M
Total and Dissolved Metals Scan (e)	W/M	W/M	W/M	M	M	W/M	M	M	M

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.
- 4) Monitoring location appears in three monitoring tables in this permit, therefore monitoring data must be reported according to the requisite reporting requirements in Section 9 and Appendices 4 and 5.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
(most recent)



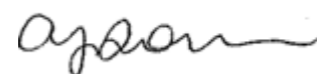
A.J. Downie, M.Sc., P.Ag.  
for Director, *Environmental Management Act*  
Mining Authorizations

TABLE 15 – GREENHILLS OPERATIONS DISCHARGE MONITORING PROGRAM

	TAILINGS POND WATER	GREENHILLS CREEK SED. POND DECANT (4)	THOMPSON CREEK SED. POND DECANT	PORTER CREEK SED. POND DECANT	WOLFRAM CREEK SED. POND DECANT	LEASK CREEK SED. POND DECANT	RAIL LOOP SED. POND DECANT	MICKELSON CREEK AT LRP ROAD	WADE CREEK AT LRP ROAD	WOLF CREEK SED. POND DECANT	WILLOW CREEK SED. POND DECANT
<i>EMS Number</i>	<i>E287438</i>	<i>E102709</i>	<i>E207436</i>	<i>0200385</i>	<i>E257795</i>	<i>E257796</i>	<i>E207437</i>	<i>0200388</i>	<i>E287433</i>	<i>E305855</i>	<i>E305854</i>
<b>PARAMETER</b>											
Field Parameters (a)	-	M	M	M	M	M	M	M	M	M	M
Conventional Parameters (b)	SA	M	M	M	M	M	M	M	M	M	M
Major Ions (c)	SA	M	M	M	M	M	M	M	M	M	M
Nutrients (d)	SA	M	M	M	M	M	M	M	M	M	M
Total and Dissolved Metals Scan (e)	SA	M	M	M	M	M	M	M	M	M	M
96 hour Rainbow Trout single concentration toxicity test (g)	-	Q	Q	Q	Q	Q	-	-	Q	Q	Q
48 hour <i>Daphnia magna</i> single concentration toxicity test (g)	-	Q	Q	Q	Q	Q	-	-	Q	Q	Q

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.
- 4) Monitoring location appears in two monitoring tables in this permit; therefore, monitoring data must be reported according to the requisite reporting requirements in both Section 9 and Appendix 5.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
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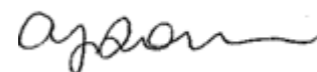
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for Director, *Environmental Management Act*  
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TABLE 16 – GREENHILLS OPERATIONS RECEIVING ENVIRONMENT MONITORING PROGRAM

	ELK RIVER UPSTREAM OF GREENHILLS OPERATIONS	THOMPSON CREEK AT LRP ROAD	COUGAR CREEK AT LRP ROAD	BRANCH F AT LRP ROAD	NO NAME CREEK	ELK RIVER SIDE CHANNEL D/S WOLFRAM CREEK	ELK RIVER D/S OF THOMPSON CREEK	ELK RIVER SIDE CHANNEL U/S WOLFRAM CREEK
<i>EMS Number</i>	<i>0200389</i>	<i>E102714</i>	<i>E287432</i>	<i>E287437</i>	<i>E305875</i>	<i>E305876</i>	<i>E305877</i>	<i>E305878</i>
<b>PARAMETER</b>								
Field Parameters (a)	M	M	M	M	M	M	M	M
Conventional Parameters (b)	M	M	M	M	M	M	M	M
Major Ions (c)	M	M	M	M	M	M	M	M
Nutrients (d)	M	M	M	M	M	M	M	M
Total and Dissolved Metals Scan (e)	M	M	M	M	M	M	M	M
96 hour Rainbow Trout single concentration toxicity test (g)	-	Q	-	-	-	-	-	-
48 hour <i>Daphnia magna</i> single concentration toxicity test (g)	-	Q	-	-	-	-	-	-

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.

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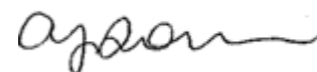
A.J. Downie, M.Sc., P.Ag.  
for Director, *Environmental Management Act*  
Mining Authorizations

TABLE 17 - LINE CREEK OPERATIONS PHASE I DISCHARGE MONITORING PROGRAM

	NO NAME CREEK SED. POND DECANT	MSA NORTH PONDS DECANT	MSA NORTH PONDS ALTERNATE (4)	CONTINGENCY TREATMENT SYSTEM (r)
<i>EMS Number</i>	<i>E221268</i>	<i>E216144</i>	<i>E304613</i>	<i>E219411</i>
<b>PARAMETERS</b>				
Field Parameters (a)	M	M	M	M
Conventional Parameters (b)	M	M	M	M
Major Ions (c)	M	M	M	M
Nutrients (d)	M	M	M	M
Total and Dissolved Metals Scan (e)	M	M	M	M
96 hour Rainbow Trout single concentration toxicity test (g)	Q	Q	Q	-
48 hour <i>Daphnia magna</i> single concentration toxicity test (g)	Q	Q	Q	-

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.
- 4) Monitoring location E304613 to be used as an alternate for E216144, as required.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
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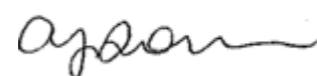
A.J. Downie, M.Sc., P.Ag.  
for Director, *Environmental Management Act*  
Mining Authorizations

TABLE 18 - LINE CREEK OPERATIONS PHASE II DISCHARGE MONITORING PROGRAM

	LCO DRY CREEK SED. PONDS TO DRY CREEK	LCO DRY CREEK SED. PONDS TO FORDING RIVER VIA OUTFALL (WHEN IN USE)	DIVERSION STRUCTURE SPILLWAY (WHEN IN USE)	SED. POND 1 SPILLWAY (WHEN IN USE)	SED. POND 2 SPILLWAY (WHEN IN USE)	SED. POND 3 SPILLWAY (WHEN CONSTRUCTED AND IN USE)
<i>EMS Number</i>	<i>E295211</i>	<i>E295231</i>	<i>E295313</i>	<i>E295314</i>	<i>E295315</i>	<i>E295316</i>
<b>PARAMETER</b>						
Field Parameters (a)	BP-W/M <sup>(1)</sup>	W/M	D*/W	D*/W	D*/W	D*/W
Conventional Parameters (b)	BP-W/M	W/M	D*/W	D*/W	D*/W	D*/W
Major Ions (c)	BP-W/M	W/M	D*/W	D*/W	D*/W	D*/W
Nutrients (d)	BP-W/M	W/M	D*/W	D*/W	D*/W	D*/W
96-hour LC50 Rainbow Trout (g)	Q	Q	-	-	-	-
48-hour LT50 <i>Daphnia magna</i> (g)	Q	Q	-	-	-	-
Selenium Speciation	BP-W/M	-	-	-	-	-
Chlorophyll- <i>a</i> (h)	BP-W/M	-	-	-	-	-

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.

Date issued: November 19, 2014  
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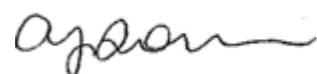
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for Director, *Environmental Management Act*  
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TABLE 19 – LINE CREEK OPERATIONS PHASE I RECEIVING ENVIRONMENT MONITORING PROGRAM

	LINE CREEK U/S OF PROCESS PLANT	LINE CREEK D/S OF WEST LINE CREEK	LINE CREEK U/S OF ROCK DRAIN	LINE CREEK U/S OF WLC BELOW ROCK DRAIN	LINE CREEK U/S MSA NORTH PIT	SOUTH LINE CREEK	WEST LINE CREEK	NORTH HORSESHOE CREEK NEAR MOUTH
<i>EMS Number</i>	0200044	0200337	0200335	E293369	E216142	E282149	E261958	E223240
<b>PARAMETER</b>								
Field Parameters (a)	W/M	W/M	M	M	M	M	M	M
Conventional Parameters (b)	W/M	W/M	M	M	M	M	M	M
Major Ions (c)	W/M	W/M	M	M	M	M	M	M
Nutrients (d)	W/M	W/M	M	M	M	M	M	M
Nitrate	-	-	-	W	-	-	W	-
Total and Dissolved Metals Scan (e)	W/M	W/M	M	M	M	M	M	M
BOD	-	W/M	M	M	-	M	-	-
Total Sulphide	-	W/M	-	-	-	-	-	-
Bromate	W/M	W/M	-	-	-	-	-	-
Hydrogen peroxide (Teck Internal Lab Results)	W/M	W/M	-	-	-	-	-	-

- 1) Refer to Table 23, Appendix 3, for abbreviation description.
- 2) Refer to Table 24, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.

Date issued: November 19, 2014  
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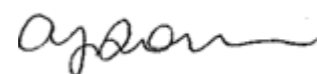
A.J. Downie, M.Sc., P.Ag.  
for Director, *Environmental Management Act*  
Mining Authorizations

TABLE 20 – LINE CREEK OPERATIONS PHASE II RECEIVING ENVIRONMENT MONITORING PROGRAM

	EAST TRIBUTARY OF LCO DRY CREEK	LCO DRY CREEK U/S OF EAST TRIBUTARY CREEK	LCO DRY CREEK D/S OF SED. PONDS	LCO DRY CREEK NEAR MOUTH	UNNAMED CREEK	GRACE CREEK U/S OF THE CP RAIL TRACKS	FORDING RIVER 100M U/S OF THE CONVEYANCE OUTFALL (K)	FORDING RIVER U/S OF LCO DRY CREEK, 100M D/S OF THE CONVEYANCE OUTFALL TO FORDING RIVER (K)	FORDING RIVER D/S OF LCO DRY CREEK	CHAUNCEY CREEK
<i>EMS Number</i>	<i>E288274</i>	<i>E288273</i>	<i>E295210</i>	<i>E288270</i>	<i>E295213</i>	<i>E288275</i>	<i>E295232</i>	<i>E288271</i>	<i>E288272</i>	<i>E295214</i>
<b>PARAMETER</b>										
Field Parameters (a)	M	BP-W/M	BP- W/M <sup>(1)</sup>	W/M	M	M	M	M	W/M	M
Conventional Parameters (b)	M	BP-W/M	BP- W/M	W/M	M	M	M	M	W/M	M
Major Ions (c)	M	BP-W/M	BP- W/M	W/M	M	M	M	M	W/M	M
Nutrients (d)	M	BP-W/M	BP- W/M	W/M	M	M	M	M	W/M	M
Selenium Speciation	-	BP-W/M	BP- W/M	-	-	-	-	-	-	-
Chlorophyll- <i>a</i>	M	BP-W/M	BP- W/M	W/M	-	-	-	-	-	-

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.

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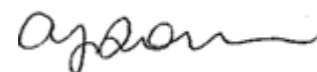
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TABLE 21 - ELKVIEW OPERATIONS DISCHARGE MONITORING PROGRAM

	WESTFORK TAILINGS IMPOUNDMENT TO GROUND	ERICKSON CREEK AT MOUTH	SOUTH PIT CREEK SED. POND DECANT	LOWER MILLIGAN CREEK SED. POND DECANT	GATE CREEK SED. POND DECANT	BODIE CREEK SED. POND DECANT	AQUEDUCT POND CONTROL STRUCTURE TO AQUEDUCT CREEK
<i>EMS Number</i>	<i>E296310</i>	<i>0200097</i>	<i>E296311</i>	<i>E208057</i>	<i>E206231</i>	<i>E102685</i>	<i>E302170</i>
<b>PARAMETER</b>							
Field Parameters (a)	SA	M	M	M	M	M	M
Conventional Parameters (b)	SA	M	M	M	M	M	M
Major Ions (c)	SA	M	M	M	M	M	M
Nutrients (d)	SA	M	M	M	M	M	M
Total and Dissolved Metals Scan (e)	SA	M	M	M	M	M	M
96 hour Rainbow Trout single concentration toxicity test (g)	-	Q	Q	Q	Q	Q	Q
48 hour <i>Daphnia magna</i> single concentration toxicity test (g)	-	Q	Q	Q	Q	Q	Q

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.

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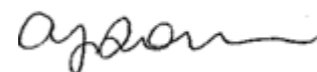


TABLE 22 - ELKVIEW OPERATIONS DISCHARGE MONITORING PROGRAM (CONTINUED)

	OTTO CREEK AT MOUTH	GODDARD CREEK SED. POND DECANT	LINDSAY CREEK INFILTRATION POND TO GROUND	DRY CREEK SED. POND DECANT	6 MILE CREEK SED. POND DECANT
<i>EMS Number</i>	<i>E102679</i>	<i>E208043</i>	<i>E258135</i>	<i>E298590</i>	<i>E102681</i>
<b>PARAMETER</b>					
Field Parameters (a)	M	M	M	M	M
Conventional Parameters (b)	M	M	M	M	M
Major Ions (c)	M	M	M	M	M
Nutrients (d)	M	M	M	M	M
Total and Dissolved Metals Scan (e)	M	M	M	M	M
96 hour Rainbow Trout single concentration toxicity test (g)	Q	Q	Q	Q	Q
48 hour <i>Daphnia magna</i> single concentration toxicity test (g)	Q	Q	Q	Q	Q

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.

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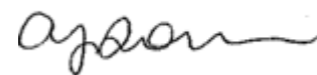
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TABLE 23– ELKVIEW OPERATIONS RECEIVING ENVIRONMENT AND OTHER MONITORING PROGRAM

	MICHEL CREEK U/S OF ERICKSON CREEK	ELK RIVER U/S OF MICHEL CREEK	BALMER CREEK AT CFI ROAD	FENNELON CREEK AT CFI ROAD	SPRING CREEK AT MOUTH	THRESHER CREEK AT MILLIGAN ROAD
<i>EMS Number</i>	0200203	0200111	E298592	E298591	E298594	E298593
<b>PARAMETER</b>						
Field Parameters (a)	W/M	M	M	M	M	M
Conventional Parameters (b)	W/M	M	M	M	M	M
Major Ions (c)	W/M	M	M	M	M	M
Nutrients (d)	W/M	M	M	M	M	M
Total and Dissolved Metals Scan (e)	W/M	M	M	M	M	M

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.

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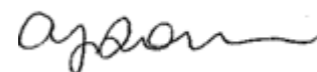
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TABLE 24- COAL MOUNTAIN OPERATIONS DISCHARGE MONITORING PROGRAM

	MAIN INTERCEPTOR SED. POND DECANT (h)	CORBIN SED. POND DECANT (h)	PENGELLY CHANNEL DECANT (h)	SOWCHUCK SUMP
<i>EMS Number</i>	<i>E102488</i>	<i>E206438</i>	<i>E298733</i>	<i>E298734</i>
<b>PARAMTER</b>				
Field Parameters (a)	M	M	M	M
Conventional Parameters (b)	M	M	M	M
Major Ions (c)	M	M	M	M
Nutrients (d)	M	M	M	M
Total Metals Scan (e)	M	M	M	M
96 hour Rainbow Trout single concentration toxicity test (g)	Q	Q	Q	-
48 hour LT50 <i>Daphnia magna</i> single concentration toxicity test (g)	Q	Q	Q	-

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.

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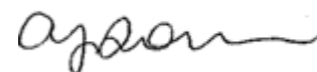
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**TABLE 25 – COAL MOUNTAIN OPERATIONS RECEIVING ENVIRONMENT MONITORING PROGRAM**

	MICHEL CREEK U/S OF OPERATIONS	CORBIN CREEK NEAR CONFLUENCE WITH MICHEL CREEK
<i>EMS Number</i>	<i>E258175</i>	<i>0200209</i>
<b>PARAMETER</b>		
Field Parameters(a)	M	W/M
Conventional Parameters (b)	M	W/M
Major Ions (c)	M	W/M
Nutrients (d)	M	W/M
Total Metals Scan (e)	M	W/M

- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.1.2.2 and the Regional Surface Flow Monitoring Plan for flow monitoring requirements.

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**APPENDIX 3: MONITORING PROGRAM NOTES AND EXPLANATIONS**

**Table 26 - Abbreviations for Surface Water Monitoring Program**

<b>A</b>	Annual frequency
<b>3X/W</b>	Sampling three times per week
<b>1X/2W</b>	Sampling once every two weeks
<b>1X/6W</b>	Six week in-stream cycle
<b>TW</b>	Twice weekly
<b>TA</b>	Twice annually
<b>C</b>	Continuous Monitoring refer to (f) Table 24
<b>D</b>	Daily frequency
<b>D*/W</b>	One sample within the first 24 hours when actively discharging at spillway, then weekly thereafter for continued discharge from the spillways. Discharge from the spillway(s) occurs for flows greater than a 1:10 year, 24-hour storm event.
<b>M</b>	Monthly frequency
<b>M/EH</b>	<p>Monthly frequency of one epilimnetic composite of water sampled from three depths (e.g. 1m, 5m,10m) and another hypolimnetic composite of water sampled from three depths (e.g. 20m,32m,45m)</p> <p>Stratification into an epilimnion and hypolimnion will be confirmed wherever a thermocline (defined as a 1°C change over 1 meter depth) is recorded. This temperature differential must be sustained in order to constitute stratification. Where stratified, one composite sample will be formed from three evenly spaced grab samples in the epilimnion and one composite sample similarly from the hypolimnion. Where unstratified, samples will be collected 3 m from the surface, 3 m from the substrate and at the mid-point of the water column. These samples will be averaged to comprise a composite sample.</p>
<b>M/T</b>	<p>Should conditions allow; monthly frequency of discrete samples from all sampled depths at all transect sampling locations identified in Table 2A.</p> <p>The number of discrete samples at each transect sampling location is determined by the depth of the reservoir at that location. If the depth is &lt;6m, then a single sample is taken at the mid-point of the water column. If the depth is 6-12 m then a sample is taken at ½ depth and a second sample is taken at ⅔ depth. If the depth is &gt; 12m, then three samples are taken: 3 m from surface, mid-point depth, and 3 m from the substrate.</p>
<b>Q</b>	Quarterly frequency
<b>Q*</b>	Toxicity testing done weekly until one year after commissioning is completed, at which time testing must be done quarterly.
<b>SA</b>	Semi-Annual frequency (twice per year), SA sampling schedules must coincide with the monthly sampling schedule for sampling locations where both sampling frequencies are required.
<b>W/M</b>	Weekly frequency March 15 – July 15, monthly during the rest of the year.

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<b>BP- W/M</b>	Weekly frequency March 15 to at least August 31 during bypass of the LCO Dry Creek Water Management System, monthly during the rest of the year, depending on unexpected monitoring results that indicate potential ortho-P uptake or the generation of organic selenium species.
<b>BOD</b>	5-day Biochemical Oxygen Demand
<b>EPH</b>	Extractable Petroleum Hydrocarbons, a combination of HEPH (C19-32) & LEPH (C10-19)
<b>TSS</b>	Total Suspended Solids

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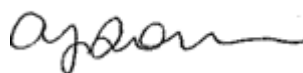


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Table 27- Surface Water Monitoring Program: Explanatory Notes

a	<b>Field Parameters</b> must include water temperature, specific conductance, dissolved oxygen, pH; for Koocanusa Reservoir locations this includes vertical profiles of dissolved oxygen and temperature
b	<b>Conventional Parameters</b> must include specific conductance, total dissolved solids, total suspended solids, hardness, alkalinity, dissolved organic carbon, total organic carbon, and turbidity.
c	<b>Major Ions</b> must include bromide, fluoride, calcium, chloride, magnesium, potassium, sodium, sulphate.
d	<b>Nutrients</b> must include ammonia, nitrate, nitrite, TKN, orthophosphate, total phosphorus.
e	<b>Dissolved Metals Scan</b> must include aluminum, antimony, arsenic, barium, beryllium, bismuth, boron, cadmium, chromium, cobalt, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, thallium, tin, titanium, uranium, vanadium, and zinc. <b>Total Metals Scan</b> must include aluminum, antimony, arsenic, barium, beryllium, bismuth, boron, cadmium, chromium, cobalt, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, thallium, tin, titanium, uranium, vanadium, and zinc.
f	Flow monitoring locations may be changed through approved flow monitoring plan and must follow latest approved plan. Flow measurements must be taken in accordance with Section 8.1.2.2 or in accordance with an approved Flow Monitoring Plan.
g	Acute toxicity tests must coincide with water quality sampling and must be implemented in accordance with the toxicity testing program approved by the director.  Teck shall collect samples when ponds are decanting within the permitted sampling frequency
h	If the discharge point is not decanting to the receiving environment, water quality samples must be taken just inside the decant point for all parameters, with the exception of toxicity.
i	<b>Selenium Speciation</b> must include total selenium, dissolved selenium, selenate (Se (VI)), selenite (Se (IV)), methylseleninic acid (MeSe (IV)), selenocyanate (SeCN), selenomethionine (SeMe), selenosulfate, dimethylselenoxide (DMSeO), methaneselenonic acid (MeSe(VI)) and unknown selenium species.
j	Field observations of algae growth (presence/absence and photograph)
k	Monitoring at this location is not required until commissioning of the conveyance works authorized in section 2.9 for the discharge to the Fording River. The permittee must notify the Ministry 1 year prior to discharge through the outfall to discuss initiation of monitoring at this location.
o (LCO)	Water temperature, dissolved oxygen, pH must be continuously monitored.
r (LCO)	To be sampled only when in use.

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APPENDIX 4: SELENIUM AND NITRATE TREATMENT FACILITIES

**APPENDIX 4A – Selenium and Nitrate Treatment Facility General Operational Requirements**

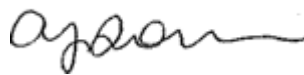
**APPENDIX 4B – West Line Creek Active Water Treatment Facility (AWTF)**

**APPENDIX 4C – Elkview Operations Saturated Rock Fill (EVO SRF)**

**APPENDIX 4D – Fording River Operations – South (FRO-S) AWTF**

**APPENDIX 4E – Fording River Operations – North (FRO-N) SRF**

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## APPENDIX 4A – Selenium and Nitrate Treatment Facility General Operational Requirements

This section includes requirements that apply to all selenium and nitrate treatment facilities. Subsequent sections include facility-specific requirements.

### 4A1 COMMISSIONING

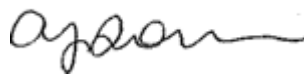
For the purpose of this permit, commissioning means bringing selenium and nitrate treatment facility works into operation. A maximum of 120 days in forward flow during commissioning is considered a reasonable time to undertake operational refinement or adjustment of works to optimize efficiency and/or effluent quality prior to moving to the operational phase of the treatment facility. The permittee must notify the director when the facility commences forward flow and commissioning must be completed within 120 days of commencing forward flow. Alternative commissioning periods must be approved by the director.

During pre-commissioning and commissioning of a treatment facility, the authorized discharge limits and associated site performance objectives for each specific facility included in the subsequent sections do not apply, but the discharge is required to be non-acutely toxic as per Section 6.2 and the downstream Compliance Point compliance limits apply. During the time that commissioning is underway, periodic reporting on the status of commissioning must be provided to the satisfaction of the director. Notification of process modification adjustments, as outlined in Section 4A4, is not required during the commissioning period. System optimization adjustments made during the commissioning period must be reported in the Commissioning Report, as per Section 4A8. Once the commissioning phase is complete, or the maximum approved commissioning period has ended, whichever occurs first, the operational phase begins, and the permittee must notify the director.

### 4A2 COMMISSIONING PLAN

A Commissioning Plan for each selenium and nitrate treatment facility must be prepared by a Qualified Professional, submitted to the director and implemented prior to commencement of the discharge from the treatment facility while in forward flow during the commissioning phase. The Commissioning Plan must include but is not necessarily limited to operational procedures required to commission and to start-up following a shut-down of

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the water treatment facility, including sequencing, estimated timeline of steps, and any additional monitoring and reporting required to demonstrate that no adverse environmental impacts result from commissioning. The Commissioning Plan must, at a minimum, include the operational monitoring for each specific facility as required by subsequent sections.

#### 4A3 OPERATIONS PLAN

An Operations Plan for each selenium and nitrate treatment facility and the associated authorized works in Appendix 4 must be prepared by a Qualified Professional, submitted to the director and implemented prior to commencement of the discharge from the treatment facility during the operational phase. The Operations Plan must include but is not necessarily limited to:

- i. The facility operator's manual, with provision for its continual improvement;
- ii. An overview of the planned maintenance program which includes an inventory of facility components and authorized replacement parts, and a detailed description of inspection, repair and replacement frequency for facility components;
- iii. Documentation to verify that the facility is operated at all times within specifications and in a manner to ensure compliance with this authorization and other applicable legislation;
- iv. Procedures for safely shutting down the treatment facility; and
- v. Actions to be taken if effluent quality fails to meet the requirements of this permit;
- vi. Contingency planning which describes built-in redundancy of the facility and outlines measures to prevent emergency conditions from occurring; and
- vii. Key metrics to be used to demonstrate the performance of the treatment facility relative to the intended performance.

The Operations Plan must be reviewed and updated following the first year of facility operations and as needed thereafter to assess its appropriateness for the authorized works, discharges and conditions. Results of the initial review must be provided to the director in the commissioning report prepared under Section 4A6 of this permit. Changes in procedures may be required by the director on the basis of this or later assessments, the operational records for

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the treatment facility and/or the results of discharge and receiving environment monitoring under Section 8. Any significant update to the plan must be submitted to the director within 30 days of adoption. Minor updates must be summarized in the quarterly report for the time period when the minor update was made.

4A4 **PROCESS MODIFICATIONS**

The permittee must notify the director in writing, prior to implementing changes to any process that may adversely affect the quality and/or quantity of the discharge from the selenium and nitrate treatment facilities. Notwithstanding notification under this Section, permitted levels must not be exceeded.

During commissioning notification for process modifications is not required for operational refinements or adjustments of works as needed to optimize efficiency and/or effluent quality. Adjustments made during the commissioning period must be reported in the Commissioning Report, as per Section 4A8.

4A5 **NEW WORKS**

The director may require upgrading of the selenium and nitrate treatment works and disposal facilities based on monitoring results, and/or any other pertinent information. Plans and specifications for new pollution treatment works and upgrades to existing works must be submitted to the director as an amendment application. All new works must be approved before a discharge from the works commences.

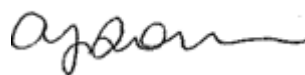
4A6 **SITE SPECIFIC ENVIRONMENTAL EMERGENCY RESPONSE PLAN**

A Site-Specific Environmental Emergency Response Plan must be prepared for all selenium and nitrate treatment facilities. The plan must be submitted to the director prior to commencement of the discharge from the selenium and nitrate treatment facilities.

The plan must include, but is not limited to:

- i. A description of measures to mitigate any health or environmental impacts, if emergencies occur;

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- ii. Specific reference to the Spill Reporting Regulation; and
- iii. Instructions for staff in the event of an emergency, including contact information for local authorities (fire, police, public health), Emergency Management BC, and the director.

Any significant update to the plan must be submitted to the director within 30 days of adoption. Minor updates must be summarized in the quarterly report for the time period when the minor update was made.

#### 4A7 **DISCHARGE MONITORING**

The permittee must sample the parameters at the sampling sites at the specific frequencies as defined in subsequent sections in Appendix 4. The influent and discharge water sampling sites are located approximately as shown in subsequent sections in Appendix 4. Sampling and analytical procedures in Section 8.1.2 apply to the monitoring required per Appendix 4 of this permit.

#### 4A8 **COMMISSIONING REPORT**

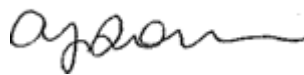
Within 12 months of finalizing the commissioning phase of the selenium and nitrate treatment facility, the permittee must submit a commissioning report, prepared by a Qualified Professional to the director. The report must document the results of performance monitoring and system optimization over the first year of operations at the facility and recommend any necessary system improvements.

#### 4A9 **QUARTERLY TREATMENT PERFORMANCE REPORT**

The permittee must submit a quarterly treatment performance report to the director within 30 days of the end of the quarter in which the samples were collected. The quarterly treatment performance report must include the following for each water treatment facility:

- i. Effluent water quality results used to calculate monthly averages for the limits in Section 2 and Appendix 4, if applicable;
- ii. Calculated rolling 30-day cumulative total hours in recirculation for each day of the quarter;
- iii. A summary of timing and duration of authorized and unauthorized bypass events (i.e., full recirculation events) and routine and enhanced monitoring conducted during each bypass event.

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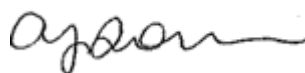


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- iv. Effluent water quality results exceeding limits and targets or other criteria, such as daily maximums or as specified by the director;
- v. Facility throughput and availability;
- vi. Selenium and nitrate load removal;
- vii. A summary of selenium speciation data;
- viii. Identification of all missing data and all QA/QC issues;
- ix. All toxicity test results and raw laboratory data sheets for all mortality results;
- x. All reportable spills or other incidents related to water quality, occurring in the quarter;
- xi. A summary of operational and/or performance highlights and trends from the quarter, including key performance indicators;
- xii. Effluent water quality results exceeding alarm level 3 at the effluent retention pond;
- xiii. Explanation of the most probable cause(s) of any non-compliances;
- xiv. All measures taken to reduce or eliminate non-compliances; and
- xv. Any additional sampling results for the compliance points identified in Section 2 obtained for any reason, whether compliance, maintenance, or operational purposes. All test data must be reported within 30 days of the end of the quarter in which sampling occurred. These additional results may be reported in summary form. Further information on the testing event may be requested in writing by the director.

Results from samples collected in the last month of the quarter that are not available must be included in the following quarterly report. Any deviation from the information listed in this section must be communicated in the quarterly report and include rationale for the changes.

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#### 4A10 ANNUAL TREATMENT PERFORMANCE REPORT

The permittee must submit an annual treatment performance report to the director by March 31 of each year following the data collection calendar year. The report may include all facilities, though discussion for each facility must be distinct. Alternatively, the permittee may submit a series of reports. Each deliverable should not exceed manageable file sizes.

The report must include the following for each water treatment facility:

- i. A summary of facility performance compared to the key performance metrics listed in the Operations Plan;
- ii. Influent sources and flow rates, including alternate sources;
- iii. Selenium and nitrate load removal;
- iv. Quantities of reagents used and residuals generated;
- v. Details on continuous improvement initiatives;
- vi. A description of any incidents including process upsets, spills (quantity and quality, including analytical results), issues with and bypasses of the Authorized Works, including recirculation events and contingency discharges;
- vii. Quantity and quality of effluent (e.g., non-hazardous waste liquids) discharged to the Turnbull South Pit Tailings Storage Facility;
- viii. A summary of non-compliances with the requirements of Appendix 4 for the previous calendar year. This must include interpretation of significance, and the status of corrective actions and/or ongoing investigations;
- ix. A map of monitoring locations with EMS and permittee descriptors;
- x. A summary and evaluation of key operational and receiving environment monitoring data associated with the selenium and nitrate treatment facilities and all analytical results from the monitoring plans in Appendix 4 for the reporting year. Data must be suitably tabulated (i.e., excel spreadsheets), with appropriate graphs and comparison of results to limits, Approved and Working Water Quality Guidelines, Site Performance Objectives, or other criteria and benchmarks as specified by the director;

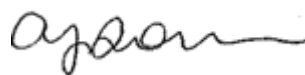
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- xi. If Site Performance Objectives in Appendix 4 are exceeded the permittee must provide an interpretation of significance, and the status of corrective actions and/or ongoing investigations;
- xii. All acute toxicity test-specific reports from the laboratory and an interpreted summary and discussion of results, including recommendations and all subsequent actions;
- xiii. All acute toxicity test lab reports must include data and/or observations for hardness, alkalinity, pH, temperature, and formation of precipitate either in the vessel or on the organism; and
- xiv. A summary of all QA/QC issues during the year.

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**APPENDIX 4B – West Line Creek (WLC) AWTF**

Additional requirements are detailed in Appendix 4A.

**4B1 AUTHORIZED DISCHARGES**

This section applies to the discharge of effluent from the West Line Creek Active Water Treatment Facility (WLC AWTF) Phase 1 to Line Creek. The WLC AWTF influent is comprised of contact water from waste rock piles and non-hazardous leachate from the WLC AWTF residual waste landfill. The site reference number for this discharge is E291569 (WL\_BFWB\_OUT\_SP21) as shown in Appendix 4B4.

4B1.1 The maximum authorized rate of discharge is 8,300 cubic meters per day.

4B1.2 The treated effluent discharged to Line Creek must not be acutely toxic, as per Section 6.2. The characteristics of the discharge at the Buffer Pond Outfall (E291569) must not exceed:

PARAMETER	LIMIT <sup>(a,b)</sup>
Ammonia (as N)	1.0 mg/L
Biological Oxygen Demand	25 mg/L
pH	6.5-8.5 pH units, allowable range
Nitrate (as N)	3.0 mg/L
Total Phosphorus	0.3 mg/L
Total Selenium	20 µg/L, monthly average
Total Suspended Solids	10.0 mg/L
Antiscalant	25 mg/L, two-minute time weighted average

(a) Discharge characteristics for the listed parameters must be determined by third-party qualified laboratory results, except for Antiscalant which must be determined by dosing rates, and pH which must be determined by field measurements.

(b) Maximum allowable concentration in any grab sample, unless otherwise noted in this table.

4B1.3 This discharge is authorized from Authorized Works which are the West Line Creek intake structure and pipeline, active water treatment plant, the advanced oxidation process facility, combined Line Creek intake and outfall structure and pipeline, infrastructure associated with

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transferring leachate influent from the biosolids residual management facility, buffer pond, buffer pond overflow spillway and wet pond, and groundwater diversion, and related appurtenances.

4B1.4 The location of the facilities from which the discharge originates and the location of the point of discharge is District Lot 6772, District Lot 4588, Kootenay Land District.

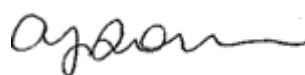
**4B2 SITE PERFORMANCE OBJECTIVES**

Additional requirements for WLC AWTF are detailed in Appendix 4A.

4B2.1 The following Site Performance Objectives are established for Line Creek immediately downstream of the confluence with South Line Creek. The site reference number where the Site Performance Objective applies is E297110 as shown in Appendix 1.

PARAMETER	OBJECTIVE	METHOD/NOTES
Total Phosphorus	$\leq 20\mu\text{g/L}$	Growing season average calculated from measurements collected every two weeks between June 15 and September 30 annually.

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4B3 WLC AWTF MONITORING PROGRAM

	WLC AWTF WEST LINE CREEK (Influent) <i>E293371</i>	WLC AWTF LINE CREEK (Influent) <i>E293370</i>	BUFFER POND OUTFALL (Effluent) <i>E291569</i>
<i>EMS Number</i>	<i>E293371</i>	<i>E293370</i>	<i>E291569</i>
<b>PARAMETER</b>			
TSS & Turbidity (field parameters) (3)	D	D	D
BOD	-	-	3X/W
Total Selenium	-	-	3X/W
Selenium Speciation (i)	-	-	M
Field Parameters (a)	D	D	D
Conventional Parameters (b)	M	M	M
Major Ions (c)	M	M	M
Nutrients (d)	M	M	M
Nitrate (Teck Internal Lab Results )	W	W	W
Total Sulphide	-	-	M
Total and Dissolved Metals Scan (e)	M	M	M
Bromate	-	-	M
Hydrogen Peroxide (Teck Internal Lab Results)	-	-	M
Ozone (Teck Internal Lab Results)	-	-	M
Flow (f)	C	C	C
96 hour Rainbow Trout single concentration toxicity test (g)	-	-	Q*
48 hour <i>Daphnia magna</i> single concentration toxicity test (g)	-	-	Q*

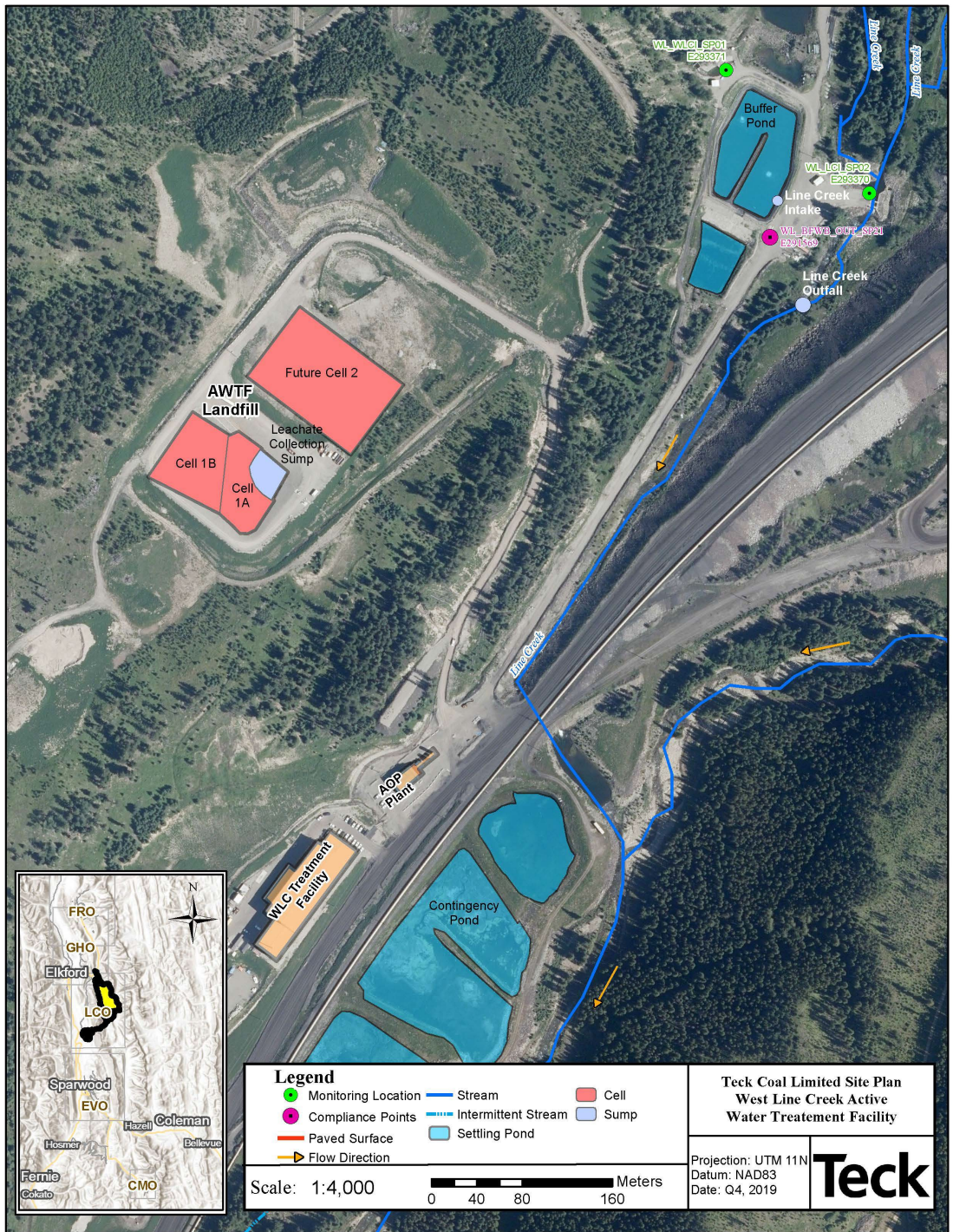
- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) TSS may be determined as per Permit 5353, Section 2.3.
- 4) Teck must notify the director within 24 hours if an LCO laboratory result for TSS is greater than 10 mg/L at the WLC AWTF Buffer Pond outlet (E291569).
- 5) Teck must notify the director immediately if a third-party laboratory result is greater than 10 mg/L TSS at the WLC AWTF Buffer Pond outlet (E291569).

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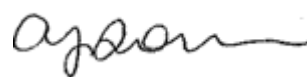
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4B4 WLC AWTF SITE PLAN



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**APPENDIX 4C – ELKVIEW OPERATIONS SATURATED ROCK FILL (EVO SRF)**

Additional requirements are detailed in Appendix 4A.

**4C1 AUTHORIZED DISCHARGES**

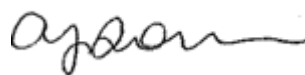
This section applies to the discharge of effluent from the Elkview Operations Saturated Rock Fill (EVO SRF) to Erickson Creek and Bodie Rock Drain. The EVO SRF influent is comprised of contact water from Erickson Creek and Natal Pit. The site reference number for this discharge is the Effluent Retention Pond Outlet (F2\_BPO, E321812) as shown in Appendix 4C5.

4C1.1 The typical flow is to be used to calculate permit fees for effluent discharges. The typical flow through the EVO SRF is 20,000 cubic meters per day (i.e., 95% of the design capacity of 21,053 m<sup>3</sup>/day). The typical flow refers to the discharge rate expected during normal operations and should not be interpreted as a compliance limit or requirement.

4C1.2 The treated effluent discharged to Erickson Creek must not be acutely toxic, as per Section 6.2. The characteristics of the discharge at the Effluent Retention Pond Outlet (F2\_BPO, E321812) must not exceed:

PARAMETER	LIMIT <sup>(a,b)</sup>
Effluent Toxicity (96 hr rainbow trout single concentration, and 48 hr <i>Daphnia magna</i> single concentration)	50% mortality
Antiscalant	25 mg/L, two-minute time weighted average <sup>(c)</sup>
Ammonia	1.2 mg/L
Biochemical Oxygen Demand (BOD)	25 mg/L
Nitrite (as N)	0.4 mg/L

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Total Sulphide	0.01 mg/L
Total Phosphorus	0.10 mg/L, monthly average
pH	6.5-9.0 pH units, allowable range
Dissolved Oxygen	5.0 mg/L, minimum

(a) Discharge characteristics for the listed parameters must be determined by third-party qualified laboratory results, except for Antiscalant which must be determined by dosing rates, and pH and DO which must be determined by field measurements.

(b) Maximum allowable concentration in any grab sample, unless otherwise noted in this table.

(c) According to the calculation in the Operations Plan

4C1.3 Limits for total selenium and nitrate (as N) in effluent discharged from the EVO SRF are included in the Elkview Operations compliance limit at the Elkview Operations Michel Creek Compliance Point (EV\_MC2) (Section 2.6).

4C1.4 The discharge is authorized from Authorized Works which are the Erickson Creek intake, influent pipeline from Erickson Creek, influent piping from Natal Pit, reagent dosing facilities, conveyance pipelines, injection wells, monitoring wells, extraction wells, Effluent retention pond, Erickson Creek effluent pipeline, Erickson Creek outfall, Bodie Rock Drain, low point drains, high point vents, pressure safety valves, rupture discs and related appurtenances approximately located as shown on the Site Plan in Appendix 4C5.

4C1.5 The location of the facilities from which the discharge originates and the location of the points of discharge are Lot 1, District Lot 4588 4589 Kootenay District, Plan 7590 9330, except parts included in Plans 9591 9262 10218 10797 11205 12980 14030 14643 15615 15081 17773 18084 18351 12403 NEP59847 NEP22563 NEP60990 NEP61045 NEP61240 NEP61298 NEP62835 NEP66365 NEP68373 NEP73532 NEP89674 PID: 010-681-043.

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4C2 **RECEIVING ENVIRONMENT LIMITS**

4C2.1 Water Temperature

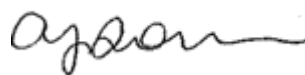
Water temperature measured at Erickson Creek at mouth (EV\_EC1; 0200097) must be managed to be equivalent to or below the following temperature limits:

PARAMETER		Daily Maximum Temperature <sup>(a)</sup>
Temperature	January 1 to April 30 and November 1 to December 31	7°C
	May 1 to August 31	13°C
	September 1 to October 31	10°C

(a) Based on the maximum of the hourly averages over 24 hours.

Based on the results of the LAEMP, the director may adjust these limits, and the permittee may be required to implement mitigation measures if needed to achieve the updated limits.

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### 4C3 OPERATIONAL REQUIREMENTS

#### 4C3.1 SRF Operational Contingency Plan

The permittee must develop and implement an operational contingency plan to manage the parameters listed in Section 4C1.2 related to operation of the EVO SRF. The plan must be submitted to the director 30 days prior to the end of the commissioning period for the EVO SRF, and the permittee must notify the director at least 15 days prior to implementing any proposed changes to the plan. The plan must include an operational monitoring program and thresholds that trigger management actions that will be implemented to mitigate the risk of impacts.

If the onsite laboratory sample results are in exceedance of the limits specified in Section 4C1.2, the permittee must immediately collect samples for analysis at a third-party qualified laboratory. These results must be included in the routine reports per Section 4A of Appendix 4.

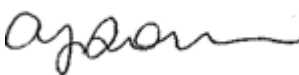
#### 4C3.2 EVO SRF Performance Metrics

The permittee must develop and track key metrics demonstrating the performance of the EVO SRF, including but not limited to removal of nitrate and selenium load. The performance metrics to be tracked must be submitted to the director 30 days prior to the end of the commissioning period for the EVO SRF, and the permittee must notify the director at least 15 days prior to implementing any proposed changes to the metrics. The performance metrics must align with the EVWQP goals and environmental management objectives. The permittee must present the performance metrics results at routine regulator updates and in routine reports per Section 4A of Appendix 4.

#### 4C3.3 Erickson Creek Discharge Management Plan

The permittee must develop and implement a discharge management plan to manage discharge from the EVO SRF to Erickson Creek. The plan must be submitted to the director 30 days prior to the end of the commissioning period for the EVO SRF, and the permittee must notify the director at least 15 days prior to implementing any proposed changes to the plan. The plan must describe the actions and monitoring Teck will

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implement to minimize change in streamflow between upstream and downstream of the Erickson Creek intake/outfall structure and follow the Federal Department of Fisheries and Oceans Canada (DFO) guidance on allowable rates of change in streamflow to avoid adverse effects to fish habitat. The permittee must report the monitoring results from the plan in the routine reports per Section 4A of Appendix 4.

#### 4C3.4 Adaptive Management Plan Studies

The permittee must develop and implement the following studies under the Adaptive Management Plan (AMP) to resolve uncertainties regarding the water balance in Erickson Creek and potential unidentified mine contact water discharge pathways. The study designs must incorporate feedback from the Elk Valley Groundwater Working Group and be submitted to the director for approval by March 31, 2021.

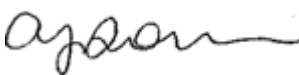
- i. Uncertainty: Erickson Creek water balance study. The study must resolve uncertainty related to the magnitude of total precipitation, evapotranspiration, surface flow and groundwater flow in the watershed. In completing the study, the permittee must demonstrate closure of the Erickson Creek water balance to the satisfaction of the director.
- ii. Uncertainty: Michel Creek contaminant load balance study. The study must resolve uncertainty related to the potential existence of an unaccounted mine contact water discharge pathway from EVO to Michel Creek. The study must utilize measured water quality data from mine contact surface water and groundwater sources. If the mass balance for contaminant loadings cannot be adequately closed to the satisfaction of the director, then Teck must develop and implement an additional study to locate and characterize the missing contaminant load pathway(s).

Progress updates and study findings must be reported in the annual AMP report per Section 10.

#### 4C3.5 EVO SRF Maintenance of Works, Emergency Procedures and Bypasses

This section refers only to authorized discharges and Authorized Works defined in Section 4C1 and is applicable during the operational phase of this facility.

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The permittee must regularly inspect the Authorized Works and maintain them in good working order, in accordance with the Operations Plan.

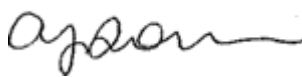
The permittee must maintain a record of inspections and maintenance of the Authorized Works and make the record available to an officer upon request.

In the event of an emergency or other condition which prevents normal operation of the Authorized Works or leads to an unauthorized discharge, the permittee must take remedial action immediately to restore the normal operation of the Authorized Works and to prevent any unauthorized discharges.

The permittee must not allow any discharge of influent or effluent authorized in Section 4C1 to bypass the Authorized Works, except with the prior written approval of the director or as defined in the following table.

EVENT	CONSECUTIVE HOURS IN RECIRCULATION (hrs)	REPORTING	MEET ALL EXISTING REQUIREMENTS OF PERMIT	ENHANCED MONITORING	IMMEDIATE NOTIFICATION TO DIRECTOR
Planned maintenance, unplanned maintenance and other downtime when influent bypasses the SRF	<24	X	X	-	-
	≥24	X	X	X	X
Discharge from influent or effluent pipelines to maintain design pressure, prevent freezing or prevent water quality changes	n/a	-	X	-	-

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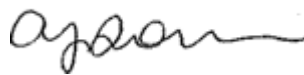


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For the purpose of this condition the following definitions apply.

- i. Immediate notification to director: notify the director of the emergency or other condition via the ENVSECoal@gov.bc.ca email address, or as otherwise instructed by the director.
- ii. Meet all existing permit requirements: continue to meet the requirements of this authorization, including, but not limited to, meeting Section 2 compliance limits at all Compliance Points.
- iii. Reporting: submit written documentation of the emergency or other condition and the remedial action that has and will be taken, a schedule of implementation of actions and the date the findings as to the cause of the incident will be reported to the director and KNC. This information must be submitted with the next quarterly treatment performance report required in Section 4A9 unless otherwise required by the director.
- iv. Normal or effective operation of the SRF: The SRF is considered to be operating effectively if it is removing the facility's portion of the selenium and nitrate load to meet the downstream monthly average limits at EV\_MC2. Under normal operations, temporary recirculation (i.e., downtime) occurs both during routine maintenance and during unscheduled events such as power fluctuations or alarm level exceedances.
- v. Influent Bypass: When the SRF is put into temporary recirculation mode (i.e., full recycle) and untreated influent contact water from Erickson Creek temporarily bypasses the facility.
- vi. Enhanced monitoring: The permittee must collect daily samples at EV\_EC1 (0200097) and EV\_MC2 (E300091) and analyze them for total selenium and nitrate for the remainder of the bypass event.
- vii. Discharge from the influent or effluent pipelines to maintain design pressure, prevent freezing, or prevent water quality changes: Discharges from either the influent or effluent pipeline at low point drains, high point vents, pressure safety valves or rupture discs at booster stations. This means discharges associated with the intended function of the Authorized Works to control pressure and vacuum, prevent freezing, and prevent water quality changes within the pipeline (e.g., generation of H<sub>2</sub>S). The released water must be controlled via the operation's surface water management system.

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4C4 **EVO SRF MONITORING PROGRAM**

	NATAL PIT INTAKE (Influent)	ERICKSON CREEK INTAKE (Influent)	EFFLUENT RETENTION POND OUTLET (Effluent)	ERICKSON CREEK OUTFALL (Effluent)	BODIE ROCK DRAIN (Effluent)	ERICKSON CREEK IMMEDIATELY DOWNSTREAM OF OUTFALL	ERICKSON CREEK AT MOUTH (3)	EVO MICHEL CREEK COMPLIANCE POINT (3)	MICHEL CREEK UPSTREAM OF BODIE AND GATE CREEK	MICHEL CREEK UPSTREAM OF ERICKSON CREEK (3)	GATE CREEK DISCHARGE MONITORING LOCATION (3)	BODIE CREEK DISCHARGE MONITORING LOCATION (3)	ELK RIVER DOWNSTREAM OF MICHEL CREEK
<i>EMS Number</i>	<i>E321791</i>	<i>E321811</i>	<i>E321812</i>	<i>E321813</i>	<i>E321815</i>	<i>E321814</i>	<i>0200097</i>	<i>E300091</i>	<i>310168</i>	<i>0200203</i>	<i>E206231</i>	<i>E102685</i>	<i>200393</i>
<i>Teck Station ID</i>	<i>F2_NWPI</i>	<i>F2_ECIN</i>	<i>F2_BPO</i>	<i>F2_ECF</i>	<i>F2_BRDF</i>	<i>EV_ECOUT</i>	<i>EV_EC1</i>	<i>EV_MC2</i>	<i>EV_MC2a</i>	<i>EV_MC3</i>	<i>EV_GT1</i>	<i>EV_BC1</i>	<i>EV_ER1</i>
<b>PARAMETER</b>													
Field parameters (a)	D	D	D	-	-	M/W	M/W	M/W	M/W	M/W	M/W	M/W	M/W
Conventional Parameters (b)	W	W	W	-	-	M/W	M/W	M/W	M/W	M/W	M/W	M/W	M/W
Major Ions (c)	W	W	W	-	-	M/W	M/W	M/W	M/W	M/W	M/W	M/W	M/W
Nutrients (d)	W	W	W	-	-	M/W	M/W	M/W	M/W	M/W	M/W	M/W	M/W
Total Sulphide	W	W	W	-	-	M/W	M/W	M/W	M/W	M/W	M/W	M/W	M/W
Dissolved Metals Scan (e)	W	W	W	-	-	M/W	M/W	M/W	M/W	M/W	M/W	M/W	M/W
Total Metals Scan (e)	M	M	M	-	-	M	M	M/W	M	M/W	M	M	M/W
Total Selenium	-	-	3X/W	-	-	-	-	-	-	-	-	-	-
Flow	C	C	C	C	C	C	C	C	-	-	C	C	-
Temperature	C	C	-	C	-	-	C	-	-	-	-	-	-
96 hour Rainbow Trout single concentration toxicity test (g)	-	-	Q	-	-	Q	Q	-	-	-	Q	Q	-
48 hour Daphnia magna single concentration Toxicity (g)	-	-	Q	-	-	Q	Q	-	-	-	Q	Q	-
Selenium Speciation (i)	W	W	W	-	-	-	-	M	M	M	-	-	-
Calcite Precipitation Propensity Monitoring	-	-	M	-	-	M	-	-	-	-	M	M	-
Rock Mass Monitoring (4)													

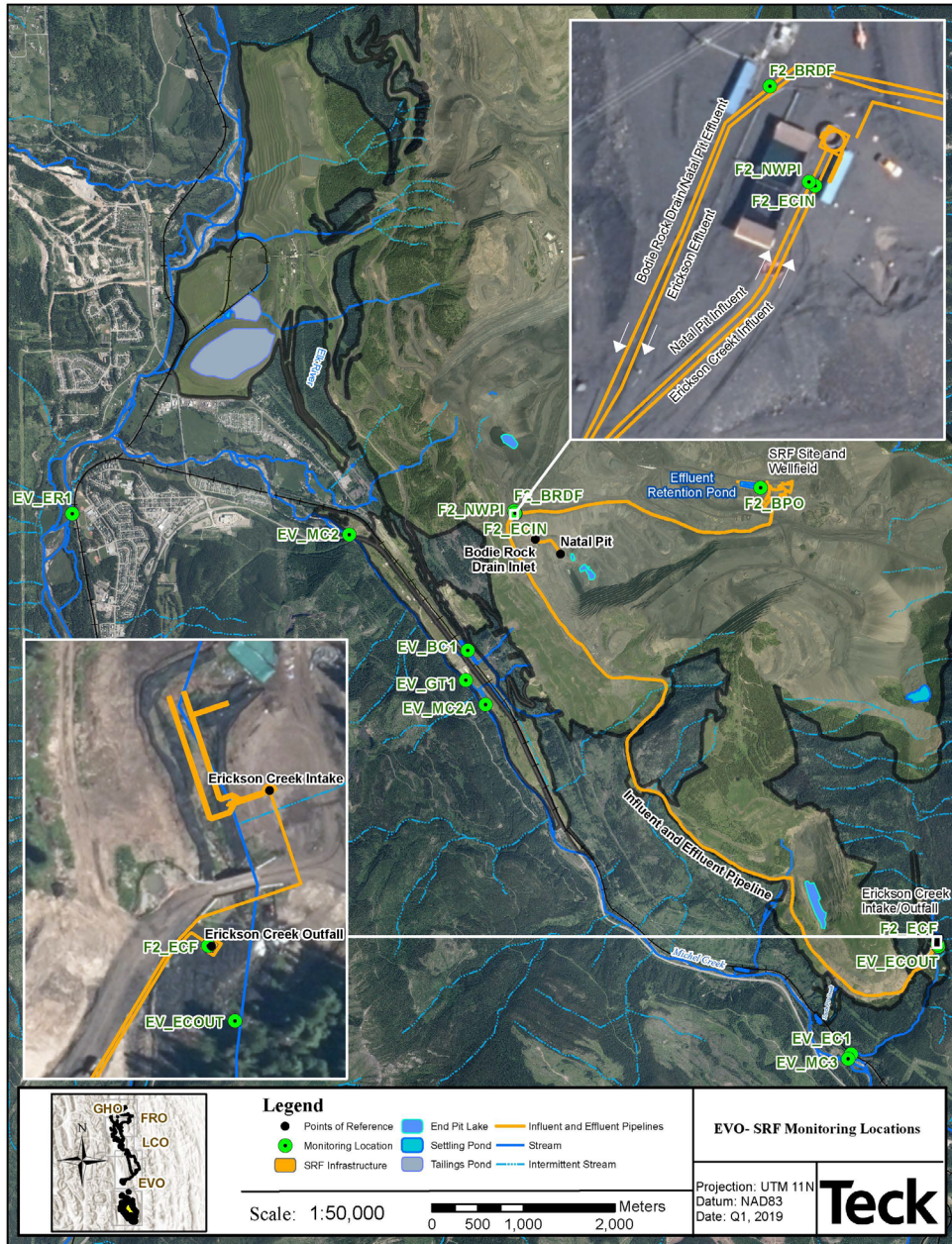
- 1) Refer to Table 26, Appendix 3, for abbreviation descriptions
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Monitoring location appears in two monitoring tables in this permit; therefore, monitoring data must be reported according to the requisite reporting requirements in both Section 9 and Appendix 4.
- 4) Rock mass monitoring to be conducted 1X/6W on an as-needed basis as a confirmatory measure of the more frequent calcite monitoring methods. Locations to be determined, both upstream and downstream of EV\_ECOUT.

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4C5 **EVO SRF SITE PLAN**



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**APPENDIX 4D – Fording River Operations – South AWTF (FRO-S AWTF)**

Additional requirements are detailed in Appendix 4A.

**4D1 AUTHORIZED DISCHARGES**

This section applies to the discharge of effluent from the Fording River Operations – South Active Water Treatment Facility (FRO-S AWTF) to the Fording River and Kilmarnock Creek. The FRO-S AWTF influent is comprised of contact water from waste rock piles in the Kilmarnock Creek, Cataract Creek, and Swift Creek catchments, non-hazardous leachate from the WLC AWTF residual waste landfill, and other sources as approved by the director in writing. The site reference number for this discharge is E321351 (FS\_BPO) as shown in Appendix 4D4.

4D1.1 The typical flow is to be used to calculate permit fees for effluent discharges. The typical flow through the FRO-S AWTF is 20,000 cubic meters per day (i.e., 95% of the design capacity of 21,053 m<sup>3</sup>/day). The typical flow refers to the discharge rate expected during normal operations and should not be interpreted as a compliance limit or requirement.

4D1.2 The treated effluent discharged to the Fording River and Kilmarnock Creek must not be acutely toxic, as per Section 6.2. The characteristics of the discharge at the Effluent Retention Pond outlet (FS\_BPO, E321351) must not exceed:

PARAMETER	LIMIT <sup>(a,b)</sup>
Effluent Toxicity (96 hr rainbow trout single concentration, and 48 hr <i>Daphnia magna</i> single concentration)	50% mortality
Antiscalant	25 mg/L, two-minute time weighted average <sup>(c)</sup>

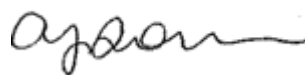
(a) Discharge characteristics for the listed parameters must be determined by third-party qualified laboratory results, except for Antiscalant which must be determined by dosing rates.

(b) Maximum allowable concentration in any grab sample, unless otherwise noted in this table.

(c) According to the calculation in the Operations Plan

4D1.3 Limits for total selenium and nitrate (as N) in effluent discharged from the FRO-S AWTF are included in the Fording River Operations

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compliance limit at the Fording River Operations Compliance Point (Section 2.1).

4D1.4 The permittee must manage FRO-S AWTF effluent temperature to be equivalent to or below the following monthly average limits at the Fording River Outfall (FS\_EFF-SC; E323231).

PARAMETER	LIMIT ( <i>monthly average</i> )	
Temperature	January 1 to February 28	6°C
	March 1 to April 30*	6°C
	May 1 to September 30	13°C
	October 1 to October 31*	10°C
	November 1 to November 30*	6°C
	December 1 to December 31	6°C

\*Effective date – September 1, 2022

4D1.5 The permittee must manage the parameters listed in the table below in accordance with the operational contingency plan required in Section 4D2.1. Treated effluent during normal operations was predicted in the FRO-S AWTF operations application to have characteristics as presented in the following table. These maximum concentrations should not be interpreted as compliance limits; however, are to be used to calculate permit fees for effluent discharges:

PARAMETER	MAXIMUM PREDICTED CONCENTRATION <sup>(a)</sup>
Sulphide	0.05 mg/L
Nitrite	0.2 mg/L
Ammonia	1 mg/L
Dissolved Oxygen	8 mg/L, minimum
pH	6.5 – 8.5 pH units, range
Hydrogen Peroxide	0.1 mg/L
Ozone	20 µg/L
Biological Oxygen Demand	45 mg/L
Total Phosphorus	0.1 mg/L
Chloride	150 mg/L
Total Suspended Solids	5 mg/L

(a) from FRO-S AWTF operations application Table 5.3-3

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4D1.6 The discharge is authorized from Authorized Works which are the Swift Creek Intake, Kilmarnock Creek Intake, influent and effluent conveyance pipelines, Effluent Retention Structure, Active Water Treatment Plant, Fording River Outfall, Kilmarnock Creek Outfall, low point drains, high point vents, pressure safety valves, rupture discs and related appurtenances approximately located as shown on the Site Plan in Appendix 4D4.

4D1.7 The location of the facilities from which the discharge originates and the location of the point of discharge is District Lot 6637, District Lot 6047, District Lot 6688, Kootenay Land District.

#### 4D2 OPERATIONAL REQUIREMENTS

##### 4D2.1 AWTF Operational Contingency Plan

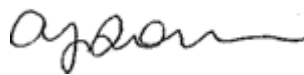
The permittee must develop and implement an operational contingency plan to manage the parameters listed in Section 4D1.5 related to operation of the AWTF. The plan must be submitted to the director 30 days prior to the end of the commissioning period for the FRO-S AWTF, and the permittee must notify the director at least 15 days prior to implementing any proposed changes to the plan. The plan must include an operational monitoring program and thresholds that trigger management actions that will be implemented to mitigate the risk of impacts.

##### 4D2.2 FRO-S AWTF Performance Metrics

The permittee must develop and track key metrics demonstrating the performance of the AWTF, including but not limited to removal of nitrate and selenium load, and implementation of alarm strategy level 3 responses. The performance metrics must align with the EVWQP goals and environmental management objectives.

- i. The performance metrics to be tracked must be submitted to the director 30 days prior to the end of the commissioning period for the FRO-S AWTF.
- ii. The permittee must notify the director at least 15 days prior to implementing any proposed changes to the metrics.

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- iii. The permittee must present the performance metrics results at routine regulator updates and in routine reports per Section 4A of Appendix 4.
- iv. The permittee must include a performance metric to assess performance of the temperature management system in managing temperature downstream of the Fording River Outfall (at FR\_SCOUTDS) to within +/- 1 degree Celcius of background (at FR\_FR3). The performance metric must consider the influence of the Swift Creek Sediment Pond discharge and available chiller capacity.
- v. The permittee must complete an engineering review of the temperature management system to determine necessary operational changes and process modifications needed to meet the permit limits for temperature in Section 4D1.4, and submit the report to the director by July 31, 2021.

#### 4D2.3 FRO-S AWTF Maintenance of Works, Emergency Procedures and Bypasses

This section refers only to authorized discharges and Authorized Works defined in Section 4D1 and is applicable during the operational phase of this facility.

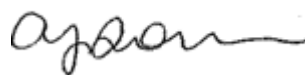
The permittee must regularly inspect the Authorized Works and maintain them in good working order, in accordance with the Operations Plan.

The permittee must maintain a record of inspections and maintenance of the Authorized Works and make the record available to an officer upon request.

In the event of an emergency or other condition which prevents normal operation of the Authorized Works or leads to an unauthorized discharge, the permittee must take remedial action immediately to restore the normal operation of the Authorized Works and to prevent any unauthorized discharges.

The permittee must not allow any discharge of influent or effluent authorized in Section 4D1 to bypass the Authorized Works, except with

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the prior written approval of the director or as defined in the following table.

EVENT	CONSECUTIVE HOURS IN RECIRCULATION (hrs)	REPORTING	MEET ALL EXISTING REQUIREMENTS OF PERMIT	ENHANCED MONITORING	IMMEDIATE NOTIFICATION TO DIRECTOR
Planned maintenance, unplanned maintenance and other downtime when influent bypasses the AWTF	<24	X	X	-	-
	≥24	X	X	X	X
	(a)				
Discharge from influent or effluent pipelines to maintain design pressure, prevent freezing or prevent water quality changes	n/a	-	X	-	-

(a) The permittee must not exceed a total of 144 hours in recirculation per month (i.e., rolling 30-day cumulative total)

For the purpose of this condition the following definitions apply.

- i. Immediate notification to director: notify the director of the emergency or other condition via the ENVSECoal@gov.bc.ca email address, or as otherwise instructed by the director;
- ii. Meet all existing permit requirements: continue to meet the requirements of this authorization, including, but not limited to, meeting Section 2 compliance limits at all Compliance Points;
- iii. Reporting: submit written documentation of the emergency or other condition and the remedial action that has and will be taken, a schedule of implementation of actions and the date the findings as to the cause of the incident will be reported to the director and KNC. This information must be submitted with the next quarterly

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treatment performance report required in Section 4A9 unless otherwise required by the director.

- iv. Normal or effective operation of the AWTF: The AWTF is considered to be operating effectively if it is removing the facility's portion of the selenium and nitrate load to meet the downstream monthly average limits at FR\_FRABCH. Under normal operations, temporary recirculation (i.e., downtime) occurs both during routine maintenance and during unscheduled events such as power fluctuations or alarm level exceedances.
- v. Influent Bypass: When the AWTF is put into a temporary recirculation mode and untreated influent water temporarily bypasses the facility. This occurs with full closure of the intakes.
- vi. Enhanced monitoring: The permittee must collect daily samples at FR\_FRABCH (E223753) and FR\_SCOUTDS (E320695) and analyze them for total selenium and nitrate for the remainder of the bypass event.
- vii. Discharge from the influent or effluent pipelines to maintain design pressure, prevent freezing, or prevent water quality changes: Discharges from either the influent or effluent pipeline at low point drains, high point vents, pressure safety valves or rupture discs at booster stations. This means discharges associated with the intended function of the Authorized Works to control pressure and vacuum, prevent freezing, and prevent water quality changes within the pipeline (e.g., generation of H<sub>2</sub>S). The released water must be controlled via the operation's surface water management system.

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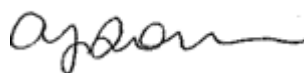
#### 4D2.4 Adaptive Management Plan Studies

The permittee must develop and implement the following studies under the Adaptive Management Plan (AMP) to resolve uncertainties regarding operation of the Kilmarnock Clean Water Diversion and the need for additional flow and groundwater information to support water quality management in FRO-S. The study designs must be submitted to the director and KNC by April 30, 2021. The permittee must provide quarterly updates to ENV and KNC on implementation of the workplans. This enhanced engagement will end when written notice is provided by the director.

- i. Uncertainty: Kilmarnock Clean Water Diversion study. The study must resolve uncertainty related to how operation of the Kilmarnock Clean Water Diversion influences the magnitude of mine contact water entering groundwater.
- ii. Uncertainty: Kilmarnock Creek Intake groundwater load bypass study. The study must resolve the uncertainty related to the magnitude and seasonal fluctuation of groundwater load bypassing the FRO-S AWTF Kilmarnock Creek Intake.
- iii. Uncertainty: Fording River valley groundwater study. The study must resolve the uncertainty related to the parameter of concern groundwater plume and load in the Fording River valley between well FR\_GH\_WELL4 and FR\_FRABCH.
- iv. Uncertainty: Swift Creek Sediment Ponds seepage study. The study must resolve the uncertainty related to the magnitude of seepage from the Swift Creek Sediment Ponds and the resulting parameter of concern groundwater plume and load towards the Fording River valley aquifer.

Progress updates and study findings must be reported in the annual AMP report per Section 10.

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#### 4D2.5 Upper Fording River Chronic Toxicity Study

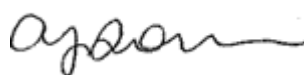
The permittee must submit a study design for an Upper Fording River Chronic Toxicity Study to the director by January 31, 2021, for approval. The study design must be reviewed by the EMC and be designed as a study to evaluate the cause, extent, and magnitude of chronic effects in the upper Fording River. The permittee must provide a summary of EMC advice and how it was considered in the study design. Monitoring results and interpretation must be compiled into a written report and submitted to the director by April 15, 2022. The final report must be to the satisfaction of the director.

#### 4D2.6 Fording River Compliance Point Monitoring Frequency

The permittee must undertake a study to assess the accuracy of monthly average surface water nitrate, selenium and sulphate concentration calculations at FR\_FRABCH with the below listed sampling frequencies. Accuracy must be estimated for each parameter for each calendar month for each sampling program. A report on findings must be submitted to the director by May 31, 2022.

- i. Weekly sampling March 15 through July 15 and monthly sampling August through February.
- ii. Weekly sampling March 15 through July 15 and twice-monthly sampling in August through February.
- iii. Weekly sampling year-round.

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#### 4D2.7 FRO-S AWTF Recirculation Event Mass Loading Travel Time Assessment

The permittee must undertake an assessment to determine the appropriate timing for water quality sample collection at FR\_FRABCH that is representative of the conditions during FRO-S AWTF recirculation. The FRO Compliance Point is approximately 11.8 km downstream of the Fording River Outfall and the full realization of recirculation on surface water quality is not expected to be instantaneous. The assessment must incorporate both seasonal and temporal aspects to inform the appropriate timing of water quality sample collection during recirculation. A summary report must be submitted to the director by April 30, 2023.

#### 4D2.8 Fording River Outfall Fish Plan

- i. The permittee must develop a plan to manage potential residual risks to fish resulting from effluent discharged from the Fording River Outfall. The permittee must prepare the plan in consultation with the Elk Valley Fish and Fish Habitat Committee and/or the Westslope Cutthroat Trout Recovery Working Group and include a summary of advice and how it was incorporated in the plan. The plan must include a trigger response plan and mitigations, or reference previously developed guidance, that can be implemented to prevent fish stranding and reduce the risks of isolation and fish mortality. The scope and scale of the plan is limited to areas of the Fording River that could be directly affected by the FRO-S AWTF operations. The plan must be submitted to the director by 7 days prior to forward flow commissioning of the FRO-S AWTF. The submitted Fording River Outfall Fish Plan must be implemented and any updates to the plan must be submitted to the director within 30 days of adoption. The permittee must submit an annual summary of trigger exceedances and actions taken to the director by June 30<sup>th</sup> of each year.
- ii. The permittee must complete an assessment of modifications required to meet a potential site performance objective for temperature of +/- 1 degree Celcius of background downstream of the Fording River Outfall, or other temperature requirements developed to support the Westslope Cutthroat Trout Recovery Plan. The assessment must be submitted to the director by June 30, 2023.

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4D3 FRO-S AWTF MONITORING PROGRAM

	KILMARNOCK CREEK FRO-S AWTF INFLUENT (Influent)	SWIFT-CATARACT CREEKS FRO-S AWTF INFLUENT (Influent)	FRO-S AWTF EFFLUENT RETENTION POND OUTLET (Effluent)	FRO-S AWTF OUTFALL STRUCTURE	FORDING RIVER UPSTREAM OF FRO-S AWTF OUTFALL STRUCTURE (5)	FORDING RIVER ~100 M DOWNSTREAM OF FRO-S AWTF OUTFALL STRUCTURE (5)	FORDING RIVER OPERATIONS COMPLIANCE POINT
<i>EMS Number</i>	<i>E321412</i>	<i>E321411</i>	<i>E321351</i>	<i>E323231</i>	<i>E320693</i>	<i>E320695</i>	<i>E223753</i>
<i>Teck Station ID</i>	<i>FS INF-K</i>	<i>FS INF-S</i>	<i>FS BPO</i>	<i>FS EFF-SC</i>	<i>FR FR3</i>	<i>FR SCOUTDS</i>	<i>FR FRABCH</i>
<b>PARAMETER</b>							
TSS & Turbidity (field parameters) (3)	D	D	D	-	-	-	-
BOD	-	-	3X/W	-	-	W/M	-
Total Selenium	-	-	3X/W	-	-	-	-
Selenium Speciation (i)	-	-	M	-	-	M	-
Field Parameters (a)	D	D	D	-	-	W/M	W/M
Conventional Parameters (b)	M	M	M	-	-	W/M	W/M
Major Ions (c)	M	M	M	-	-	W/M	W/M
Nutrients (d)	M	M	M	-	-	W/M	W/M
Nitrate (Teck Internal Lab Results)	3X/W	3X/W	3X/W	-	-	-	-
Total Sulphide	-	-	M	-	-	W/M	-
Total and Dissolved Metals Scan (e)	M	M	M	-	-	W/M	W/M
Bromate	-	-	M	-	-	M	-
Hydrogen Peroxide (Teck Internal Lab Results)	-	-	M	-	-	M	-
Ozone (Teck Internal Lab Results)	-	-	M	-	-	-	-
Flow	C	C	C	-	-	-	-
Temperature	-	-	-	C	C	C	-
96 hour Rainbow Trout single concentration toxicity test (g)	-	-	Q*	-	-	-	-
48 hour <i>Daphnia magna</i> single concentration toxicity test (g)	-	-	Q*	-	-	-	-
Calcite Precipitation Propensity -Monitoring	-	-	-	-	1X/2W	1X/2W	-
Rock Mass Monitoring (4)	-	-	-	-	1X/6W, as needed	1X/6W, as needed	-

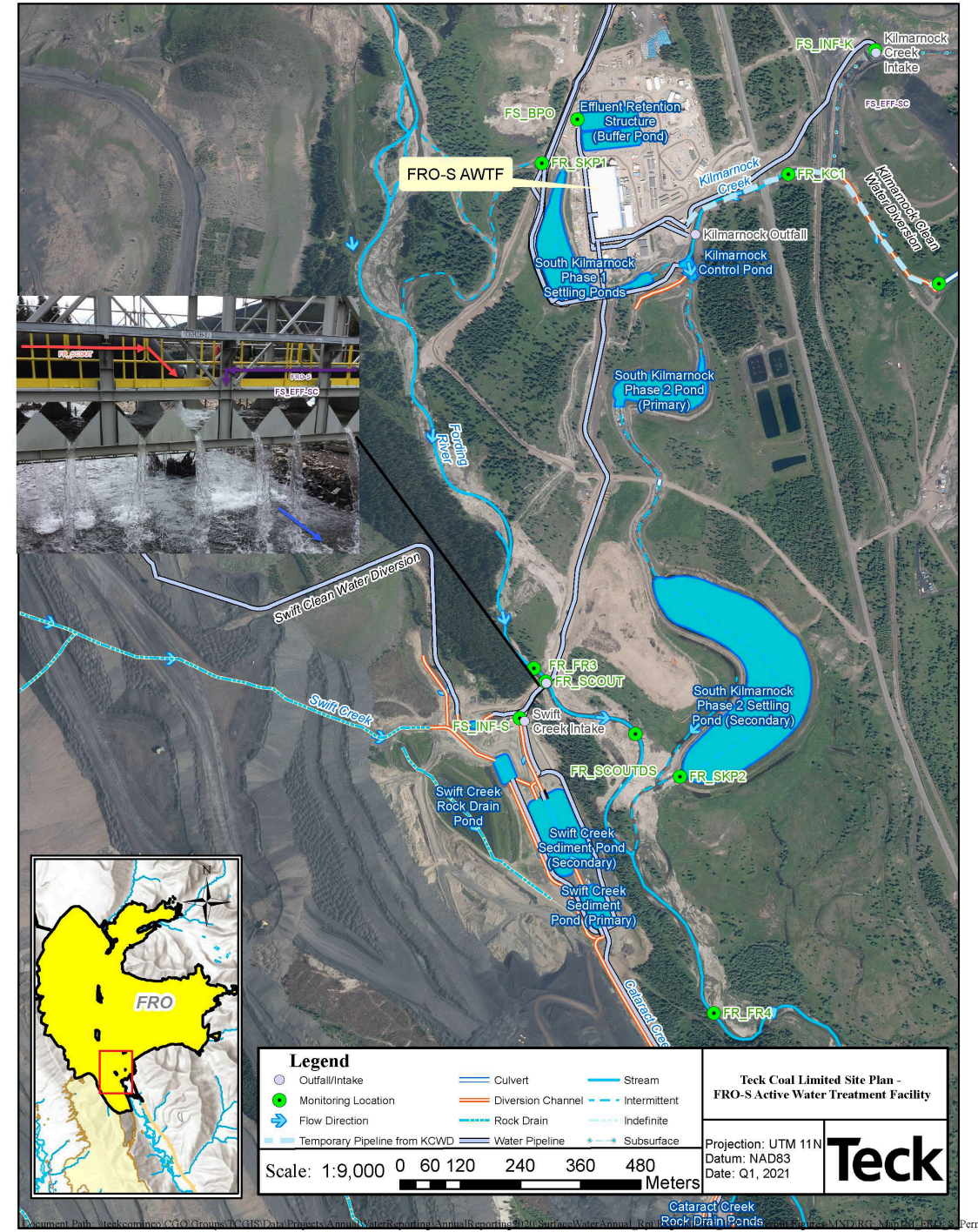
- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) TSS may be determined as per Permit 424, Section 2.3.
- 4) Rock mass monitoring to be conducted on an as-needed basis as a confirmatory measure of the more frequent calcite monitoring methods.
- 5) Monitoring location appears in multiple monitoring tables in this permit; therefore, monitoring data must be reported according to the requisite reporting requirements in Section 9 and Appendices 4 and 5.

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4D4 FRO-S AWTF SITE PLAN



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**APPENDIX 4E – Fording River Operations – North SRF (FRO-N SRF) Phase 1**

Additional requirements are detailed in Appendix 4A.

**4E1 AUTHORIZED DISCHARGES**

This authorization applies to the discharge of effluent from Phase 1 of the Fording River Operations North Saturated Rock Fill North Project (FRO-N SRF) which includes the conveyance of treated effluent from the Effluent Retention Pond (E326355, E4\_BPO) to the E4 Discharge Injection wells, to Clode Settling Ponds (E102481, FR\_CC1) and thence to the Fording River. For the purpose of this authorization, influent is defined as Eagle 4 Pit water directed to the injection wells and effluent is defined as treated effluent from the Effluent Retention Pond.

4E1.1 This discharge is authorized from November 01, 2021 to January 1, 2024.

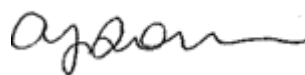
4E1.2 The maximum weekly average flow is to be used to calculate permit fees for effluent discharges. The maximum weekly average flow through the FRO-N SRF is 9,500 cubic metres per day. This flow rate refers to the maximum discharge rate expected during normal operations and should not be interpreted as a compliance limit or requirement.

4E1.3 The characteristics of the discharge at the Effluent Retention Pond Outlet (E326355, E4\_BPO) to the E4 Discharge Injection wells must not exceed:

PARAMETER	LIMIT <sup>(a,b)</sup>
Ammonia (as N)	7.0 mg/L
Biological Oxygen Demand	25 mg/L
Nitrite (as N)	1.1 mg/L
Total Sulphide	0.032 mg/L
Total Phosphorus	0.2 mg/L, monthly average
pH	6.5-9.0 pH units, allowable range
Dissolved Oxygen	5 mg/L, minimum

(a) Discharge characteristics for the listed parameters must be determined by third-party qualified laboratory results, except for pH and DO which must be determined by field measurements.

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(b) Maximum allowable concentration in any grab sample, unless otherwise noted in this table.

4E1.4 The effluent discharged at the Clode Settling Pond Decant must not be acutely toxic, as defined in Section 6.2. The characteristics of the discharge at the Clode Settling Pond Decant (E102481, FR\_CC1) must not exceed:

PARAMETER	LIMIT <sup>(a,b)</sup>
Antiscalant	25 mg/L, two-minute time weighted average <sup>(c)</sup>

(a) Discharge characteristics for Antiscalant must be determined by dosing rates.

(b) Maximum allowable concentration.

(c) According to the calculation in the Operations Plan.

4E1.5 The discharge is authorized from Authorized Works which are the influent source pumping wells within the E4 Pit, reagent dosing facilities, conveyance piping system, injection wells, monitoring wells, extraction wells, Effluent Retention Pond, E4 Discharge Injection wells, Antiscalant system, low point drains, high point vents, pressure safety valves, rupture discs and related appurtenances approximately located as shown on the Site Plan in Appendix 4E4.

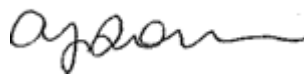
4E1.6 The location of the facilities from which the discharge originates and the location of the point of discharge is District Lot 6700, District Lot 6701, and District Lot 6709, Kootenay Land District.

## 4E2 OPERATIONAL REQUIREMENTS

### 4E2.1 SRF Operational Contingency Plan

The permittee must develop and implement an operational contingency plan to manage the parameters listed in 4E1 related to operation of the FRO-N SRF. The plan must be submitted to the director 30 days prior to the end of the commissioning period for the FRO-N SRF, and the permittee must notify the director at least 15 days prior to implementing any proposed changes to the plan. The plan must include an operational monitoring program and thresholds that trigger management actions that will be implemented to mitigate the risk of impacts.

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If the onsite laboratory sample results are in exceedance of the limits specified in Section 4E1.3, the permittee must immediately collect samples for analysis at a third-party qualified laboratory. These results must be included in the routine reports per Section 4A of Appendix 4.

#### 4E2.1.1 Nickel

The SRF Operational Contingency Plan must include nickel trigger(s) and response actions to manage nickel concentrations in effluent at the Clode Settling Pond Decant (FR\_CC1). The plan must describe actions to be taken if total nickel concentrations in effluent at FR\_CC1 exceed an initial trigger value of 90 µg/L, the maximum projected 2022 base-case concentrations, when the SRF is discharging to the E4 Discharge Injection Wells. The purpose of the contingency plan is to ensure that nickel concentrations in lower Clode Creek do not exceed the level 1 nickel interim screening value of 157 µg/L due to operation of the FRO-N SRF. The plan must be updated within 9 months of the submission of the final nickel benchmark to the director.

#### 4E2.2 FRO-N SRF Performance Metrics

The permittee must develop and track key metrics demonstrating the performance of the FRO-N SRF, including but not limited to removal of nitrate and selenium load. The performance metrics to be tracked must be submitted to the director 30 days prior to the end of the commissioning period for the FRO-N SRF, and the permittee must notify the director at least 15 days prior to implementing any proposed changes to the metrics. The performance metrics must align with the EVWQP goals and environmental management objectives. The permittee must present the performance metrics results at routine regulator updates and in routine reports per Section 4A of Appendix A.

#### 4E2.3 FRO-N SRF MAINTENANCE OF WORKS, EMERGENCY PROCEDURES AND BYPASSES

This section refers only to authorized discharges and Authorized Works defined in Section 4E1 and is applicable during the operational phase of this facility.

The permittee must regularly inspect the Authorized Works and maintain them in good working order, in accordance with the

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Operations Plan. The permittee must maintain a record of inspections and maintenance of the Authorized Works and make the record available to an officer upon request.

In the event of an emergency or other condition which prevents normal operation of the Authorized Works or leads to an unauthorized discharge, the permittee must take remedial action immediately to restore the normal operation of the Authorized Works and to prevent any unauthorized discharges. The permittee must not allow any discharge of influent or effluent authorized in 4E1 to bypass the Authorized Works, except with the prior written approval of the director or as defined in the following table.

EVENT	CONSECUTIVE HOURS IN RECIRCULATION (hrs)	REPORTING	MEET ALL EXISTING REQUIREMENTS OF PERMIT	IMMEDIATE NOTIFICATION TO DIRECTOR
Planned maintenance, unplanned maintenance and other	<24	X	X	-
downtime when influent bypasses the SRF	≥24	X	X	X
Discharge from influent or effluent pipelines to maintain design pressure, prevent freezing or prevent water quality changes	n/a	-	X	-
Discharge to Turnbull South Pit Tailings Storage Facility as per EMA Permit 424	n/a	X	X	X
Use as per WSA Water Licences	n/a	-	n/a	-

For the purpose of this condition the following definitions apply.

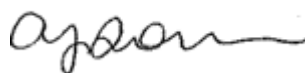
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- i. Immediate notification to director: notify the director of the emergency or other condition via the ENVSECoal@gov.bc.ca email address, or as otherwise instructed by the director.
- ii. Meet all existing permit requirements: continue to meet the requirements of this authorization, including, but not limited to, meeting Section 2 compliance limits at all Compliance Points.
- iii. Reporting: submit written documentation of the emergency or other condition and the remedial action that has and will be taken, a schedule of implementation of actions and the date the findings as to the cause of the incident will be reported to the director and KNC. This information must be submitted with the next quarterly treatment performance report required in Section 4A9 unless otherwise required by the director.
- iv. Normal operation of the SRF: Under normal operations, temporary recirculation (i.e., downtime) occurs both during routine maintenance and during unscheduled events such as power fluctuations or alarm level exceedances.
- v. Influent Bypass: When the SRF is put into temporary recirculation mode (i.e., full recycle) or contingency discharge mode (i.e., discharge to Turnbull South Pit Tailings Storage Facility) and untreated influent contact water from Eagle 4 Pit temporarily bypasses the facility.
- vi. Discharge from the influent or effluent pipelines to maintain design pressure, prevent freezing, or prevent water quality changes: Discharges from either the influent or effluent pipeline at low point drains, high point vents, pressure safety valves or rupture discs at booster stations. This means discharges associated with the intended function of the Authorized Works to control pressure and vacuum, prevent freezing, and prevent water quality changes within the pipeline (e.g., generation of H<sub>2</sub>S). The released water must be controlled via the operation's surface water management system.

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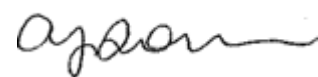
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4E3 FRO-N SRF PHASE 1 MONITORING PROGRAM

	FORDING RIVER UPSTREAM OF HENRETTA	FORDING RIVER DOWNSTREAM OF HENRETTA	FORDING RIVER UPSTREAM OF CLODE PONDS DISCHARGE	SOUTHERN FAR FIELD WELL (Influent)	NORTHERN FAR FIELD WELL (Influent)	EFFLUENT RETENTION POND OUTLET (Effluent)	CLODE SETTLING POND DECANT (Discharge)	GRASSY CREEK	FORDING RIVER DOWNSTREAM OF CLODE PONDS DISCHARGE	WEST EXFILTRATION DITCH	FORDING RIVER UPSTREAM OF KILMARNOCK CREEK	FORDING RIVER OPERATIONS COMPLIANCE POINT
<i>EMS Number</i>	<i>E216777</i>	<i>0200251</i>	<i>E326352</i>	<i>E326353</i>	<i>E326354</i>	<i>E326355</i>	<i>E102481</i>	<i>E326356</i>	<i>E326357</i>	<i>E326358</i>	<i>0200201</i>	<i>E223753</i>
<i>Teck Station ID</i>	<i>FR UFR1</i>	<i>FR FRI</i>	<i>FR FRUSCC1</i>	<i>E4 PW 01</i>	<i>E4 PW 02</i>	<i>E4 BPO</i>	<i>FR CCI</i>	<i>FR GCI</i>	<i>FR FRDSCC1</i>	<i>FR WED1</i>	<i>FR FR2</i>	<i>FR FRABCH</i>
<b>PARAMETER</b>												
Field parameters (a)	M	M	-	TW	TW	D	W	M	M	M	W/M	W/M
BOD	-	-	-	-	-	W	W	-	-	-	-	-
Conventional Parameters (b)	M	M	-	TW	TW	W	W	M	M	M	W/M	W/M
Major Ions (c)	M	M	-	TW	TW	W	W	M	M	M	W/M	W/M
Nutrients (d)	M	M	-	TW	TW	W	W	M	M	M	W/M	W/M
Total Sulphide	M	M	-	TW	TW	W	W	M	M	M	W/M	W/M
Dissolved Metals Scan (e)	M	M	-	TW	TW	W	W	M	M	M	W/M	W/M
Total Metals Scan (e)	M	M	-	TW	TW	W	W	M	M	M	W/M	W/M
Flow	-	-	-	C	C	C	-	-	-	-	-	-
96 hour Rainbow Trout single concentration toxicity test (g)	-	-	-	-	-	-	Q	-	-	-	-	-
48 hour Daphnia magna single concentration Toxicity (g)	-	-	-	-	-	-	Q	-	-	-	-	-
Selenium Speciation (i)	-	-	-	-	-	W	-	-	-	-	-	-
Calcite Precipitation Propensity Monitoring	-	-	M	-	-	-	M	-	M	-	-	-
Rock Mass Monitoring (4)				-	-	-		-		-	-	-

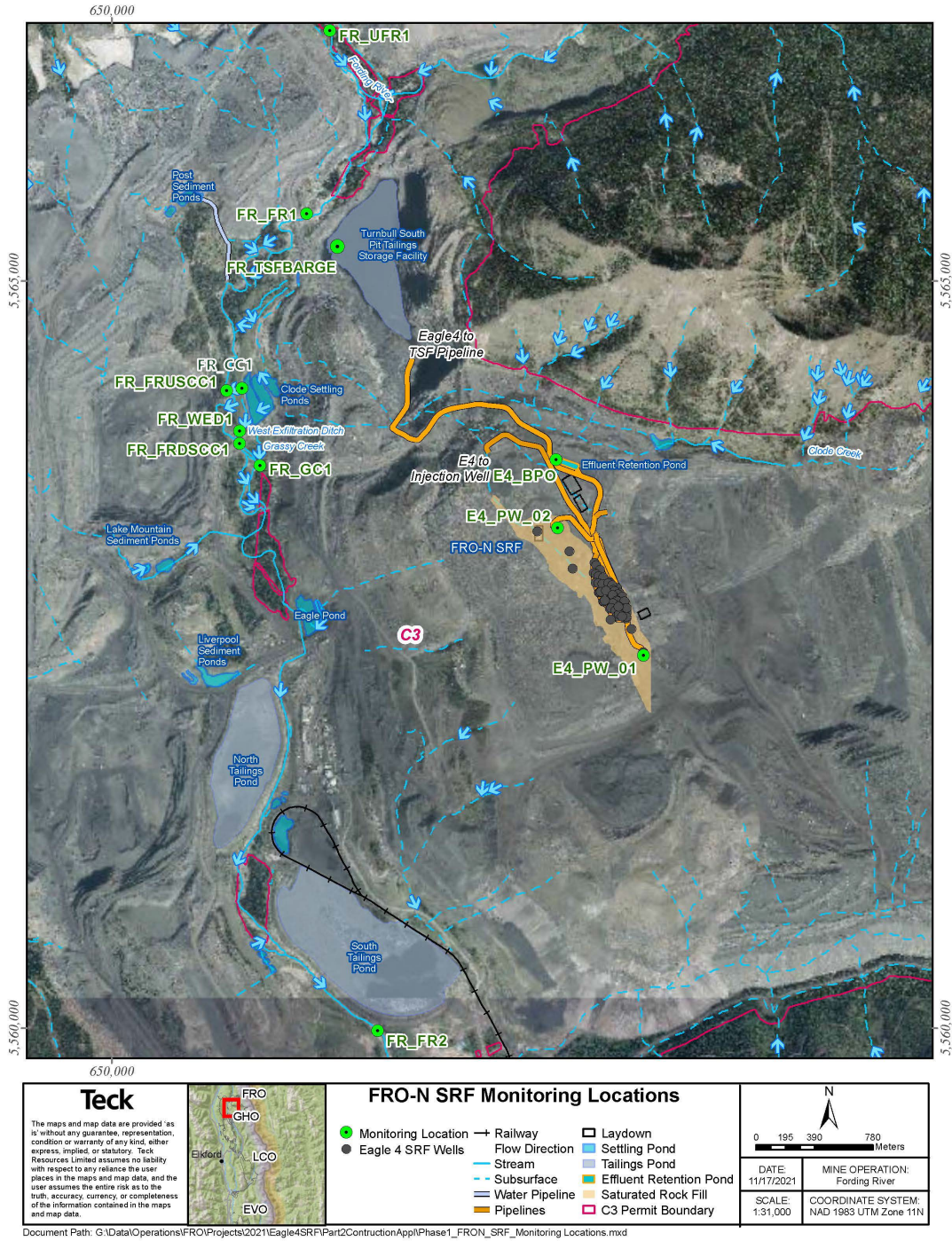
- 1) Refer to Table 26, Appendix 3, for abbreviation descriptions
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Monitoring location appears in two monitoring tables in this permit; therefore, monitoring data must be reported according to the requisite reporting requirements in both Section 9 and Appendix 4.
- 4) Rock mass monitoring to be conducted 1X/6W on an as-needed basis as a confirmatory measure of the more frequent calcite monitoring methods. Locations to be determined, both upstream in the Fording River and downstream of FR\_CC1.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
(most recent)



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4E4 **FRO-N SRF SITE PLAN**



Date issued: November 19, 2014  
Date amended: December 19, 2022  
(most recent)

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APPENDIX 5: CALCITE TREATMENT FACILITIES

**APPENDIX 5A – Calcite Treatment Facility General Operational Requirements**

**APPENDIX 5B – Upper Greenhills Creek Antiscalant Addition System**

**APPENDIX 5C – Swift-Cataract Antiscalant Addition System**

**APPENDIX 5D – Line Creek Operations (LCO) Dry Creek Antiscalant Addition System**

**APPENDIX 5E – Liverpool Antiscalant Addition System**

Date issued: November 19, 2014  
Date amended: December 19, 2022  
(most recent)



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## APPENDIX 5A – Calcite Treatment Facility General Operational Requirements

This section includes requirements that apply to all calcite treatment facilities. Subsequent sections include facility-specific requirements.

### 5A1 COMMISSIONING PLAN

A Commissioning Plan for calcite treatment facilities must be prepared by a Qualified Professional, submitted to the director and implemented prior to commencement of discharge from the calcite treatment facility. The Commissioning Plan may include all facilities, though discussion for each facility must be distinct. Alternatively, the permittee may submit a Commissioning Plan for each facility. The Commissioning Plan must include but is not necessarily limited to operational procedures required to commission the calcite treatment facilities, including any additional monitoring and reporting required to demonstrate that no adverse environmental impacts result from commissioning.

### 5A2 OPERATIONS PLAN

An Operations Plan for calcite treatment facilities must be prepared by a Qualified Professional, submitted to the director and implemented prior to commencement of the discharge from the calcite treatment facilities. The Operations Plan may include all facilities, though discussion for each facility must be distinct. Alternatively, the permittee may submit an Operations Plan for each facility. The Operations Plan must include all stand-alone calcite treatment systems. Calcite treatment associated with any treatment facility (e.g., WLC AWTF) must be captured in the Operations Plan for that treatment facility.

The Operations Plan must include but is not necessarily limited to:

- i. The facility operator's manual, with provision for its continual improvement;
- ii. An overview of the planned maintenance program which includes an inventory of facility components and authorized replacement parts, and a detailed description of inspection, repair and replacement frequency for facility components;
- iii. Information on reagent usage and storage;

Date issued: November 19, 2014  
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- iv. Documentation to verify that the facility is operated at all times within specifications and in a manner to ensure compliance with this authorization and other applicable legislation;
- v. Actions to be taken if effluent quality fails to meet the requirements of the permit;
- vi. Contingency planning which describes built-in redundancy of the facility and outlines measures to prevent emergency conditions from occurring.

Any significant update to the plan must be submitted to the director within 30 days of adoption. Minor updates must be summarized in the annual report for the time period when the minor update was made.

**5A3 CALCITE TREATMENT FACILITY MAINTENANCE OF WORKS,  
EMERGENCY PROCEDURES AND BYPASSES**

This section refers only to authorized discharges and Authorized Works defined within Appendix 5.


The permittee must regularly inspect the Authorized Works and maintain them in good working order, in accordance with the Operations Plan.

The permittee must maintain a record of inspections and maintenance of the Authorized Works and make the record available to an officer upon request.

In the event of an emergency or other condition which prevents normal operation of the Authorized Works or leads to an unauthorized discharge, the permittee must:

- i. take remedial action immediately to restore the normal operation of the Authorized Works and to prevent any unauthorized discharges; and
- ii. submit written documentation of the emergency or other condition and the remedial action that has and will be taken, a schedule of implementation of actions and the date the findings as to the cause of the incident will be reported to the director and KNC. This information must be submitted with the next annual performance report required in Section 5A9 unless otherwise required by the director.

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The permittee must not allow any discharge of influent or effluent authorized in Appendix 5 to bypass the Authorized Works, except with the prior written approval of the director or as defined in Sections 5B1.6, 5C1.5, 5D1.5, and 5E1.5.

Normal or effective operation of Calcite Treatment Facilities is defined as follows: Calcite Treatment Facilities are considered to be operating effectively if they are achieving the prevention of calcite formation in the downstream receiving environment that the facility is intended to manage. According to the Commissioning and Operations Plans, under normal operation, temporary downtime may occur during commissioning, trouble shooting, maintenance, unsuitable in-stream flows, power fluctuations or facility alarm exceedances.

5A4 **PROCESS MODIFICATIONS**

The permittee must notify the director in writing, prior to implementing changes to any process that may adversely affect the quality and/or quantity of the discharge from the calcite treatment facilities. Notwithstanding notification under this Section, permitted levels must not be exceeded.

5A5 **NEW WORKS**

The director may require upgrading of the calcite treatment works based on monitoring results, and/or any other pertinent information. Plans and specifications for new pollution treatment works and upgrades to existing works must be submitted to the director as an amendment application. All new works must be approved before a discharge from the works commences.

5A6 **SITE SPECIFIC ENVIRONMENTAL EMERGENCY RESPONSE PLAN**

A Site-Specific Environmental Emergency Response Plan must be prepared for all stand-alone calcite treatment systems. The plan must be submitted to the director prior to commencement of the discharge from the calcite treatment facilities. Calcite treatment associated with any treatment facility in Appendix 4 must be captured in the Emergency Response Plan for that treatment facility.

Date issued: November 19, 2014  
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The plan must include, but is not limited to:

- i. A description of measures to mitigate any health or environmental impacts, if emergencies occur;
- ii. Specific reference to the Spill Reporting Regulation; and
- iii. Instructions for staff in the event of an emergency, including contact information for local authorities (fire, police, public health), Emergency Management BC, and the director.

Any significant update to the plan must be submitted to the director within 30 days of adoption. Minor updates must be summarized in the annual report for the time period when the minor update was made.

#### 5A7 **MONITORING**

The permittee must conduct monitoring associated with the calcite treatment facilities as defined in subsequent sections in Appendix 5. The discharge and receiving environment water sampling sites are located approximately as shown in subsequent sections in Appendix 5.

#### 5A8 **COMMISSIONING REPORT**

A commissioning report must be submitted to the director within 60 days of completing commissioning of any new calcite treatment facility. If the commissioning report deadline corresponds with the annual report deadline, one report may be submitted to meet both requirements.

The commissioning report must include, but is not limited to:

- i. operating times;
- ii. influent flow rates or treated water volume;
- iii. antiscalant dosing rates;
- iv. calculated in-pipe antiscalant concentrations (where applicable); and
- v. monitoring data.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
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## 5A9 ANNUAL PERFORMANCE REPORT

An annual performance report must be submitted to the director by March 31 for each year following the data collection calendar year. The report must include, but is not limited to:

- i. operating availability of the Authorized Works;
- ii. influent flow rates or treated water volume;
- iii. quantity of antiscalant used and dosing rates;
- iv. calculated in-pipe antiscalant concentrations (where applicable);
- v. a description of any incidents including process upsets, spills, issues with and bypasses of the Authorized Works;
- vi. monitoring data;
- vii. interpretation and analysis of monitoring data;
- viii. discussion of results and recommendations for changes to management and/or regulatory controls to improve protection of the environment, as appropriate; and
- ix. A summary of non-compliances with the requirements of Appendix 5 for the previous calendar year. This must include interpretation of significance, and the status of corrective actions and/or ongoing investigations.

The report must also include operational performance results of antiscalant addition systems associated with selenium and nitrate treatment facilities, including:

- x. quantity of antiscalant used and dosing rates;
- xi. rock mass monitoring and calcite precipitation propensity monitoring data;
- xii. *Daphnia magna* and rainbow trout acute toxicity results; and
- xiii. Calcite Indices.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
(most recent)



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## APPENDIX 5B – Upper Greenhills Creek Antiscalant Addition System

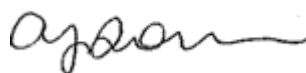
Additional requirements are detailed in Appendix 5A.

### 5B1 AUTHORIZED DISCHARGES

This section applies to the discharge of effluent from the Upper Greenhills Creek (UGHC) Antiscalant Addition System to Greenhills Creek. The UGHC Antiscalant Addition System influent is comprised of diverted mine influenced water from Greenhills Creek. The site reference number for this discharge is E328694 (GH\_EFPIPE) as shown in Appendix 5B4.

- 5B1.1 Treated effluent discharged at E328694 must not be acutely toxic as per Section 6.2.
- 5B1.2 Treated effluent at E328694 must not exceed an antiscalant concentration of 350 mg/L based on a 2-minute time-weighted average, according to the sampling and calculation procedure in the Operations Plan.
- 5B1.3 Antiscalant concentrations in Greenhills Creek at E328695 (GH\_HWGH\_BRB) must not exceed 15 mg/L based on a 2-minute time-weighted average, according to the sampling and calculation procedure in the Operations Plan.
- 5B1.4 Notification of deviation from the identified antiscalant in the Teck application “Greenhills Operations Greenhills Creek Calcite Remediation Field Trial & Antiscalant Addition Project” dated December 11, 2020, must be provided to the director and KNC prior to implementation.
- 5B1.5 The discharge is authorized from Authorized Works which are: antiscalant addition module, raw water intake structure, discharge pipeline with diffuser pipe to return water to Greenhills Creek, and related appurtenances approximately located as shown in Appendix 5B4.
- 5B1.6 The UGHC Antiscalant Addition System may operate intermittently, in accordance with the Operations Plan, as required to meet the Site

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Performance Objectives for Calcite per Section 3.4 and prevent acute toxicity failures per Section 6.2.

**5B2 GREENHILLS CREEK DOWNSTREAM MONITORING REVIEW**

5B2.1 The permittee must provide an analysis and interpretation of monitoring results from Greenhills Creek downstream monitoring locations during the initial period of 12 months during project commissioning and operations to the director and KNC. The report must be submitted within 14 months of the project start date and include a recommendation for ongoing monitoring at these locations.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
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5B3 UPPER GREENHILLS CREEK ANTISCALANT ADDITION SYSTEM MONITORING PROGRAM

	GREENHILLS CREEK UPSTREAM OF UGHC SYSTEM (Upstream in receiving environment; Influent)	UGHC ANTISCALANT MODULE (Effluent)	GREENHILLS CREEK ~65 M D/S OF UGHC AAS, D/S OF BRANCH B ROAD CULVERT (Downstream in receiving environment)	GREENHILLS CREEK D/S OF GARDINE CREEK (Downstream in receiving environment)	GREENHILLS CREEK SEDIMENT POND INLET (Downstream in receiving environment)	GREENHILLS CREEK SEDIMENT POND DECANT (Downstream in receiving environment) (4)	GREENHILLS CREEK REACH 1 (Downstream in receiving environment)
<i>EMS Number</i>	<i>E328693</i>	<i>E328694</i>	<i>E328695</i>	<i>E328696</i>	<i>E328697</i>	<i>E102709</i>	<i>E321331</i>
<i>Teck Station ID</i>	<i>GH_USAAS</i>	<i>GH_EFFPIPE</i>	<i>GH_HWGH_BRB</i>	<i>GH_DSGC</i>	<i>GH_GH1B</i>	<i>GH_GH1</i>	<i>GH_CA04</i>
<b>PARAMETER</b>							
Field Parameters (a)	M	M	M	-	M	M	M
Conventional Parameters (b)	M	M	M	-	M	M	M
Major Ions (c)	M	M	M	-	M	M	M
Nutrients (d)	M	M	M	-	M	M	M
Total and Dissolved Metals Scan (e)	M	M	M	-	M	M	M
96 hour Rainbow Trout single concentration toxicity test (g)	-	Q	-	-	-	-	-
48 hour <i>Daphnia magna</i> single concentration toxicity test (g)	-	Q	-	-	-	-	-
Flow (f)	-	-	C	-	C	C	-
Calcite Precipitation Propensity Monitoring	1X/2W	-	1X/2W	1X/2W	1X/2W	1X/2W	1X/2W
Rock Mass Monitoring (5)	1X/6W, as needed	-	1X/6W, as needed	1X/6W, as needed	-	-	1X/6W, as needed

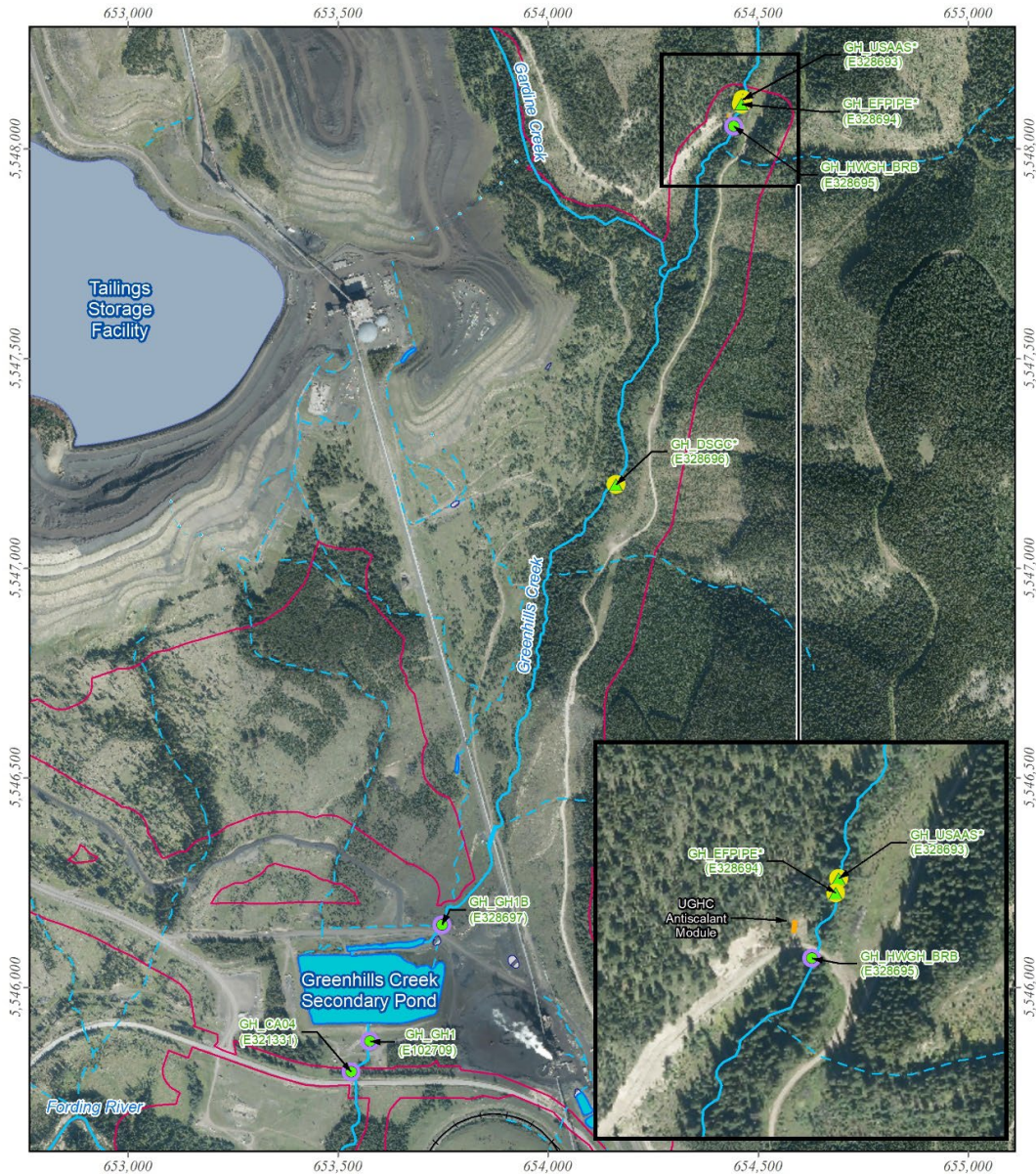
- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.5.1 and the approved annual calcite monitoring program for Calcite Index Monitoring requirements.
- 4) Monitoring location appears in two monitoring tables in this permit; therefore, monitoring data must be reported according to the requisite reporting requirements in both Section 9 and Appendix 5.
- 5) Rock mass monitoring to be conducted on an as-needed basis as a confirmatory measure of the more frequent calcite monitoring methods.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
(most recent)



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**5B4 UPPER GREENHILLS CREEK ANTISCALANT ADDITION SYSTEM  
SITE PLAN**



<p><b>Teck</b></p> <p>The maps and map data are provided "as is" without any guarantee, representation, condition or warranty of any kind, either express, implied, or statutory. Teck Resources Limited assumes no liability with respect to any reliance the user places in the maps and map data, and the user assumes the entire risk as to the truth, accuracy, currency, or completeness of the information contained in the maps and map data.</p>		<p><b>Greenhills Creek Antiscalant Addition Facility - Monitoring Locations</b></p>		
		<p><b>Monitoring Location Status</b></p> <ul style="list-style-type: none"> <li>● Active</li> <li>▲ Proposed</li> <li>● Site</li> <li>● Operational</li> </ul>	<p><b>Monitoring Location Type</b></p> <ul style="list-style-type: none"> <li>□ Permit Boundary</li> <li>— Railway</li> <li>■ Settling Pond</li> <li>■ Sump</li> <li>■ Tailings Pond</li> </ul>	

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Date issued: November 19, 2014  
 Date amended: December 19, 2022  
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## APPENDIX 5C – Swift-Cataract Antiscalant Addition System

Additional requirements are detailed in Appendix 5A

### 5C1 AUTHORIZED DISCHARGES

This section applies to the discharge of effluent from the Swift-Cataract Antiscalant Addition System to the Fording River via the Swift Creek Intake structure, FRO-S AWTF bypass pipeline and the Fording River Outfall (i.e., saw-tooth weir on the Fording River Road crossing). The Swift-Cataract Antiscalant Addition System influent is Swift Creek Sediment Ponds effluent comprised of combined flow of Swift Creek and Cataract Creek. The site reference number for this discharge is E320694 (FR\_SCOUT) as shown in Appendix 5C3.

- 5C1.1 Treated effluent discharged at E320694 must not be acutely toxic, as per Section 6.2.
- 5C1.2 Treated effluent at E320694 must not exceed an antiscalant concentration of 25 mg/L based on a two-minute time-weighted average, according to the sampling and calculation procedure in the Operations Plan.
- 5C1.3 Notification of deviation from the identified antiscalant in the Teck application “Swift Cataract Antiscalant Addition Project” dated August 30, 2019 must be provided to the director and KNC prior to implementation.
- 5C1.4 The discharge is authorized from Authorized Works which are: antiscalant addition module and related appurtenances approximately located as shown in Appendix 5C3.
- 5C1.5 The Swift-Cataract Antiscalant Addition System may operate intermittently, in accordance with the Operations Plan, as required to meet the Site Performance Objectives for Calcite per Section 3.4 and prevent acute toxicity failures per Section 6.2.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
(most recent)




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**5C2 SWIFT-CATARACT ANTISCALANT ADDITION SYSTEM  
MONITORING PROGRAM**

	SWIFT-CATARACT SED. POND DOSED WITH ANTISCALANT TO FORDING RIVER (3;4) (Effluent)	FORDING RIVER U/S OF FRO-S AWTF OUTFALL STRUCTURE (Upstream in receiving environment)	FORDING RIVER D/S OF FRO-S AWTF OUTFALL STRUCTURE (Downstream in receiving environment) (4)	SWIFT CREEK SEDIMENT PONDS TO FORDING RIVER
<i>EMS Number</i>	<i>E320694</i>	<i>E320693</i>	<i>E320695</i>	<i>E319331</i>
<i>Teck Station ID</i>	<i>FR_SCOUT</i>	<i>FR_FR3</i>	<i>FR_SCOUTDS</i>	<i>FR_SCCAT</i>
<b>PARAMETER</b>				
Field Parameters (a)	M	-	M	-
Conventional Parameters (b)	M	-	M	-
Major Ions (c)	M	-	M	-
Nutrients (d)	M	-	M	-
Total and Dissolved Metals Scan (e)	M	-	M	-
96 hour Rainbow Trout single concentration toxicity test (g)	Q	-	-	-
48 hour <i>Daphnia magna</i> single concentration toxicity test (g)	Q	-	-	-
Flow (f)	-	-	-	C
Calcite Precipitation Propensity Monitoring	1X/2W	1X/2W	1X/2W	-
Rock Mass Monitoring (5)	-	1X/6W, as needed	1X/6W, as needed	-

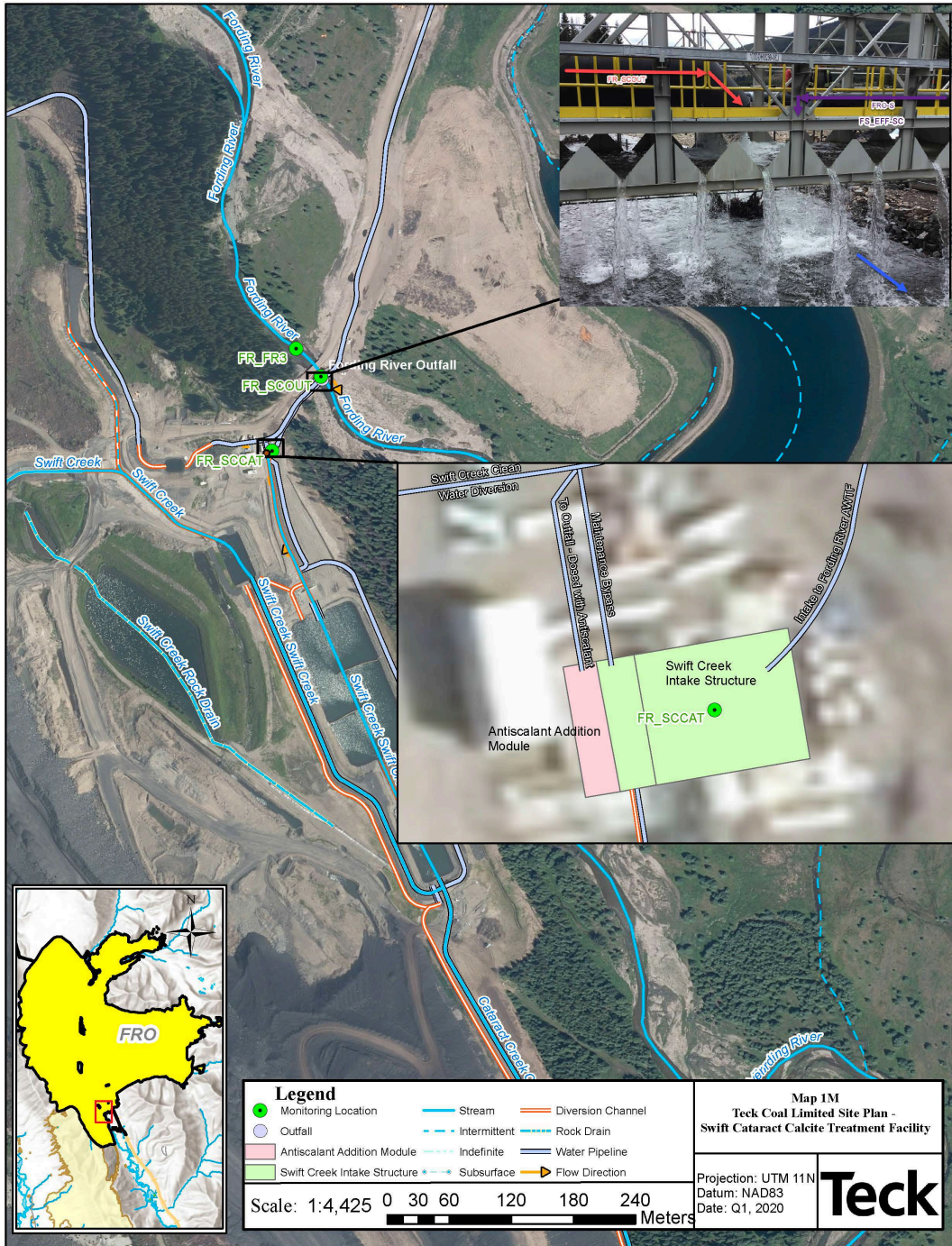
- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Samples are to be collected only when there is discharge via overflow from the FRO-S AWTF Swift Creek Intake. If the discharge is initiated because of a recirculation event at FRO-S AWTF, the monitoring program is not effective during the first four (4) hours of the recirculation event.
- 4) Monitoring location appears in three monitoring tables in this permit; therefore, monitoring data must be reported according to the requisite reporting requirements in Section 9, Appendix 4, and Appendix 5.
- 5) Rock mass monitoring to be conducted on an as-needed basis as a confirmatory measure of the more frequent calcite monitoring methods.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
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**5C3 SWIFT-CATARACT ANTISCALANT ADDITION SYSTEM SITE  
PLAN**



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Date issued: November 19, 2014  
Date amended: December 19, 2022  
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## APPENDIX 5D – LCO Dry Creek Antiscalant Addition System

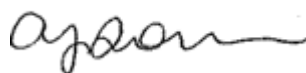
Additional requirements are detailed in Appendix 5A.

### 5D1 AUTHORIZED DISCHARGES

This section applies to the discharge of effluent from the LCO Dry Creek Antiscalant Addition System to Dry Creek. The LCO Dry Creek Antiscalant Addition System influent is Dry Creek Sediment Pond effluent. The site reference number for this discharge is E295211 (LC\_SPDC) as shown in Appendix 5D4.

- 5D1.1 Treated effluent discharged at E295211 must not be acutely toxic, as per Section 6.2.
- 5D1.2 Treated effluent at E295211 must not exceed an antiscalant concentration of 25 mg/L based on a two-minute time-weighted average, according to the sampling and calculation procedure in the Operations Plan.
- 5D1.3 Notification of deviation from the identified antiscalant in the Teck application “Line Creek Operations Dry Creek Calcite Management Project” dated May 8, 2020 must be provided to the director and KNC prior to implementation.
- 5D1.4 The discharge is authorized from Authorized Works which are: antiscalant addition module, the combined effluent pipeline, and related appurtenances approximately located as shown in Appendix 5D4.
- 5D1.5 The LCO Dry Creek Antiscalant Addition System may operate intermittently, in accordance with the Operations Plan, as required to meet the Site Performance Objectives for Calcite per Section 3.4 and prevent acute toxicity failures per Section 6.2.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
(most recent)



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5D2 **DRY CREEK DOWNSTREAM MONITORING REVIEW**

5D2.1 The permittee must provide an analysis and interpretation of monitoring results from Dry Creek downstream monitoring locations during the initial period of 12 months during project commissioning and operations to the director and KNC. The report must be submitted within 14 months of the project start date and include a recommendation for ongoing monitoring at these locations.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
(most recent)



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5D3 LCO DRY CREEK ANTISCALANT ADDITION SYSTEM MONITORING PROGRAM

	LCO DRY CREEK U/S OF DCWMS HEAD POND	LCO DRY CREEK SEDIMENT POND COMBINED EFFLUENT D/S OF ANTISCALANT ADDITION (Effluent)	LCO DRY CREEK 30 M D/S OF DCWMS DISCHARGE LOCATION IN REACH 4 (Downstream in receiving environment)	LCO DRY CREEK 0.6 KM D/S OF DCWMS IN REACH 3 (Downstream in receiving environment)	LCO DRY CREEK 1.5 KM D/S OF DCWMS IN REACH 3 (Downstream in receiving environment)	LCO DRY CREEK 0.5 KM U/S OF FORDING RIVER IN REACH 1 (Downstream in receiving environment)
<i>EMS Number</i>	<i>E288273</i>	<i>E295211</i>	<i>E295210</i>	<i>E326823</i>	<i>E326821</i>	<i>E288270</i>
<i>Teck Station ID</i>	<i>LC_DC3</i>	<i>LC_SPDC</i>	<i>LC_DCDS</i>	<i>LC_DC2</i>	<i>LC_DC4</i>	<i>LC_DC1</i>
<b>PARAMETER</b>						
Field Parameters (a)	M	M	M	-	-	-
Conventional Parameters (b)	M	M	M	-	-	-
Major Ions (c)	M	M	M	-	-	-
Nutrients (d)	M	M	M	-	-	-
Total and Dissolved Metals Scan (e)	M	M	M	-	-	-
96 hour Rainbow Trout single concentration toxicity test (g)	-	Q	-	-	-	-
48 hour <i>Daphnia magna</i> single concentration toxicity test (g)	-	Q	-	-	-	-
Flow (f)	-	C	-	-	-	-
Calcite Precipitation Propensity Monitoring	M	M	M	M	M	M
Rock Mass Monitoring (4)	1X/6W, as needed	-	1X/6W, as needed	-	-	1X/6W, as needed

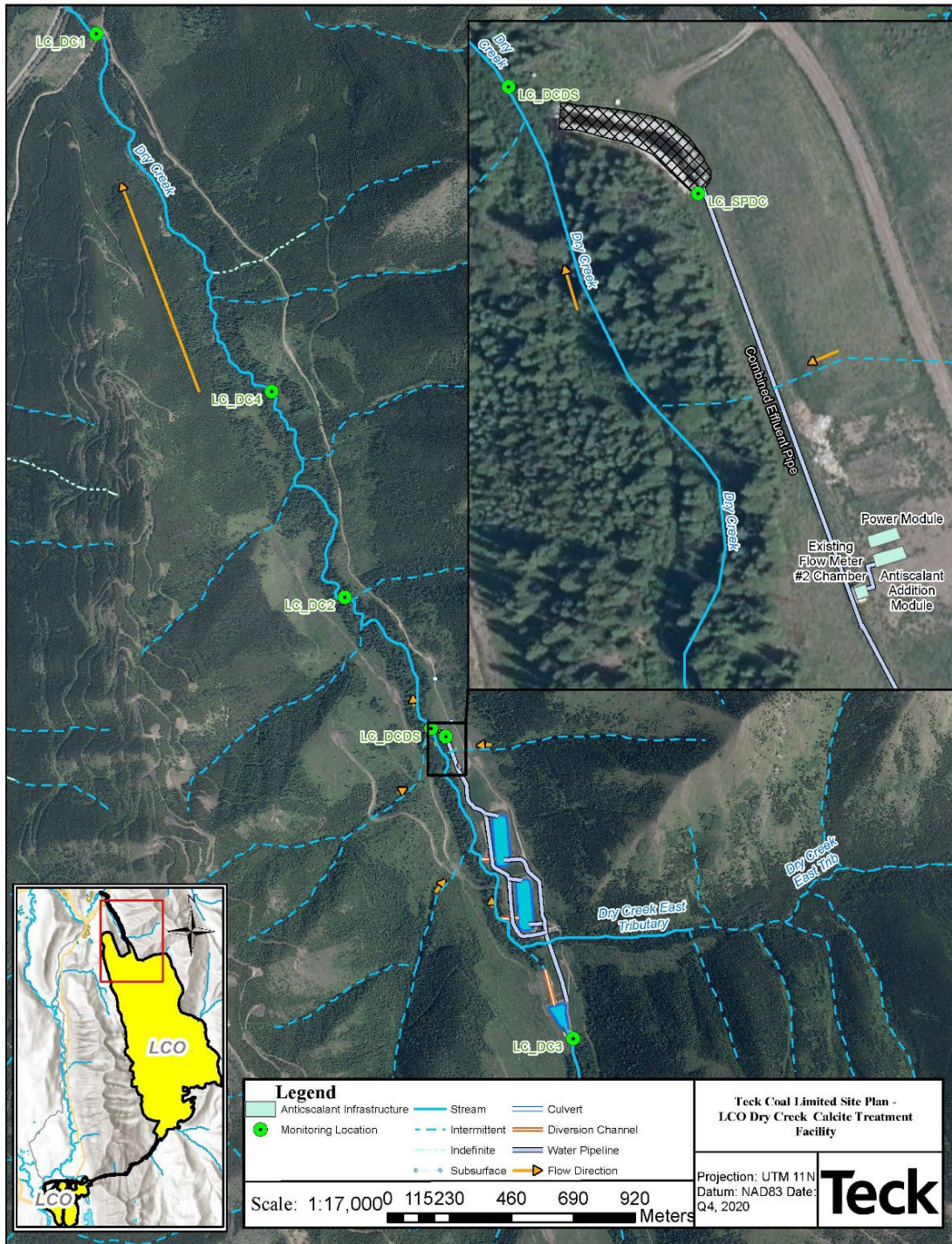
- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.5.1 and the approved annual calcite monitoring program for Calcite Index Monitoring requirements.
- 4) Rock mass monitoring to be conducted on an as-needed basis as a confirmatory measure of the more frequent calcite monitoring methods.
- 5) If monitoring locations appear in multiple monitoring tables in this permit, monitoring data must be reported according to the requisite reporting requirements in Appendix 5 and the other associated sections.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
(most recent)



A.J. Downie, M.Sc., P.Ag.  
for Director, *Environmental Management Act*  
Mining Authorizations

5D4 **LCO DRY CREEK ANTISCALANT ADDITION SYSTEM SITE PLAN**



Document Path: \\teck\com\co\CGO\Groups\TCGIS\Data\Projects\Annual Water Reporting\Annual Reporting 2020\Surface Water\Annual\_Rpt\Regional\RG\_107517 Permi Figures\MXD\RG\_Map\_LCO\DC\_Antisca

Date issued: November 19, 2014  
Date amended: December 19, 2022  
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Mining Authorizations

## APPENDIX 5E – Liverpool Antiscalant Addition System

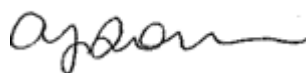
Additional requirements are detailed in Appendix 5A.

### 5E1 AUTHORIZED DISCHARGES

This section applies to the discharge of effluent from the Liverpool Antiscalant Addition System to the Fording River. The Liverpool Antiscalant Addition System influent is Liverpool Sediment Pond effluent. The site reference number for this discharge is E304835 (FR\_LP1) as shown in Appendix 5E3.

- 5E1.1 Treated effluent discharged at E304835 must not be acutely toxic as per Section 6.2.
- 5E1.2 Treated effluent at E304835 must not exceed an antiscalant concentration of 25 mg/L based on a 2-minute time-weighted average, according to the sampling and calculation procedure in the Operations Plan.
- 5E1.3 Notification of deviation from the identified antiscalant in the Teck application “Liverpool Sediment Ponds Temporary Antiscalant Addition Project: Emergency Authorization Request” dated April 19, 2022, must be provided to the director and KNC prior to implementation.
- 5E1.4 The discharge is authorized from Authorized Works which are: antiscalant addition module and related appurtenances approximately located as shown in Appendix 5E3.
- 5E1.5 The Liverpool Antiscalant Addition System may operate intermittently, in accordance with the Operations Plan, as required to meet the Site Performance Objectives for Calcite per Section 3.4 and prevent acute toxicity failures per Section 6.2.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
(most recent)



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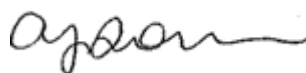


**5E2 LIVERPOOL ANTISCALANT ADDITION SYSTEM MONITORING PROGRAM**

	LIVERPOOL SEDIMENT PONDS TO FORDING RIVER (Effluent)(4)	FORDING RIVER U/S OF LIVERPOOL PONDS DISCHARGE CHANNEL (~130 m upstream in receiving environment)	FORDING RIVER D/S OF LIVERPOOL PONDS DISCHARGE CHANNEL (Downstream in receiving environment)
<i>EMS Number</i>	<i>E304835</i>	<i>E328891</i>	<i>E328692</i>
<i>Teck Station ID</i>	<i>FR_LP1</i>	<i>FR_MULTIPLATE</i>	<i>FR_FRDSLPI</i>
<b>PARAMETER</b>			
Field Parameters (a)	M	M	M
Conventional Parameters (b)	M	M	M
Major Ions (c)	M	M	M
Nutrients (d)	M	M	M
Total and Dissolved Metals Scan (e)	M	M	M
96 hour Rainbow Trout single concentration toxicity test (g)	Q	-	-
48 hour <i>Daphnia magna</i> single concentration toxicity test (g)	Q	-	-
Flow (f)	C	-	-
Calcite Precipitation Propensity Monitoring	1X/2W	1X/2W	1X/2W
Rock Mass Monitoring (5)	-	1X/6W, as needed	1X/6W, as needed

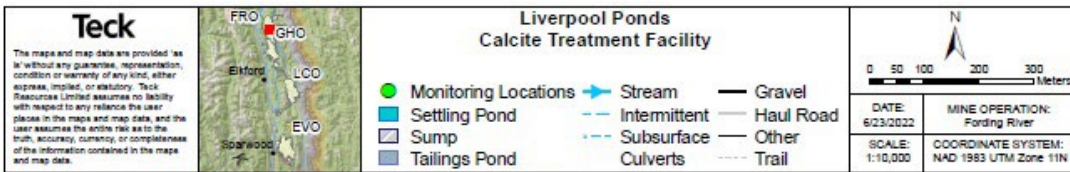
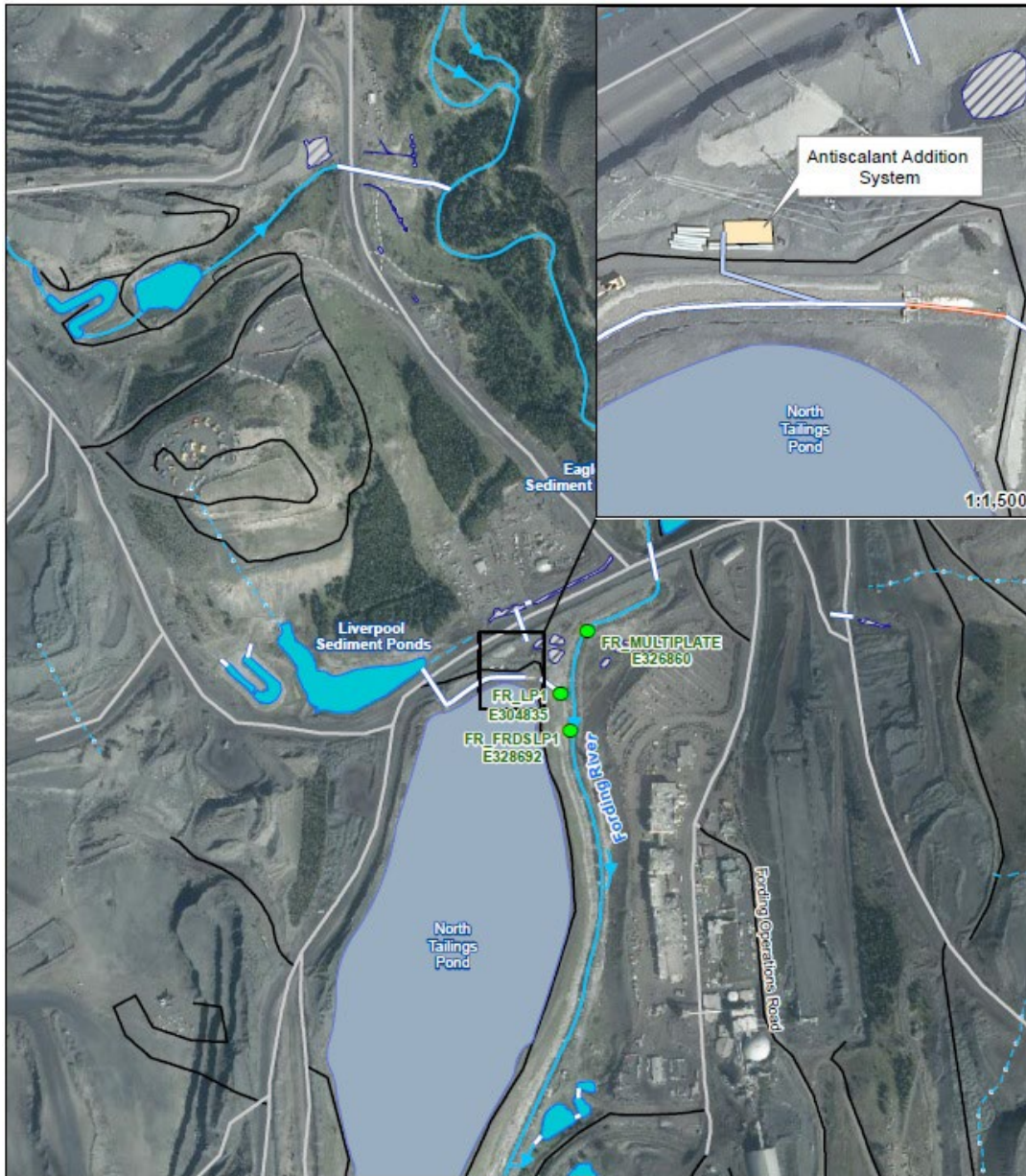
- 1) Refer to Table 26, Appendix 3, for abbreviation description.
- 2) Refer to Table 27, Appendix 3, for explanatory notes.
- 3) Refer to Section 8.5.1 and the approved annual calcite monitoring program for Calcite Index Monitoring requirements.
- 4) Monitoring location appears in two monitoring tables in this permit; therefore, monitoring data must be reported according to the requisite reporting requirements in both Section 9 and Appendix 5.
- 5) Rock mass monitoring to be conducted on an as-needed basis as a confirmatory measure of the more frequent calcite monitoring methods.

Date issued: November 19, 2014  
Date amended: December 19, 2022  
(most recent)



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Mining Authorizations

5E3 LIVERPOOL ANTISCALANT ADDITION SYSTEM SITE PLAN



Date issued: November 19, 2014  
 Date amended: December 19, 2022  
 (most recent)

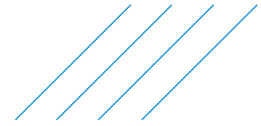
A.J. Downie, M.Sc., P.Ag.  
 for Director, *Environmental Management Act*  
 Mining Authorizations

# Appendix II

## Government Approval Letters and Report Recommendations

- Attachments
  - I. 2020 RGMP Approval
  - II. 2018 Site-Specific GWMP Approval Letter
  - III. 2017 RGMP ENV Approval





# 1 ENV Approval Letters and Conditions and Previous Recommendations

The Ministry of Environment & Climate Change Strategy (ENV) approval letters for the 2020 Regional Groundwater Monitoring Program (RGMP), and the 2018 Site-specific Groundwater Monitoring Program (SSGMP) updates for the Fording River Operations (FRO), Greenhills Operations (GHO), Line Creek Operations (LCO), Elkview Operations (EVO), and Coal Mountain Mine (CMm) are attached to this Appendix (Attachments 1 and 2, respectively). The 2018 SSGMPs and 2020 RGMP were approved by ENV on March 2020 and March 2023, respectively. The SSGMPs were subsequently updated and provided to ENV in October 2021. The 2021 SSGMP Updates are pending ENV's approval. For reference, the ENV approval letter for the 2017 RGMP Update is also attached (Attachment 3).

The sections below provide the key recommendations presented in the 2020 RGMP Update and the proposed studies to address the data gaps presented in the 2021 SSGMP Update.

## 1.1 2020 Regional Groundwater Monitoring Program Update Recommendations

Recommendations were developed in the 2020 RGMP Update and are provided below for each operation (SNC-Lavalin, 2020). These recommendations were incorporated or assessed in this year's annual report.

### Background

- Install one background well in 2021. Evaluate monitoring data in background monitoring wells drilled in 2020 and 2021 and after one year of monitoring assess the need for additional background wells and location.

### Study Area 1

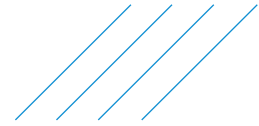
- Review results from MBI once a year of data is obtained and evaluate identified gaps on the western side of the Fording River Valley. Based on the results, a subset of MBI monitoring wells should be incorporated into the RGMP. Additional monitoring wells will also be installed as part of MBI based on the preliminary assessments. The location and number of wells will be refined in early 2021.
- Consider installing a nested monitoring well in the southern portion of Study Area 1 near or upgradient of FR\_FRABCH.

### Study Area 2

- Install a nested groundwater monitoring well in the Dry Creek alluvial fan near the confluence of Dry Creek and the Fording River.

### Study Area 3

- Install nested monitoring wells near western boundary of Study Area 3 along potential groundwater flow path to Elk River watershed prior to Josephine Falls.
- Where possible, install pressure transducers for continuous water level measurements in existing production wells in the Fording River valley-bottom monitored under the RGMP.



#### Study Area 4

- Once at least one year of data is available at the new wells drilled in the vicinity of Leask and Wolfram Creek Sedimentation Ponds as Part of CPX2, compile and assess the need for replacement of existing monitoring wells and/or inclusion of new monitoring wells in RGMP. Review data from newly installed hydrometric stations as part of the MBI.
- Once one year of data has been collected from the MBI wells, determine if gap at GH\_MW-ERSC-1 has been filled and select monitoring wells for inclusion in RGMP. Additional monitoring wells will be installed as part of MBI based on the preliminary assessments. The location and number of wells will be refined in early 2021.
- Add new groundwater monitoring wells GH\_MW\_EF1A/B to the RGMP and review one year of data to evaluate if gap at RG\_DW-01-03 is filled.

#### Study Area 5/6

- Add new groundwater monitoring wells LC\_MW\_ER4A/B to the RGMP and review one year of data for potential long-term inclusion.
- Install a nested well pair between LC\_LC4 and the Fording River to facilitate an understanding of geology and groundwater flow along Line Creek.
- It may be possible that one or some of the existing Teck water supply wells near LC\_LC4 can provide supplemental information on the groundwater quality in the alluvial fan to address this objective. Develop understanding of pumping rates, capture zones, water quality and water levels to improve understanding of groundwater-surface water interaction and load balance.
- Remove PIZP1101 as part of the Study Area 5/6 assessment but retain sampling as part of the Background Groundwater Assessment.

#### Study Area 7

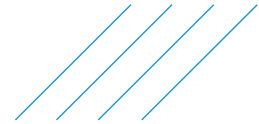
- Add new groundwater monitoring well RG\_MW\_WW to the RGMP and review one year of data for potential long-term inclusion.
- Install a nested well pair in the Grave Creek alluvial fan at confluence with Elk River. Monitor and sample the monitoring wells for one year to determine whether the gap has been filled.

#### Study Area 8

- New monitoring wells EV\_MW\_GC1A/1B were installed to provide monitoring near the Goddard Creek in the valley-bottom. The shallow well EV\_MC\_GC1B should be included in the RGMP and the deeper well EV\_MW\_GC1A should be monitored for a minimum of one year then evaluated for inclusion in the RGMP.

#### Study Area 9

- Include monitoring and sampling at EV\_MW\_MC2-A/B, EV\_MW\_GT1-A/B, EV\_MW\_BC1-A/B, and EV\_MW\_SPR1-C to the RGMP to better define CI sources and downward migration.
- Install pressure transducers for continuous water level measurements in existing supply wells. Monitor and analyze the pressure transducer as part of the RGMP.
- Include monitoring and sampling at EV\_MW\_BC2, EV\_MW\_BC3, EV\_MW\_SGC1, and EV\_MW\_SGC2 to the Elkview Operations (EVO) SSGMP to further investigate dissolved selenium in bedrock.
- New monitoring wells EV\_MW\_MCgwA/B were installed in 2020. The wells should be monitored for a minimum of one year then evaluated for inclusion in the RGMP.



- Remove RG\_DW-03-01 from RGMP.
- Remove EV\_MCgwS/D from RGMP and decommission both wells.
- Survey surface water monitoring datum at EV\_GT1 and EV\_BC1 relative to geodetic elevations, install transducers at both stations to continuously monitor surface water.
- A flow and load accretion study should be completed along Michel Creek extending to an area upstream of Study Area 10.

#### Study Area 10

- New monitoring wells EV\_MW\_SP1A/B/C were installed to assess groundwater quality near Michel Creek. The wells should be monitored for a minimum of one year then evaluated for inclusion in the RGMP.
- A flow accretion study for Michel Creek extending beyond the karst potential blocks is recommended to assess the potential influx. The study should extend to Study Area 9 to assess additional potential surface or groundwater monitoring locations.

#### Study Area 11

- Evaluate water level and water quality data from CM\_MW\_AG1A/B evaluate whether it suitably monitors groundwater quality downgradient of all mining-related sources in Study Area 11.
- To aid in evaluation, collect water quality samples at the Andy Good Creek station (CM\_AG2) timed with the groundwater sampling at CM\_MW\_AG1A/B.
- Install pressure transducers for continuous water level measurements in CM\_MW1-OB/SH/DP.

#### Study Area 12

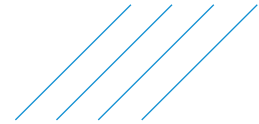
- Collect concurrent samples from RG\_MW-03-04 and RG\_DW-03-04 to develop a correlation. Survey and monitor groundwater levels at RG\_DW-03-04 to refine groundwater flow direction. Data from should be reviewed in 2021 Annual Report and assess for potential removal of RG\_DW-03-04 from the RGMP.

## 1.2 2021 Site-Specific Groundwater Monitoring Program Update Proposed 2022-2024 Studies to Address Data Gaps

The following studies were proposed for 2022-2024 to address data gaps identified in the 2021 SSGMP Update and are summarized below for each operation (SNC-Lavalin, 2021).

### Fording River Operations

- Review existing data on the stratification of Henretta Lake. If the assessment is seasonally limited, collect field data and water quality samples in a vertical profile of the water column in Henretta Lake in other seasons.
- Installation of additional nested monitoring wells completed in bedrock and overburden west of Henretta Lake.
- Additional monitoring and sampling of newly installed wells to assess loading from Turnbull Bridge spoil, and evaluation of data.
- Installation of additional monitoring wells installed in overburden to assess influence of groundwater extraction on flows and load in the Fording River.



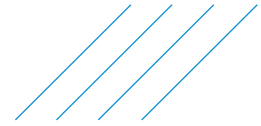
- Review ongoing studies and access in this area, and installation of new monitoring well in Fording River valley-bottom west of the Clode Creek ponds and between the FR\_POTWELLS and Lake Mountain Pit/Clode Creek.
- Monitoring and sampling of newly installed bedrock wells and evaluation of data to assess potential westward flow of bedrock seepage from E4 Saturated Rock Fill (SRF; now FRO-N SRF).
- Monitoring and sampling of newly installed wells FR\_LMA-1, FR\_LMA-2, and FR\_LMA-3 to assess seepage from the river towards the pit.
- Monitoring and sampling of newly installed wells and evaluation of data to assess groundwater quality and groundwater surface water interactions with the pond which overlies the historic Clode Creek alluvial fan.
- Monitoring and sampling historic wells and seeps at the toe of the slope of the STP to assess source of mine related constituents south of the STP (FR\_BH-03-16 and FR\_BH-04-16) and whether there is attenuation of order constituents (OC) at FR\_09-03-A/B.
- Seepage study of the Swift Creek sediment ponds is ongoing. Once complete, the findings will be assessed to inform whether select wells need to be added to the SSGMP.
- Teck is undertaking a seepage study of the Cataract Creek sediment ponds to understand potential seepage and pathway from the pond to the Fording River through groundwater. The findings of this study will be reviewed by the SSGMP.
- Additional monitoring and sampling of wells installed in under the Mass Balance Investigation (MBI) and evaluation of data for potential incorporation into the SSGMP or RGMP.
- Create a new surface water monitoring station at the confluence of the Fording River and the Oxbow Channel downstream of the regional groundwater discharge zone.

### Greenhills Operations

- Review results of ongoing Mass Balance Investigation (MBI) and Porter Creek investigations.
- Assess results from GHO Greenhills-Fording Aquifer Study drilling program and evaluate the new monitoring wells for potential inclusion in the GHO SSGMP.
- Assess results of isotope samples (18O-H<sub>2</sub>O, 2H-H<sub>2</sub>O, tritium and sulphate) at GH\_MW-MC-2D. If results are inconclusive, further field investigation of the deep groundwater flow regime will be conducted.
- Assess results from MBI investigation downgradient of Thompson Creek watershed to assess potential inclusion of new monitoring wells into SSGMP/RGMP.

### Line Creek Operations

- Assess need for a bedrock monitoring well within the Dry Creek Drainage, near the Dry Creek sedimentation ponds.
- Well pair RG\_MW\_DC1A/B should be monitored quarterly for one year and, following data review, considered for incorporating into subsequent SSGMPs.
- Install a shallow well in the Dry Creek drainage, downgradient from the sedimentation ponds.

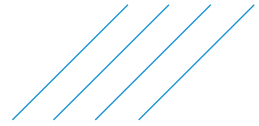


- Review the findings of the groundwater bypass study once it has been concluded and evaluate future planned monitoring wells near Upper Line Creek and the upper portions of Centre Line Creek to assess the need for additional investigations.
- Review the findings of the groundwater bypass study once it has been concluded and evaluate future planned monitoring wells in the vicinity of the West Line Creek Active Water Treatment Facility (WLC AWTF) to assess the need for additional investigations.
- Monitor groundwater at LC\_MW\_CP1A/B.
- Monitor groundwater at LC\_MW\_ER4A/B and LC\_MW\_SRDA/B.
- Monitor groundwater at RG\_MW\_LCA/B.
- Decommission LC\_PIZP1101 and replace with an appropriate well.
- Inspect LC\_PIZP1105 to confirm well integrity.

#### Elkview Operations

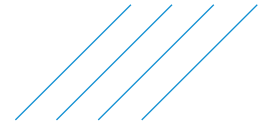
- Review of data obtained from recent well installations and test pits at the Harmer Reservoir.
- Review groundwater monitoring and sampling data obtained from new Dry Creek Sedimentation Pond wells after two years of data are collected.
- Review data obtained from Harmer Reservoir decommissioning study, including preparation of a cross section extending from EV\_GV3gw to the new wells near the reservoir.
- Restore surface water monitoring location EV\_GV1 or add new surface water monitoring location near new well RG\_MW\_GCA.
- Cedar North in-pit Backfill Extension (CNIBE) - Fault F42 to investigate hydraulic conductivity, connectivity and preferred pathways of faults and weathered bedrock as part of Permit 107517 Condition 8.2.4.
- Decommission EV\_MCgwS/D.
- Review Goddard Marsh load balance study.
- Review shallow wells to be installed near Lagoon D as part of decommissioning investigation.
- Conduct single-well response tests at EV\_OCgw and EV\_ECgw to re-evaluate hydraulic conductivity.
- Continue monitoring chemistry at EV\_MW\_MC3 and at nearby SEEP\_1B and review isotope results.
- Survey datum at Gate Creek and Bodie Creek monitoring stations to be consistent with groundwater wells.
- Install multilevel well nest adjacent to EV\_RCSgw (formerly known as EV\_RCgw) and near MV\_MW\_MC1A/B to investigate OC pathways.
- Complete a site reconnaissance of the Balmer North mine area in conjunction with an opportunistic sampling program where surface water seeps or where other surface water is noted.
- Perform a reconnaissance to understand potential suitable locations to install well nest near Milligan Creek Sedimentation Pond.
- Review of data obtained from new wells EV\_MW\_MC3A/B installed as part of RGMP drilling near Erickson Creek intake.





### Coal Mountain mine

- Hydraulic conductivity testing at CM\_MW7-SH, CM\_MW7-DP and CM\_MW8.
- Conduct a flow and load accretion Study to inform the need and location for potential additional groundwater monitoring well(s).



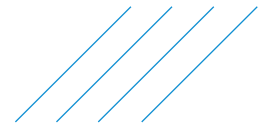
## 2 2021 Annual Report Recommendations by Program

Recommendations were developed in the 2021 Annual Report and are provided below for each operation (SNC-Lavalin, 2022). These recommendations were incorporated or assessed in this year’s annual report.

### 2.1 FRO SSGMP

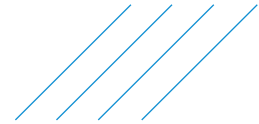
**Table A: FRO SSGMP – 2021 Annual Report Recommendations**

Recommendation	Status	Comments
<b>2021 Annual Report New Recommendations</b>		
<b>A local background well should be installed at FRO to replace the mine-influenced FR_HMW5 if a suitable location can be identified.</b>	Complete	Monitoring wells FR_MW22_KCWD1A/B were installed in the upper Kilmarnock Creek watershed in Q3 of 2022. The wells are located in an area inferred to be upgradient of mining operations and believed to be suitable for use as local background wells, though data has not been yet reviewed to confirm this.
<b>An attempt should be made to retrieve the tubing that is stuck in monitoring well FR_HMW2. If this is not possible, the well should be decommissioned and a new well installed within spoils in the Henretta Creek watershed to replace it.</b>	Complete	Tubing retrieval using a drill rig in Q3 2022 failed. FR_HMW2 was decommissioned and replaced with FR_MW23_HMW2_V2 in Q1 of 2023. An adjacent well (FR_MW23_HMW2_BR) was also completed in bedrock in Q1 of 2023.
<b>An attempt should be made to complete another hydraulic conductivity test at monitoring well FR_HMW1S, where recovery was too rapid and there was insufficient displacement for analysis in 2011.</b>	Complete	Additional hydraulic conductivity tests at FR_HMW1S were completed in Q4 of 2022.
<b>A datalogger should be re-installed in monitoring well FR_MW_NTPSE, which had its datalogger pulled when monitoring ceased as part of the previous program.</b>	Complete	The datalogger was re-installed in Q1 of 2022.
<b>Consideration should be given to the need for installing new monitoring wells within overburden and bedrock in Study Area 1 once recently installed monitoring wells have been evaluated for inclusion in the FRO SSGMP and/or RGMP.</b>	Complete	New monitoring wells were installed within overburden and bedrock at three locations in Study Area 1 in 2022 in support of the MBI, including wells RG_MW22_FR12A/B/C/D, RG_MW22_FR13A/B/C, and RG_MW22_FR14A/B/C.
<b>Monitoring wells RG_MW_FR1A/B/C should be incorporated into the SSGMP and RGMP to eventually replace supply well FR_GH_WELL4. Addition of these new wells will provide water quality and groundwater elevation data over the entire overburden thickness in the Fording River valley bottom. However, sampling of monitoring well FR_GH_WELL4 should continue for a period of time until a relationship between the water quality at FR_GH_WELL4 and RG_MW_FR1A/B/C is established.</b>	Ongoing	Monitoring wells RG_MW_FR1A/B/C have been incorporated into the programs for the 2022 Annual Report and going forward. However, their inclusion in the programs has not been approved by ENV and the relationship between hydrogeologic conditions at FR_GH_WELL4 and RG_MW_FR1A/B/C is still being established.



**Table A (Cont'd): FRO SSGMP – 2021 Annual Report Recommendations**

Recommendation	Status	Comments
<b>2021 Annual Report Existing Recommendations</b>		
<p><b>Nested (clustered) monitoring wells should be installed in the Henretta Creek Valley bottom west of Henretta Lake to investigate a potential down-valley pathway of mine-influenced groundwater sourced from the spoils and backfilled pits that may bypass the lake and creek, as well as the hydrogeologic conditions in bedrock in the Henretta Creek Valley.</b></p>	Complete	<p>Clustered monitoring wells were attempted to be installed west of Henretta Lake in Q3 of 2022. However, only the bedrock well (FR_MW22_HC1_1A) was installed since the overburden was shallow and unsaturated.</p>
<p><b>Review findings of the ongoing investigation, once completed, to understand potential stratification of OC in Henretta Lake.</b></p>	Ongoing	<p>The data will be reviewed in 2023 and the findings presented in a separate deliverable.</p>
<p><b>Additional monitoring wells should be installed in the area of FR_POTWELLS and instrumented with dataloggers to investigate the hydraulic connection between the supply wells and the Fording River.</b></p>	Ongoing	<p>An additional 16 wells in nine locations were installed in Q3 and Q4 of 2022, including:</p> <ul style="list-style-type: none"> <li>• FR_MW22_POTW1A/B/C,</li> <li>• FR_MW22_POTW2A/B,</li> <li>• FR_MW22_POTW3A/B,</li> <li>• FR_MW22_POTW4A/B,</li> <li>• FR_MW22_POTW5,</li> <li>• FR_MW22_POTW6A/B,</li> <li>• FR_MW22_POTW7,</li> <li>• FR_MW22_POTW8A/B, and</li> <li>• FR_MW22_POTW9.</li> </ul> <p>Four drivepoint piezometers were also installed in Q4 of 2022, including FR_DP22_POTW1 to FR_DP22_POTW4. Additional work remains to complete the recommendations and a status update will be provided as part of the 2023 Annual Report</p>
<p><b>Monitoring wells should be installed in the area between FR_POTWELLS and Clode Creek and in the area west of the Clode Creek ponds, where groundwater quality is unknown.</b></p>	Complete	<p>Monitoring wells FR_MW22_FC1A/B were installed in the Fish Creek area to investigate water quality between the FR_POTWELLS and Clode Creek area. Monitoring wells FR_MW_CB-7A/B/C were also installed west of the Clode Creek ponds to assess the potential transport pathway between the ponds and Fording River beneath the West Exfiltration Ditch.</p>
<p><b>Historic monitoring wells FR_BH-03-16, FR_BH-04-16, and FR_09-03-A/B south of the STP should be assessed for suitability of monitoring and sampling. If the wells are in good condition, FR_BH-03-16 and FR_BH-04-16 should be monitored and sampled to assess the source of OC in this area, while wells FR_09-03-A/B should be monitored and sampled to assess whether OC are similarly attenuated immediately downgradient of the STP east of FR_09-04-A/B.</b></p>	Ongoing	<p>Monitoring wells FR_BH-03-16, FR_BH-04-16, and FR_09-03-A/B were located and found to be in good condition. The 2022 FRO Annual Report recommends all four monitoring wells be sampled.</p>



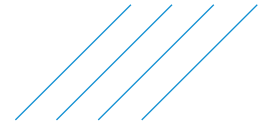
**Table A (Cont'd): FRO SSGMP – 2021 Annual Report Recommendations**

Recommendation	Status	Comments
<b>2021 Annual Report Existing Recommendations (Cont'd)</b>		
Monitoring wells recently installed in the Henretta Creek Valley, Turnbull Bridge Spoil area, Clode Creek area, Lake Mountain Creek area, Eagle pond area, Kilmarnock Creek area, Swift Creek and Cataract Creek Sediment Pond areas, and downgradient of the FRO operational area (MBI wells) should be evaluated for potential inclusion in the SSGMP once interpretation of the data have been published.	Ongoing	These wells will be evaluated and considered for inclusion in the SSGMP in the 2024 SSGMP Update Report.

## 2.2 GHO SSGMP

**Table B: GHO SSGMP – 2021 Annual Report Recommendations**

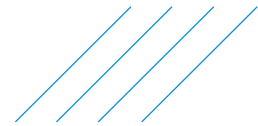
Recommendation	Status	Comments
<b>2021 Annual Report New Recommendations</b>		
Replace the transducer in GH_MW_GHC-1B.	Complete	Transducer was replaced in Q3 2022.
Install a transducer in GH_MW_RLP2.	Ongoing	Transducer has not yet been installed. It is planned to be installed in 2023.
<b>2021 Annual Report Existing Recommendations</b>		
Decommission GH_GA-MW-4 which was replaced with RG_MW_LC3A/B, now that one year of data has been collected at RG_MW_LC3A/B.	Complete	Well was decommissioned in September 2022.
Decommission GH_GA-MW-2 which was replaced with RG_MW_WC2A/B, now that one year of data has been collected at RG_MW_WC2A/B.	Complete	Well was decommissioned in September 2022.



## 2.3 LCO SSGMP

**Table C: LCO SSGMP – 2021 Annual Report Recommendations**

Recommendation	Status	Comments
<b>2021 Annual Report New Recommendations</b>		
Assess available data from LC_MW_LC1-1A, LC_MW_LC1-2A, and LC_MW_LC1-3A for potential continuous groundwater level monitoring and install a transducer in a minimum of one well. Continuous groundwater level measurements would facilitate a more detailed assessment of groundwater in this area.	Complete	Pressure transducers were installed in all three wells in October 2022.
Develop the repaired well LC_PIZP1101 prior to next sampling event and assess whether water quality is representative of the aquifer. Conduct new geodetic survey of ground surface and top of casing. Deploy protection measures to mitigate future damage.	Ongoing	Well development, survey, and deployment of protection measures are still pending.
Utilize a bladder pump at LC_PIZP1105.	Complete	Upon field inspection, the static water column was not tall enough to allow for the proper functioning of a bladder pump, and therefore one was not installed. Investigate alternative sampling methods, such as a stainless-steel bailer.
In 2022, Teck will conduct hydrologic surveys to confirm the location of the high-water marks of LCO Dry Creek and Elk River near RG_MW_DC1A/B and LC_MW_ER4A/B, respectively. If the hydrologic surveys determine that the well locations are within 10 m of the high-water mark, future reporting will be updated to reflect the appropriate guideline.	Complete	Geodetic surveys were conducted by Kerr Wood Leidel Associated Ltd (KWL) in October 2022 which determined that these four wells are greater than 10 m laterally from the high-water mark of the closest watercourse. The KWL report is attached in Appendix XII.
<b>2021 Annual Report Existing Recommendations</b>		
Install pressure transducers for continuous groundwater level monitoring at LC_PIZDC1404S, LC_MW_CP1A, and LC_MW_CP1B. Assess whether a pressure transducer can be installed at LC_PIZDC1306. Continuous groundwater level measurements would facilitate more detailed assessments of groundwater at these locations.	Complete	Pressure transducers were installed in all four wells in October 2022.
Reduce sampling frequency to twice per year for the following wells (LC_PIZDC1307, LC_PIZDC1308, LC_PIZP 1101 and LC_PIZP1103) because OCs are less than primary screening levels, baseline data has been established with a long period of data and trends are stable or decreasing according to Mann-Kendall statistical analysis.	Ongoing	Proposed in the 2021 SSGMP Update. Pending regulatory approval



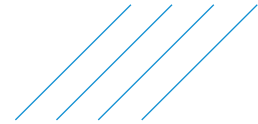
**Table C (Cont'd): LCO SSGMP – 2021 Annual Report Recommendations**

Recommendation	Status	Comments
<b>2021 Annual Report Existing Recommendations (Cont'd)</b>		
Reduce manual water level measurement frequency to twice per year for the following wells; LC_PIZP1001, LC_PIZP1002 and LC_PIZP1003 because groundwater levels for these wells are only needed to augment interpreted groundwater flow direction at the Process Plant.	Ongoing	Proposed in the 2021 SSGMP Update. Pending regulatory approval
Recommend continuous groundwater level monitoring of LC_PIZP1001, LC_PIZP1002 and LC_PIZP1003	Complete	A pressure transducer was installed in LC_PIZP1001 in Q4 2020 and in LC_PIZP1002 in October 2022. A pressure transducer was not installed in LC_PIZP1003 due to insufficient space because of large diameter tubing in the well.
Investigate the reason for the anomalously high groundwater elevations at LC_PIZP1002 and LC_PIZP1003 (17 m and 9 m, respectively). Depths to bottom and depths to water information should be validated. A new geodetic survey of the ground surfaces and tops of casings may be warranted.	Complete	Inspection at LC_PIZP1001 indicated the presence of large diameter tubing that is almost completely filling the well diameter and may be influencing groundwater elevations. LC_PIZP1002 is a large diameter well with no issues noted during inspection. The depths to bottom and water were confirmed. New geodetic surveys were conducted.

## 2.4 EVO SSGMP

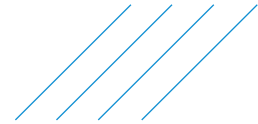
**Table D: EVO SSGMP – 2021 Annual Report Recommendations**

Recommendation	Status	Comments
<b>2021 Annual Report New Recommendations</b>		
Complete hydraulic conductivity tests at EV_GV3gwS, EV_GV3gw, RG_MW_GCA, EV_BALgw, EV_MW_MCgwA/B, and EV_MW_BC1B.	Complete	Hydraulic conductivity testing was conducted and results reported in Appendix VIII.
Re-develop monitoring well RG_MW_GCA to attempt to reduce turbidity in the water column.	Complete	Turbidity increased with each sampling event in 2022 despite redevelopment efforts. Decommissioning is recommended.
Review cross section EA-EA' to include borehole log data from the Harmer Reservoir project, where appropriate. Review data to confirm whether a secondary cross section should be included in the area.	Complete	Additional west-east cross-section was included in the 2022 Annual Report (EV-05 in Appendix VIII).
Conduct a site visit to determine the feasibility of installing additional wells north of Sparwood Ridge and south of Michel Creek to further investigate groundwater flow and the source of selenium at EV_MW_MC3.	Complete	EV_MW22_MC3B was installed in 2022.
Collect water quality from seep EV_SPR1B quarterly for at least one year to investigate possible selenium sources at EV_MW_MC3.	Complete	Samples were collected in 2022 and reported in Appendix VIII.



**Table D (Cont'd): EVO SSGMP – 2021 Annual Report Recommendations**

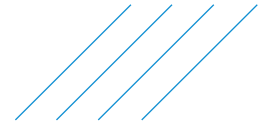
<b>Recommendation</b>	<b>Status</b>	<b>Comments</b>
<b>2021 Annual Report New Recommendations (Cont'd)</b>		
Collect quarterly water samples from discharge point EV_SPR5 for at least one year to confirm trends.	Complete	Samples were collected in 2022 and reported in Appendix VIII.
<b>2021 Annual Report Existing Recommendations</b>		
Sample monitoring wells near the Dry Creek Sedimentation Pond (EV_MW_DC1 through EV_MW_DC7 and EV_PW_DC1) as well as near the Harmer Reservoir (EV_MW_HC1 through EV_MW_HC5) per recommendations in the 2021 SSGMP Update. Assess analytical results from the Harmer Dam Removal Project in 2022 for potential inclusion in the SSGMP. Assess analytical results from the Dry Creek Sedimentation Pond in 2023 for potential inclusion in the SSGMP.	Ongoing	Monitoring wells EV_MW_DC1, EV_MW_DC2 and EV_MW_DC7 were selected for biannual sampling (Q2/Q3) starting in 2023. Winter access to these wells is difficult due to their remote location. Harmer Reservoir well analytical data will be reviewed in 2023 for potential inclusion in the SSGMP.
Survey surface water stations at Harmer Creek (EV_HC1) and Goddard Creek (EV_GC2) to a local datum.	Ongoing	EV_HC1 was surveyed to both a local and a geodetic datum, whereas EV_GC2 was surveyed to a local datum. In 2023, a geodetic survey is planned for EV_GC2.
Add monitoring well EV_GV3gwS to the SSGMP.	Complete	Well was included in 2022 SSGMP.
Results from the groundwater investigation planned for Lagoon D decommissioning should be reviewed to evaluate whether additional wells (including near EV_OCgw) are recommended for this area and for inactive Lagoons A-C to evaluate shallow groundwater.	Ongoing	The results of the groundwater investigation have not yet been reviewed, and will be undertaken once available.
Review results from investigation activities planned west of Cedar North Pit to Elk River (Permit 107517 Condition 8.2.4) to assess possible transport pathways of mine-influenced groundwater within faults and fractures.	Ongoing	The results will be reviewed in 2023 once the finalized reports are available.
Review the findings of the Goddard Marsh load balance study as well as the existing monitoring network to assess whether additional groundwater monitoring is warranted.	Ongoing	The load balance study is currently under review.
Complete a hydraulic conductivity test at EV_OCgw.	Complete	Hydraulic conductivity testing was conducted and results reported in Appendix VIII.
Decommission nested well pair EV_MCgwS/D since both of these wells are installed in the aquitard.	Complete	These wells were decommissioned in 2022.
Continue monitoring chemistry at EV_MW_MC3 and at nearby SEEP_1B and review isotope results.	Ongoing	Monitoring is ongoing.



**Table D (Cont'd): EVO SSGMP – 2021 Annual Report Recommendations**

Recommendation	Status	Comments
<b>2021 Annual Report Existing Recommendations (Cont'd)</b>		
Survey surface water stations at Bodie Creek (EV_BC1) and Gate Creek (EV_GT1) to a local datum.	Ongoing	These stations were surveyed to a local datum in 2019 and this data has been added to the hydrographs. EV_BC1 was surveyed to a geodetic datum in 2022; EV_GT1 has yet to be geodetically surveyed.
Investigate the condition of monitoring wells EV_MW_BC2 and EV_MW_BC3 and if appropriate, add to SSGMP to obtain a better understanding of shallow groundwater and to monitor the bedrock pathway.	Complete	These wells have been added to the SSGMP and are included in the 2022 annual report.
Review contaminant load study related to condition 4C3.4ii in Permit 107517 to understand whether a load imbalance along Michel Creek exists.	Ongoing	The contaminant load study has not been reviewed. This report can be reviewed once available.
Add additional wells screened through middle portion of sand and gravel aquifer, near EV_RCSgw, and further downstream, at EV_MW_MC1A/B, to identify heterogeneities within the aquifer that may be affecting groundwater flow and transport of dissolved selenium.	Complete	Additional wells have been added: <ul style="list-style-type: none"> <li>• EV_MW22_RCSgw1A/B/C,</li> <li>• EV_MW22_BCgw1A/B, and</li> <li>• EV_MW22_MC2C.</li> </ul>
Complete a site reconnaissance of the Balmer North mine area.	Ongoing	The Balmer North desktop study was completed in 2022. Site reconnaissance identified the Bodie Seep and confirmed that wells EV_MW_BC1A/B were in good condition, which were added to the SSGMP program. Additional site reconnaissance was not completed.
Complete a site reconnaissance near Milligan Creek Sedimentation Pond to assess the feasibility of installing a well nest.	Complete	The site reconnaissance indicated that access restrictions, including a railway crossing and pond berms, block well installation near the Milligan Creek Sedimentation Pond.
Sample newly installed monitoring wells in Erickson Creek (EV_MW_EC3A/B) for at least two years. Assess analytical results in 2023 for potential inclusion in the SSGMP.	Ongoing	Sampling results from these wells will be reviewed in 2023.
Complete hydraulic conductivity test at EV_ECgw.	Complete	A hydraulic conductivity was conducted at this well and reported on accordingly in Appendix VIII.
Sampling frequency at EV_BALgw, EV_LSgw, EV_OCgw, EV_GCgw, EV_MW_MC1A, EV_MW_MC2A, EV_MW_AQ1, EV_MW_AQ2, EV_MW_MC4, EV_MW_SPR1A, EV_MW_GT1A, and EV_BCgw should be reduced to semi-annual based on low and/or stable OC concentrations.	Ongoing	There is sufficient data available from prior years to reduce the sample frequency to semi-annual. These wells were sampled quarterly in 2022. The sampling frequency of these monitoring wells will be updated when the 2021 SSGMP Update is approved by ENV.
Remove monitoring well EV_WF_SW from the SSGMP as the well is located upland along Erickson Creek and has significant groundwater variations. The well is screened below 159 m of waste rock and concentrations of OC are less than the primary screening criteria.	Ongoing	This well remains part of the SSGMP. The well will be removed when the 2021 SSGMP Update is approved.

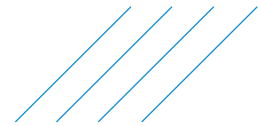




## 2.5 CMm SSGMP

**Table E: CMm SSGMP – 2021 Annual Report Recommendations**

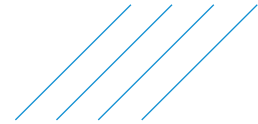
Recommendation	Status	Comments
<b>2021 Annual Report New Recommendations</b>		
Complete hydraulic conductivity testing at CM_MW4-SH/DP.	Ongoing	The field portion of hydraulic conductivity testing was completed at CM_MW4-DP in 2022. Hydraulic conductivity testing has not yet been completed at CM_MW4-SH due to an irretrievable artesian well control plug.
Install transducers in monitoring wells CM_MW6-DP/SH, CM_MW7-DP/SH, CM_MW8, CM_MW9, and CM_MW10 to understand groundwater-surface water interaction and groundwater recharge.	Complete	Pressure transducers were installed in all wells in 2022 Q4.
<b>2021 Annual Report Existing Recommendations</b>		
It is unlikely CM_MW9 will ever be successfully developed, therefore development efforts on CM_MW9 should cease. Continue collecting quarterly groundwater levels to verify the minimal water seepage into the well.	Complete	Development efforts have ceased at CM_MW9. A pressure transducer was installed at CM_MW9 in 2022 Q4, and quarterly groundwater levels are being collected to verify minimal water seepage into the well.
Complete a flow accretion study on relevant water courses (Corbin Creek from Corbin Pond to confluence with Michel Creek, Michel Creek from upgradient of CM_MC1 to downstream of confluence with Andy Good Creek, and the lower portion of Andy Good Creek). Survey continuous water level monitoring stations at CM_CC1, CM_MC1 and CM_SPD relative to sea level (geodetic datum). Establish continuous level monitoring at CM_MC2.	Ongoing	A flow accretion study was completed in 2022 Q4. In 2023, a geodetic survey of CM_CC1, CM_MC1 and CM_SPD, and the establishment of continuous level monitoring at CM_MC2 is being evaluated.
Complete hydraulic conductivity testing at CM_MW7-DP/SH and CM_MW8.	Ongoing	Hydraulic conductivity testing was completed at CM_MW7-DP/SH in 2022 Q4. Hydraulic conductivity testing was not successful at CM_MW8 in 2022 Q4 due to downhole logistics associated with water and well depth. Another attempt is planned for 2023.
Update sampling frequency of monitoring wells CM_MW4-SH, CM_MW4-DP, CM_MW5-DP, CM_MW6-SH, CM_MW6-DP, CM_MW7-SH and CM_MW8 to twice per year. OC are below primary screening levels in these monitoring wells, there is a relatively long period of record and trends are stable or decreasing according to Mann-Kendall statistical analysis.	Ongoing	The sampling frequency of these monitoring wells will be updated when the 2021 SSGMP Update is approved by ENV.



## 2.6 RGMP

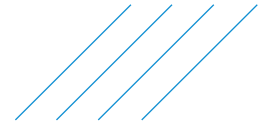
**Table F: RGMP – 2021 Annual Report Recommendations**

Recommendation	Status	Comments
<b>AMP KU 6.3 (Triggers) – 2021 New Recommendations</b>		
A full year of data from monitoring wells installed in drinking water aquifers (i.e., GH_MW_EF1A/B, RG_MW_WW and RG_MW-03-04). The next steps for trigger development will be to analyze data from wells to understand whether triggers will be effective in achieving objectives through a defined response framework.	Ongoing	Trigger review is currently underway.
<b>Background – 2021 New Recommendations</b>		
Update the Background Assessment as part of the 2023 RGMP Update, including a review of the adequacy of the current background monitoring well network. Continue to supplement the background monitoring network with new monitoring wells.	Ongoing	The background assessment will be updated as part of the 2023 RGMP Update.
Evaluate analytical results for newly installed background wells including RG_MW_AC1A/B once one year of data is available to assess whether they should be added to the background monitoring network.	Ongoing	RG_MW_AC1A/B will be evaluated for inclusion in the RGMP background monitoring well network in the 2023 RGMP Update.
Sample groundwater at all background monitoring wells once for isotope analysis ( <sup>3</sup> H, <sup>2</sup> H, <sup>18</sup> O and potentially <sup>14</sup> C) to obtain a better understanding of the origin of groundwater in background monitoring wells.	Ongoing	Background monitoring wells will be sampled for isotope analysis ( <sup>3</sup> H, <sup>2</sup> H, <sup>18</sup> O and potentially <sup>14</sup> C) in 2023.
Install data loggers within GH_MW_BG1A/B/C to assess continuous groundwater level changes.	Complete	Data loggers were installed in GH_MW_BG1A/B/C in 2022 Q2.
Assess trends of OC in background monitoring wells on an annual basis, and reassess annually if they should continue to be considered as representative of background groundwater quality.	Ongoing	Trends of OC in background monitoring wells have been assessed in the 2022 RGMP Annual Report.
RG_DW-03-10 (Sparwood Well 4) in Study Area 8 should be added to the background monitoring network.	Ongoing	RG_DW-03-10 (Sparwood Well 4) was assessed as part of Study Area 8 in the 2022 RGMP Annual Report, and will be added to the background monitoring well network in the 2023 RGMP Update.
<b>Background – 2021 Existing Recommendations</b>		
Continue to monitor/sample background locations at least two times in a year, as recommended in the 2020 RGMP Update (SNC-Lavalin, 2020).	Ongoing	Background locations will continue to be monitored/sampled at least two times per year. The background assessment will be updated as part of the 2023 RGMP Update, and the background monitoring well network and required monitoring/sampling frequency will be updated.



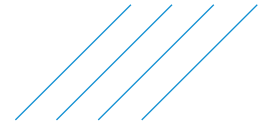
**Table F (Cont'd): RGMP – 2021 Annual Report Recommendations**

<b>Recommendation</b>	<b>Status</b>	<b>Comments</b>
<b>Study Area 1 – 2021 New Recommendations</b>		
Add monitoring wells RG_FR7A/B and RG_FR8A/B/C to the RGMP as they are located along the inferred flow paths between source areas (Kilmarnock Alluvial fan and Fording River) and the regional groundwater discharge zone.	Ongoing	Monitoring wells RG_MW_FR8A/B/C have been incorporated into the RGMP for the 2022 Annual Report and going forward. However, their inclusion in the programs has not been approved by ENV. Monitoring wells RG_FR7A/B were decommissioned in 2022 due to their location in an ephemeral channel and concerns about well seal integrity, and replaced with RG_MW22_FR12A/B/C/D. Monitoring wells RG_MW22_FR12A/B/C/D have been recommended to be added to the RGMP in the 2022 Annual Report.
<b>Study Area 1 – 2021 Existing Recommendations</b>		
Potential inclusion of wells installed in support of the MBI other than RG_MW_FR1A/B/C, RG_MW_FR7A/B and RG_MW_FR8A/B/C (newly recommended to be added) should be assessed once the interpretive reporting for that program has been completed.	Ongoing	These wells will be evaluated and considered for inclusion in the SSGMP in the 2023 RGMP Update Report.
Review results of ongoing MBI and Porter Creek investigations to assess the potential groundwater transport of OCs from the Porter Creek catchment.	Ongoing	Review of this work is ongoing. Available, relevant findings will be discussed in the 2023 RGMP Update.
<b>Study Area 2 – 2021 New Recommendations</b>		
Evaluate the feasibility of installing transducers in RG_MW_DC1A and RG_MW_DC1B for continuous groundwater level monitoring. Continuous groundwater level measurements would facilitate a more detailed assessment of groundwater at this location.	Complete	Pressure transducers were installed in both wells in December 2021.
<b>Study Area 2 – 2021 Existing Recommendations</b>		
No recommendations	Not applicable	Not applicable
<b>Study Area 3 – 2021 New Recommendations</b>		
No recommendations	Not applicable	Not applicable
<b>Study Area 3 – 2021 Existing Recommendations</b>		
Assess results from GHO Greenhills-Fording Aquifer Study drilling program to consider potential inclusion of the new monitoring wells in the GHO SSGMP.	Ongoing	Review of this work is ongoing. Available, relevant findings will be discussed in the 2023 RGMP Update.
<b>Study Area 4 – 2021 New Recommendations</b>		
Lower the hanging depth of loggers installed in RG_MW_LC3A/B	Complete	Hanging depths of transducers were lowered in Q3.



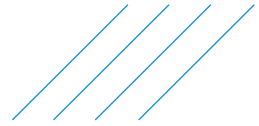
**Table F (Cont'd): RGMP – 2021 Annual Report Recommendations**

Recommendation	Status	Comments
<b>Study Area 4 – 2021 Existing Recommendations</b>		
Assess results of isotope samples ( <sup>18</sup> O-H <sub>2</sub> O, <sup>2</sup> H-H <sub>2</sub> O, tritium and sulphate) at GH_MW-MC-2D and GH_MW-MC-1D. If results are inconclusive, further field investigation of the deep groundwater flow regime will be conducted.	Ongoing	<sup>18</sup> O-H <sub>2</sub> O, <sup>2</sup> H H <sub>2</sub> O, and tritium samples from well GH_MW-MC-2D were collected and reporting is underway. Relevant data is expected to be incorporated into the 2023 RGMP Update.
Assess results from MBI investigation downgradient of Thompson Creek watershed to consider potential inclusion of new monitoring wells into SSGMP/RGMP.	Ongoing	Review of this work is ongoing. Available and relevant findings will be discussed in the 2023 RGMP Update.
<b>Study Area 5/6 – 2021 New Recommendations</b>		
No recommendations provided in report.	Not applicable	Not applicable
<b>Study Area 5/6 – 2021 Existing Recommendations</b>		
Install transducers in newly drilled clustered monitoring wells RG_MW_LC4A and RG_MW_LC4B. Continuous groundwater level measurements would facilitate a more detailed assessment of groundwater at this location.	Complete	Pressure transducers were installed in both wells in October 2022.
Teck has existing water supply wells near the top of the Line Creek alluvial fan. It may be possible that one or some of the existing water supply wells near LC_LC4 can provide supplemental information to facilitate characterization of groundwater - surface water interactions in the alluvial fan. Assess available relevant data for inclusion into the SSGMP and potentially validate through monitoring.	Ongoing	Groundwater withdrawals from two pumping wells have been incorporated into the 2022 annual SSGP report.
Confirm the December 2021 repairs were successful and the well integrity of PIZP1101 has been maintained. If the well was successfully repaired, remove PIZP1101 as part of the Study Areas 5/6 assessment but retain sampling as part of the BGA. If subsequent analytical results do not align with historical ranges (i.e., within 2 sampling events), this well should be decommissioned.	Complete	The post-repair analytical results appear to align with historical ones, therefore this well should be retained in the program. There does not appear to be sediment build up within the screened interval, however high groundwater turbidity remains. As listed in Table E above, the well should be redeveloped.
Add LC_MW_ER4A and LC_MW_ER4B to the RGMP. Continue quarterly sampling and continuous groundwater level measurements.	Complete	These wells were added to the program, sampled quarterly, and instrumented with pressure transducers.
<b>Study Area 7 – 2021 New Recommendations</b>		
No recommendations	Not applicable	Not applicable
<b>Study Area 7 – 2021 Existing Recommendations</b>		
Establish a new surface water monitoring location at Grave Creek near RG_MW_GCA to replace former EV_GV1 location which is very difficult to access.	Ongoing	A new surface water sampling location has not yet been identified.



**Table F (Cont'd): RGMP – 2021 Annual Report Recommendations**

Recommendation	Status	Comments
<b>Study Area 8 – 2021 New Recommendations</b>		
A hydrometric station should be established at the Goddard Creek Sedimentation Pond and the water level in the pond should be monitored to better understand the redox conditions at EV_MW_GC1B.	Ongoing	Staff gauge (EV_GC2) was installed in 2021. Water level monitoring, redox monitoring and review of data should continue to be undertaken at this location.
<b>Study Area 8 – 2021 Existing Recommendations</b>		
No recommendations	Not applicable	Not applicable
<b>Study Area 9a/b – 2021 New Recommendations</b>		
Survey wellhead elevations at EV_WH50 and EV_HW1 so that pressure transducer groundwater level data can be correlated to groundwater elevations.	Complete	Completed by Align Surveys in mid 2022.
<b>Study Area 9a/b – 2021 Existing Recommendations</b>		
Install multilevel well nest adjacent to EV_RCSgw and EV_BRgw. Install dataloggers at these new locations. Dataloggers cannot be installed at EV_RCSgw and EV_BRgw as the downhole pumps cannot be removed to facilitate installation. Also, these two wells do not have a borehole log, construction details are unknown and there is uncertainty as to the source of dissolved copper from these wells. Nested monitoring wells will aid in the understand the surface water/groundwater relationship and any potential effects of pumping of these wells.	Complete	The following wells were installed in 2022: <ul style="list-style-type: none"> <li>• Adjacent to EV_RCSgw: <ul style="list-style-type: none"> <li>- EV_MW22_RCSgw1A/B/C</li> </ul> </li> <li>• Adjacent to EV_BRgw: <ul style="list-style-type: none"> <li>- EV_MW22_BCgw1A/B</li> </ul> </li> </ul>
<b>Study Area 10 – 2021 New Recommendations</b>		
Consider re-establishing surface water monitoring station EV_MC3A to evaluate surface water quality in Michel Creek immediately downgradient of Erickson Creek, and consider establishing a new station in Michel Creek downgradient of Milligan Creek. These additional locations will help in the understanding of OC inputs to Michel Creek.	Ongoing	Monitoring station is active, but no recent sample data is available.
<b>Study Area 11 – 2021 New Recommendations</b>		
No new recommendations	Not Applicable	Not Applicable
<b>Study Area 11 – 2021 Existing Recommendations</b>		
Complete a flow and load accretion study on Michel Creek, lower Corbin Creek, and lower Andy Good Creek to help assess the adequacy of the existing groundwater monitoring network. Then assess if additional groundwater monitoring well(s) are required and/or if existing monitoring wells should be replaced/abandoned.	Complete	A flow accretion study was completed in 2022 Q4 and is bring reported on in Q1 2023.
<b>Study Area 12 – 2021 New Recommendations</b>		
Install pressure transducer at RG_MW_03-04.	Complete	Transducer installed in April 2022.



## 3 References

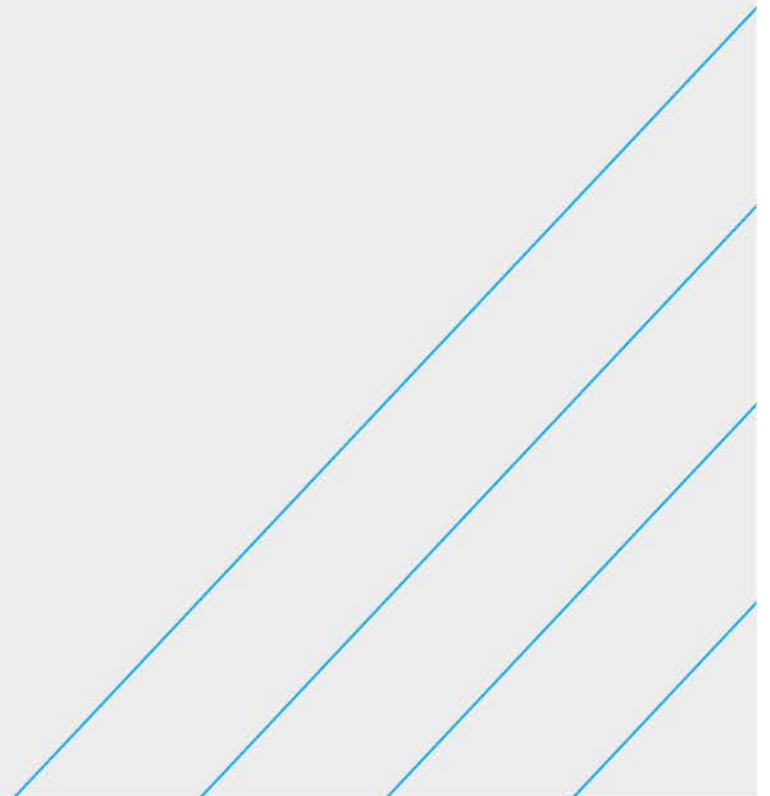
SNC-Lavalin. 2020. 2020 Regional Groundwater Program Update. Report prepared for Teck Coal Limited. Dated December 4, 2020.

SNC-Lavalin. 2021. 2021 Site-specific Groundwater Monitoring Program Update. Report prepared for Teck Coal Limited. Dated October 31, 2021.

SNC-Lavalin, 2022. 2021 Annual Report: Elk Valley Regional and Site-Specific Groundwater Monitoring Programs. Report prepared for Teck Coal Limited. Dated March 29, 2022.

# Attachment I

2020 RGMP Approval





March 20, 2023

Authorization Number: 107517

VIA EMAIL: [Cam.Jaeger@teck.com](mailto:Cam.Jaeger@teck.com); [Nathaniel.Barnes@teck.com](mailto:Nathaniel.Barnes@teck.com)

Teck Coal Limited  
3300-550 Burrard St  
Vancouver, BC V6C 0B3

Dear Teck Coal Limited:

**Re: Approval of 2020 Update to Regional Groundwater Monitoring Program as per Section 8.2.1 of *Environmental Management Act* Permit 107517**

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This approval replaces my earlier letter on this subject dated February 3, 2023, and includes a minor correction to the numbering in requirement 2(d).

The 2020 update of the Elk Valley Regional Groundwater Monitoring Program (2020 RGMP) dated December 2020 has been received and reviewed by Ministry of Environment and Climate Change Strategy (ENV) staff, along with the 2021 RGMP Annual Report dated March 2022. Review indicates that the 2020 RGMP meets the conditions of Permit 107517, although ENV expects advancements (detailed below) to be included in the next update.

Pursuant to Section 8.2.1 of Permit PE107517, I hereby approve the 2020 RGMP with the following conditions established as new requirements to be met by Teck:

1. Teck Coal Limited (Teck) must continue to host and facilitate the Groundwater Working Group (GWG). Membership in the GWG must be extended to ENV, Ktunaxa Nation Council (KNC), the Interior Health Authority (IHA), and the Ministry of Energy, Mines and Low Carbon Innovation (EMLI). GWG meetings must be held a minimum of four times annually, one of which should be in-person. Timing of any in-person meeting may be at Teck's discretion. A site tour should be included in the agenda of the in-person meeting and invitation to the site tour extended to all GWG members.
2. Teck must submit the next version of the RGMP (2023 RGMP) to the director for approval by September 30, 2023. In the 2023 RGMP:
  - a. Teck must complete and report on all activities recommended in the 2020-2023 Work Plan as described in the 2020 RGMP.
  - b. Teck must update all components of the 2020 RGMP (including Table D summarizing all hydrogeological studies). The update must clearly identify



ongoing and planned studies, and describe how they are informing the RGMP update. New information from all ongoing studies in Table D must be incorporated into the regional Conceptual Site Model.

- c. Teck must provide an updated assessment of:
    - i. Background groundwater quality, with reference to B.C. CSR Protocol 9.
    - ii. The fate and transport of mine-influenced groundwater near Elkford.
    - iii. The potential for mine contact water to be transported through regional bedrock aquifers and structural features such as weathered bedrock, faults, fractures and karst to the receiving environment.
    - iv. The potential for mine-influenced water to be transported to Baynes Lake and Kikomun Creek.
  - d. Teck must provide a 2023-2026 Work Plan to fill gaps in hydrogeological understanding identified in the 2023 RGMP, including those noted in section 2(c) of this 2020 RGMP approval letter.
3. Teck must submit to the director a 3D visualization in digital format, of borehole lithology and screened interval data from all relevant boreholes and monitoring wells drilled by or on behalf of Teck.
- a. By December 31, 2023 the visualization must include information from MU1, MU2 and MU3, and by October 31, 2024 it must be augmented with information from MU4 and relevant portions for MU5.
  - b. Boreholes and monitoring wells included in the RGMP (and Site-Specific Groundwater Monitoring Programs) must be highlighted and base maps (containing waterbodies, watercourses, and permitted mine areas), best available topographic data (LiDAR or other), and satellite imagery, must be included.
  - c. An updated version of the 3D visualization must be submitted each year starting in 2025 along with the Annual Groundwater Monitoring Report as required in Section 9.4.1 of Permit 107517.

A copy of this approval letter is being placed on the permit file, as an addendum to the permit, to reflect the director's approval of the 2020 RGMP. All other terms and conditions detailed in the *Environmental Management Act* Permit 107517 remain in effect.

This authorization 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 permittee. This permit is issued pursuant to the provisions of the *Environmental Management Act* to ensure compliance with Section 120(3) of that statute, which makes it an offence to discharge waste, from a prescribed industry or activity, without proper authorization. It is also the responsibility of the permittee 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 permit will be carried out by staff from the Environmental Protection Division's Regional Operations Branch. Plans, data and reports pertinent to the permit are to be submitted by email or electronic transfer to the director, designated officer, or as further instructed.

Should you have any questions concerning this authorization letter, please contact Kyle Terry at [Kyle.Terry@gov.bc.ca](mailto:Kyle.Terry@gov.bc.ca).

Yours truly,



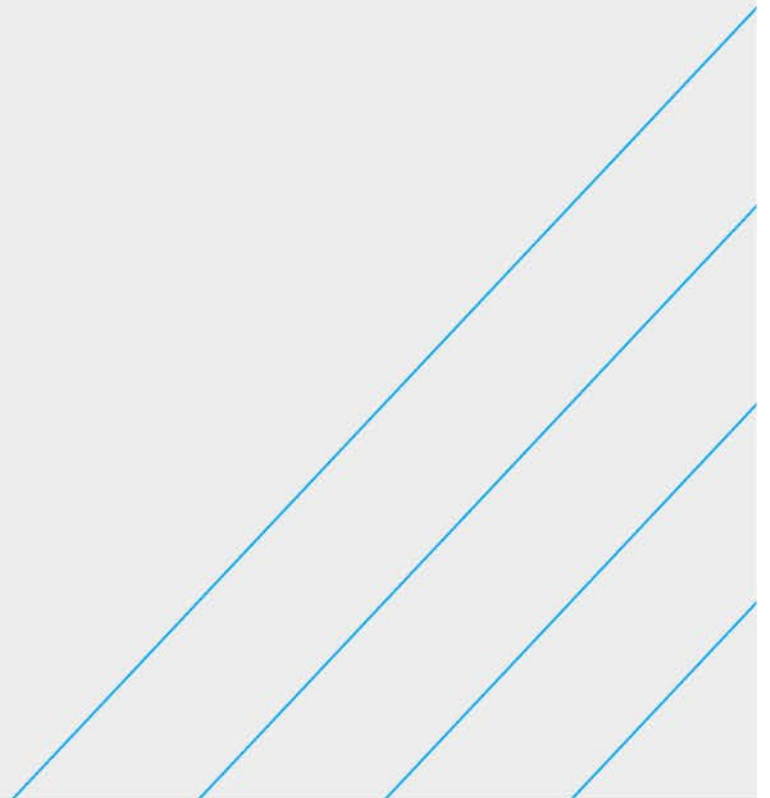
A.J. Downie, M.Sc., P.Ag.  
for Director, *Environmental Management Act*  
SE Coal Mining

cc: [Lucy.Eykamp@teck.com](mailto:Lucy.Eykamp@teck.com)  
[Referrals@ktunaxa.org](mailto:Referrals@ktunaxa.org)  
[PERMRECL@gov.bc.ca](mailto:PERMRECL@gov.bc.ca)

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[H2ORegulatorySubmissions@teck.com](mailto:H2ORegulatorySubmissions@teck.com)

# Attachment II

2018 Site-Specific GWMP Approval Letter





File: PE107517

March 11, 2020

Mariah Arnold  
Sr. Lead Environmental Sciences  
Cam Jaeger  
Coordinator Environment

Teck Coal Limited  
124B Aspen Drive  
Sparwood, BC V0B 2G0

Dear Mariah and Cam:

**RE: Elk Valley Site-Specific Groundwater Monitoring Programs (SSGMP) - 2018 Update**

The 2018 update of the Site-Specific Groundwater Monitoring Plans (2018 SSGMPs) for Teck's operations in the Elk Valley (Fording River, FRO; Greenhills, GHO; Line Creek, LCO; Elkview, EVO; Coal Mountain, CMO) dated October 31, 2018 were received and reviewed by staff of the Ministry of Environment and Climate Change Strategy (ENV). Ministry Assessments for the 2018 SSGMPs were submitted by ENV to Teck in April 2019, which indicated that four of the five plans (FRO, GHO, LCO and EVO) did not meet the requirements described in Permit 107517. ENV requested a revised version of these plans to be submitted by September 30, 2019. ENV has received and completed the review of the revised submissions.

Pursuant to Section 9.2.2 of Permit PE107517, the 2018 update of the Elk Valley Site-Specific Groundwater Monitoring Plans (2018 SSGMP) for the following operations: Fording River Operations (FRO); Greenhills Operations (GHO); Line Creek Operations (LCO); Elkview Operations (EVO) and Coal Mountain Operations (CMO), are accepted with the following conditions:

1. Updated Site-Specific Groundwater Monitoring Plans for FRO, GHO, LCO, EVO and CMO will be submitted to the Director for approval **by October 31, 2021**.
2. The 2021 SSGMP updates will include the following:

- a. Expand the site-specific monitoring well network as follows:
  - i. FRO - Swift Creek valley bottom. Add a well to the FRO network, to investigate the presence of a potential mine-affected groundwater transport pathway in overburden and/or shallow weathered bedrock in the area downgradient of the Swift Creek sediment management system towards the Fording River valley bottom aquifer.
  - ii. GHO – Porter Creek valley bottom. Replace GH\_MW-PC with a well pair installed in unconsolidated sediments and bedrock, to monitor a potential mine-affected groundwater transport pathway and investigate the surface water – groundwater interaction upgradient of the confluence with Fording River.
  - iii. LCO – Dry Creek. Add to the LCO well network the new well that is planned to be installed in Study Area #2 and added to the RGMP network, as per the Work Plan included in the ENV Acceptance Letter for the 2017 RGMP Update.
  - iv. LCO – Confluence of West Line Creek and Line Creek. Add to the LCO well network well AWTF-MW-15-02B and AWTF-Seep, if suitable, and/or a new well pair installed in the area downstream of the confluence of West Line Creek with Line Creek, where the surficial geology mapping indicates the presence of fluvial deposits. The objective of monitoring this well(s) and seep is to investigate the presence of a potential mine-affected groundwater transport pathway by-passing the AWTF intake location.
  - v. LCO – Background. Install a well pair (overburden / bedrock) upstream of the LCO mine-affected areas in the area within the Tornado Creek watershed where surficial geology mapping indicates the presence of fluvial deposits. Use this well to characterize background conditions for LCO. If no unconsolidated deposits are found in the area indicated by mapping, install a well in weathered bedrock to characterize background bedrock conditions in LCO.
  - vi. EVO – Grave Creek. Install a well in unconsolidated sediments in the Grave Creek valley fill aquifer, at a shallower depth than EV\_GV3gw, to investigate a potential shallow groundwater pathway and the interaction between surface and shallow groundwater.
- b. Update the Conceptual Site Model for each operation, based on the integration of the updated groundwater monitoring data set and relevant information obtained from other groundwater studies supporting site-specific permit applications or regional programs (e.g. Kilmarnock alluvial fan groundwater study conducted in support of the FRO-S Active Wastewater Treatment Plant, groundwater investigations in the Clode Creek watershed, updated modelling and flow accretion survey in Dry Creek as part of the LCO Dry Creek Structured Decision Making process (SDM)).
- c. Update maps for the same themes and in the same format as those included in the revised 2018 SSGMPs. Update the maps for LCO and CMO using the same format and notation of the maps included in FRO, GHO and EVO.

- d. Update hydrogeological cross-sections to reflect the information acquired from new wells (and updated locations in plan view, where cross-sections have been extended to include new wells). Additional cross-sections will be developed for all wells, in directions parallel and perpendicular to the main direction of flow. The cross-sections should show all the wells (including wells drilled for purposes other than monitoring, e.g. geotechnical wells) used to define them, with the following details: well screens location, average groundwater elevation and elevation of nearby surface water bodies. The stratigraphic logs of all the wells used to define the cross-sections will also be provided.
- e. Update the structure of the documents describing the plans for LCO and CMO to be consistent with those prepared for FRO, GHO and EVO.
- f. Update the characterization of the effect of dewatering of the pits that intercept groundwater on the groundwater head, flow pattern and on interaction of groundwater with surface water.

If you have any questions, please contact Sarah Alloisio, Hydrogeologist, at Sarah.Alloisio@gov.bc.ca or at 236-468-2286.

Yours truly,

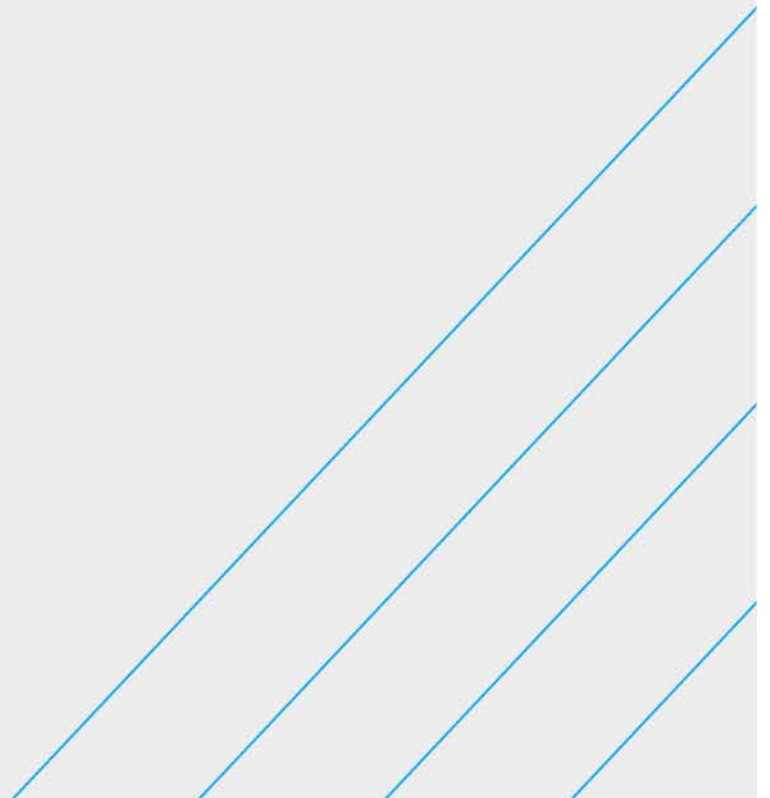


Liz Freyman  
for Director, *Environmental Management Act*  
Mining Operations

Cc: Jeanien Carmody-Fallows, Section Head, Mining Authorizations, ENV  
Heather McMahon, Ktunaxa Nation Council

# Attachment III

2017 RGMP ENV Approval





File: PE107517

July 9, 2020

Mariah Arnold  
Sr. Lead Environmental Sciences  
Cam Jaeger  
Coordinator Environment  
Nathaniel Barnes  
Lead Water

Teck Coal Limited  
124B Aspen Drive  
Sparwood, BC V0B 2G0

**RE: Elk Valley Regional Groundwater Monitoring Program (RGMP) - 2017 Update**

**[Rev. 1 – Amendment of Condition 2.6.** This document is an update of the Approval Letter issued on February 19, 2020, whereby Condition 2.6 is modified as follows:

From:

“An update on how the RGMP addresses the changes introduced in the 2018 Adaptive Management Plan (AMP), with reference to Question 4 (effects of groundwater discharge to streams on calcite development) and Question 6 (groundwater triggers).”

To:

“An update on how the RGMP addresses the changes introduced in the 2018 Adaptive Management Plan (AMP).”]

The 2017 update of the Elk Valley Regional Groundwater Monitoring Program (2017 RGMP) dated September 2017 has been received and reviewed by ministry staff, along with the 2017 and 2018 Regional Groundwater Monitoring Program Annual Reports dated March 2018 and March 2019.

Pursuant to Section 9.2.1 of Permit PE107517, I hereby accept the 2017 update of the Elk Valley Regional Groundwater Monitoring Program (2017 RGMP), subject to the following conditions:

1. The Groundwater Work Plan will be carried out as written. The Groundwater Work Plan and the accompanying Table of Proposed Drilling Locations (Proposed Drilling Locations), which were discussed during the Groundwater Working Group (GWG) meeting of November 26-27, 2019 and submitted to ENV on January 7, 2020, are included as appendices to this Letter. Specifically, the monitoring wells proposed as part of the ongoing Mass Balance Investigation studies in support of the Regional Water Quality Model will be installed as soon as possible, subject to access and permitting constraints, and added to the Regional Groundwater Monitoring Network. Updates on the implementation of the Work Plan will be provided to the GWG during the Group’s meetings and



conference calls. All proposed changes to the Work Plan and Proposed Drilling Locations will need to be justified and will require review by the GWG and approval prior to being implemented.

2. An update of the RGMP must be submitted to the Director for approval **by September 30, 2020** and will meet in full, all the requirements detailed in point *i* to *vii* Of Section 9.2.1 of Permit PE107517.

Specifically, the 2020 RGMP update will contain the following:

- 2.1 Based on the data acquired from the monitoring between 2017 and December 31, 2019, a “updated description of relevant aquifer characteristics (e.g. hydraulic conductivity, storage properties, transmissivity, etc.), and a description of regional groundwater flow patterns (directions and velocities) and recharge areas, fate, groundwater interactions with surface waters, the effects of groundwater withdrawals on the SW/GW interactions, and the mobility of mine related constituents of interest.” (point *vi* of Section 9.2.1).
- 2.2 An updated Conceptual Site Model (CSM), and on a closer integration with the Site-Specific groundwater programs, the Mass Balance Investigation and the Sparwood Area Groundwater Study.
- 2.3 A list of all the hydrogeological studies conducted between 2017 and 2019, in support of other programs included in the Elk Valley Area-Based Management Plan (e.g. Regional Aquatic Effects Assessment, Regional Water Quality Model) or permit applications (e.g. Fording River South water treatment plant intake, Elkview and Fording River North Saturated Rock Fill), with an overview of each study and indication of whether and what information resulting from these studies is relevant to inform the CSM.
- 2.4 In addition to the maps included in the 2017 update, include the following maps:
  - i. Updated maps of the location of the existing groundwater monitoring wells included in the RGMP and proposed new RGMP wells (if applicable). The location of surface water monitoring stations should also be added as a reference.
  - ii. Updated maps allowing the visualization of the main aspects of the Conceptual Site Model (e.g. surface and groundwater pathways, indicative gaining and losing stream reaches, receptors associated with monitoring wells).
  - iii. Maps showing all the locations of the hydrogeological studies referred to in point 2.3 (two maps showing the study locations located in the northern and southern portion of the Elk Valley, respectively).
- 2.5 Updated hydrogeological cross-sections to reflect the information acquired from new wells (and updated locations in plan view, where cross-sections have been extended to include new wells). Additional cross-sections will be developed for all the wells included in the updated regional groundwater monitoring network, in directions parallel and perpendicular to the main direction of flow. The cross-sections should show all the wells (including wells drilled for purposes other than monitoring, e.g. geotechnical wells) used to define them, with the following details:

topographic profile, bedrock contact elevation (where this is available or can be inferred), well screens location, average groundwater elevation and elevation of nearby surface water bodies. The stratigraphic logs of all the wells used to define the cross-sections will also be provided.

2.6 An update on how the RGMP addresses the changes introduced in the 2018 Adaptive Management Plan (AMP).

3. Provide a proposed Work Plan for 2020-2023 with proposed well drilling locations to fill in any remaining gaps identified during the update, with a tentative schedule for its implementation, as per condition *iv* of PE107517, Section 9.2.1 “Identify limitations and data gaps and conduct additional studies necessary to refine the hydrogeological conceptual model, determine the location and extent of mine-affected groundwater discharge to surface waters and to evaluate management and mitigation options.”

Further, the Director expects the following:

- The GWG established in October 2016 will continue to provide guidance for groundwater programs. The GWG will consist of members from Teck Coal Limited (Teck), the Ktunaxa Nation Council (KNC), Ministry of Environment (ENV), Interior Health Authority (IHA) and may expand to include participants from Ministry of Energy and Mines (MEM), Ministry of Forest, Lands and Natural Resource Operations and Rural Development (FLNRORD).
- A minimum of two (2) in-person meetings and two (2) conference calls of the GWG will be held in 2020. The GWG will meet approximately every three months, to maintain continuity in the communication and activities related to the groundwater programs. This will ensure that these programs achieve the objectives of the Elk Valley Area-Based Management Plan (ABMP) to protect groundwater, human health and aquatic ecosystems.

If you have any questions, please contact Sarah Alloisio, Hydrogeologist, at Sarah.Alloisio@gov.bc.ca or at 236-468-2286.

Yours truly,



Liz Freyman, Head, Environmental Impact Assessment Section - Mining  
for Director, *Environmental Management Act*  
Mining Operations

cc: Heather McMahon, Ktunaxa Nation Council ([HM McMahon@ktunaxa.org](mailto:HM McMahon@ktunaxa.org))

# Regional Groundwater Monitoring Program: Work Plan 2020

Relevant Study Area	ENV Condition	Teck Response
<b>Background/Northeast of Study Area 1</b>	Add a newly drilled well pair in the Henretta Creek valley bottom upstream of FR_HMW5, to replace FR_HMW5 as background well	Teck proposes to install a monitoring well nest in this Study Area in 2020. The timeline and final location for the wells are contingent on regulatory approval landowner permission, and weather but is anticipated to be complete by Q3 2020. Teck has begun ongoing engagement with EMPR and other regulatory bodies to better understand regulatory requirements and pre-disturbance obligations for this location.
<b>Background/North of Study Area 1</b>	Add a newly drilled well pair (shallow and deep) in Upper Fording River, north of Henretta Creek and spoil.	Teck proposes to install a monitoring well nest in this Study Area in 2020. This timeline and final location for the wells are contingent on regulatory approval landowner permission and weather but is anticipated to be completed by Q3 2020. Teck has begun ongoing engagement with EMPR and other regulatory bodies to better understand regulatory requirements and pre-disturbance obligations for this location.
<b>Background/South of Study Area 4</b>	Select an additional well pair among the existing CPX2 baseline wells (GH_MW-Wolf-1S/D, GH_MW-Willow-1S/D and GH_MW-Willow-2S/D) or add a newly drilled well pair (shallow and deep) north of surface water sampling station GH_ER2 if the existing wells are not suitable for monitoring.	Geochemical analysis of water in the Wolf and Willow wells indicate that they are not representative of background Elk River valley aquifer conditions but may be suitable for use as background wells for their respective tributaries. The British Columbia MoE Water and Air Baseline Monitoring Guidance Document for Mine Proponents and Operators (2016) indicates that a minimum of 1 year of quarterly data collection is required for adequate baseline groundwater chemistry characterization. Insufficient data has been collected to make this determination and as such the Wolf and Willow Creek wells will continue to be monitored until such time that their suitability for baseline characterization can be established. In 2020, a number of wells are scheduled to be drilled on the west side of GHO under the scope of the MBI. Results from this program will be evaluated to determine whether one or more of these wells are representative of background Elk River valley bottom groundwater chemistry.
<ul style="list-style-type: none"> <li>• <b>Background/North of Study Area 4</b></li> <li>• <b>Background/West portion of Study Area 8</b></li> <li>• <b>Background/South of Study Area 10</b></li> <li>• <b>Background/North of Study Area 11</b></li> </ul>	Add a newly drilled well pair (shallow and deep) in the Boivin Creek alluvial fan north of Elkford.	A draft framework for identifying and prioritizing additional areas for investigation under the RGMP was included in the Terms of Reference to meet Condition 2 of the April 18, 2017 approval letter from ENV. This framework ranked Study Areas based on purpose statements and stated objectives of the groundwater monitoring programs as well as timeline requirements. The 2017 RGMP update used this ranking to develop a schedule for additional studies in the prioritized study areas. This gap was not identified as a priority for the 2017-2020 cycle. As such data collected during the current program cycle will be reviewed as part of the 2020 Update and if this gap remains it will be ranked and prioritized for the 2020-2023 program.
<b>Background/East of Study Area 7</b>	Add a newly drilled well pair (shallow and deep) in Grave Creek valley bottom sediments upstream of the confluence with Harmer Creek.	A draft framework for identifying and prioritizing areas of investigation under the RGMP was included in the Terms of Reference to meet Condition 2 of the April 18, 2017 approval letter from ENV. This framework ranked Study Areas based on purpose statements and stated objectives of the groundwater monitoring programs as well as timeline requirements. The 2017 RGMP update used this ranking to develop a schedule for additional studies in the prioritized study areas. This gap was not identified as a priority for the 2017-2020 cycle. A number of investigations are planned for 2020, including flow and load accretion studies over Grave Creek Alluvial fan. All data collected will be reviewed and will determine the placement and ranking of monitoring wells for the 2020-2023 program. There is one location scheduled to be drilled in Study Area 7 by Q3 2020 to support the development and implementation of groundwater triggers but the timeline and final location for the wells are contingent on regulatory approval, landowner permission, and weather.
<b>Background/South of Study Area 11</b>	Evaluate the adequacy of wells CM_MW3-SH and CM_MW3-DP as background wells for CMO. If the data indicate that groundwater quality in these wells is likely mine-influenced, drill a new well pair (shallow and deep) upgradient from the mining operations at a location that is deemed to be representative of background conditions.	Available data for CM_MW3-SH and CM_MW3-DP will be reviewed in 2020 in order to evaluate the suitability of these wells to serve as background monitoring locations. The findings of these evaluations will inform the need for additional background wells upgradient of CMO. If additional well(s) are required, installation of the well(s) will be ranked under the prioritization framework for the 2020-2023 program during the 2020 Update.
<b>Study Area 1</b>	Upper Fording River valley bottom. Select additional well(s) among the recently drilled five wells (FR_MW_FRRD1, FR_MW_CASW6-A/B and FR_MW_CH1-A/B), or install a newly drilled well pair (shallow and deep) if none of the five wells is suitable for monitoring.	Available groundwater chemistry data for FR_MW_FRRD1, FR_MW_CASW6-A/B and FR_MW_CH1-A/B were evaluated in October 2019. Analysis suggests that these wells do not intersect a potential down-valley plume of mine related constituents. The same data gap was identified under the scope of the MBI program. A number of investigations including geophysics and flow accretion studies were completed in Q4 2019 and new groundwater monitoring wells are scheduled to be completed by the end of Q3 2020. The timeline and final location for the wells are contingent on regulatory approval, landowner permission, and weather. The data collected within the scope of the MBI will be reviewed prior to the 2020 Update and if additional wells are required they will be ranked under the prioritization framework for the 2020-2023 program.
<b>Study Area 2</b>	Dry Creek – Fording River confluence. Add a newly drilled well pair (shallow and deep) in the Dry Creek alluvial fan.	This Study Area was ranked low in relative priority in 2017(12 out of 13). The same data gap was identified under the scope of the MBI program. A number of investigations including geophysics and the addition of new groundwater monitoring wells were completed under that program in Q4 2019. The data collected MBI program will be reviewed prior to the 2020 Update and if additional wells are required they will be ranked under the 2020 Update prioritization framework for the 2020-2023 program.
<b>Study Area 3</b>	Fording River valley bottom upstream of Josephine Falls. Add a newly drilled well pair (shallow and deep) in the glaciofluvial sediments to the west of where Fording River turns to the south, upgradient of Josephine Falls.	The same data gap was identified under the scope of the MBI program. A number of investigations including geophysics, flow and load accretion studies were completed in Study Area 3 in 2019. This data will inform the number and location of new groundwater monitoring wells scheduled to be drilled under that program in 2020. The data collected within the scope of the MBI program will be reviewed prior to the 2020 RGMP Update and if additional wells are required they will be ranked under the 2020 Update prioritization framework for the 2020-2023 program.
<b>Study Area 4</b>	Upgradient of GH_GA-MW-4. Remove well GH_GA-MW-1 from the regional network and replace it either with recently drilled wells GH_MW-MC-1S/D and GH_MW-MC-2S/D or with a newly drilled well pair (shallow and deep) upgradient of GH_GA-MW-4, if the existing wells are not suitable for monitoring.	<p>A desktop review of available water chemistry data completed in October 2019 suggests that while GH_MW-MC-1S/D and GH_MW-MC-2S/D may be suitable for use as background piezometers in their respective drainages, they are not representative of groundwater chemistry in the Elk River valley-bottom. The same data gap was identified under the scope of the MBI program. A number of investigations including geophysics, bedrock reconnaissance, and flow and load accretion studies were completed in November 2019. This data will inform the number and location of new groundwater monitoring wells completed under the MBI program in 2020. The data collected will be reviewed prior to the 2020 Update and if additional wells are required they will be ranked under prioritization framework for the 2020-2023 RGMP program.</p> <p>Teck will also drill a new well in this Study Area in 2020 to support groundwater trigger development. The timeline and final location for the wells are contingent on regulatory approval, landowner permission, and weather.</p>

# Regional Groundwater Monitoring Program: Work Plan 2020

Relevant Study Area (Cont.)	ENV Condition (Cont.)	Teck Response (Cont.)
<b>Study Area 5</b>	Line Creek valley bottom downgradient of LC_LC4. Add a newly drilled well pair at the eastern portion of Study Area 5 downgradient of surface water monitoring station LC_LC4, in the area mapped as glaciofluvial sediments on the edge of the Fording River floodplain.	The same data gap was identified under the scope of the MBI program. A number of investigations including geophysics and flow and load accretion studies were completed in November 2019. The data collected will inform the number and location of new groundwater monitoring wells drilled under the MBI in 2020. MBI program results will be reviewed prior to the 2020 Update and if additional wells are required they will be ranked under the prioritization framework for the 2020-2023 program.
<b>Study Area 6</b>	Downgradient of Process Pond and CCR Pile. Add a newly drilled well pair downgradient of the CCR pile and adjacent to Order Station EV_ER4.	Teck proposes to install a nested monitoring well in this Study Area in 2020 to address this gap. This timeline and final location for the wells are contingent on regulatory approval, landowner permission and weather.
<b>Study Area 7</b>	Grave Creek alluvial fan at confluence with Elk River. Add a newly drilled well pair (shallow and deep) in the Grave Creek alluvial fan close to the confluence with Elk River.	Teck will complete two rounds of flow and load accretion studies over Grave Creek alluvial fan in 2020. Data collected will inform the location of an additional well for the 2020 update. Teck will also drill a new well in this Study Area in 2020 to support groundwater trigger development but the timeline and final location for the wells are contingent on regulatory approval, landowner permission, and weather.
<b>Study Area 8</b>	Valley bottom aquifers near Goddard Creek Sedimentation Pond. Add wells EV_TW1 and EV_TW2 to monitor the deep and shallow valley bottom aquifer in the area of Goddard Creek Sedimentation Pond or drill a new well pair (shallow and deep) near the Pond, if these wells are not suitable for monitoring.	EV_TW1 and EV_TW were assessed in November 2019 and found to be unsuitable for monitoring. Teck proposes to install a nested replacement monitoring well to fill this gap by Q3 2020. This timeline and final location for the well(s) are contingent on regulatory acceptance, landowner permission, and the weather.
<b>Study Area 9</b>	Michel Creek valley bottom aquifer. Conduct K-testing of well EV_MCgwS/D and replace it with a newly drilled well pair (shallow and deep) if the K-testing results indicate that EV_MCgwS/D is not suitable for monitoring. Replace EV_RCgw this well with one of the recently installed well pairs as part of the Sparwood Area Study, if suitable for monitoring, or add a newly drilled well pair (shallow and deep).	Conductivity (K) testing was completed in November 2019 on groundwater monitoring well EV_MCgwS/D. Evaluation of this data (scheduled for Q1 2020) will inform whether a new well will be drilled before the 2020 RGMP update. If a well is required, the timeline and final location for the well(s) are contingent on regulatory approval, landowner permission, and weather.  In addition, 15 new groundwater wells were installed in Study Area 9 in Q1 2019 as a part of the Sparwood Area and Study Area Study. Teck will collect and evaluate a year of baseline data in the new well network. This will inform the prioritization process for new monitoring wells in this Study Area under the scope of the 2020 RGMP update.
<b>Study Area 10</b>	Michel Creek valley bottom downgradient of confluence with Erickson Creek. Add a newly drilled well pair (shallow and deep) between surface water monitoring stations EV_EC1 and EV_SP1, one well pair between EV_SP1 and EV_MG1 and one well pair downgradient of EV_MG1.	Teck collected flow and load accretion studies in Erickson Creek in Q3 2019. Evaluation of this data will inform the final location and number of wells in this Study Area. Teck proposes to install a nested monitoring well nest in this Study Area by Q3 2020. This timeline and final location for the well(s) are contingent on regulatory approval, landowner permission, and weather.
<b>Study Area 11</b>	Michel Creek valley bottom downgradient of CMO. Add a newly drilled well pair (shallow and deep) in the Michel Creek valley bottom aquifer downgradient of CM_MW1-OB/SH/DP.	Teck proposes to install a nested monitoring well in this Study Area by Q3 2020. This timeline and final location for the wells are contingent on regulatory approval, weather, and landowner permission.
<b>Study Area 12</b>	Michel Creek northern valley bottom aquifer. Add a newly drilled well pair (shallow and deep) in the valley bottom sediments north of Michel Creek in the Sparwood area.	Sparwood well #4 was drilled in Q4 2019 and full commissioning and tie in with the drinking water supply has not yet been completed. Drilling and pumping data as well as historic Well #1, #2, and #3 data will be evaluated in Q1 2020. This will inform the placement and prioritization of new wells in SA12 for the 2020 update as well as the value of adding Well # 4 to the RGMP. Teck will also drill a new well in this Study Area by Q3 2020 to support groundwater trigger development but the timeline and final location for the well(s) are contingent on regulatory approval, landowner permission, and weather.
<b>Drinking Water</b>	Add at least three monitoring well pairs (shallow and deep) in targeted areas where groundwater is used for drinking water supply, to support the development and implementation of Groundwater Triggers.	Teck proposes to install nested monitoring wells in Study Areas 4, 7, 12 by Q3 2020. Please refer to those sections for more details. This timeline and final locations for the wells are contingent on evaluation of available 2019 data as well as regulatory approval, landowner permission and weather.
<b>Regional</b>	3. An update of the RGMP will be submitted to the Director for approval by September 30, 2020, and will contain the following at a minimum: <ul style="list-style-type: none"> <li>a. An updated Conceptual Site Model, based on the data acquired from the monitoring wells added in 2019 and 2020 and a closer integration with the Site-Specific Groundwater Monitoring Programs.</li> <li>b. Updated versions of the 3D block diagrams based on the most recent data.</li> <li>c. Maps allowing the visualization of the main aspects of the conceptual site model (e.g. surface and groundwater pathways, gaining and losing stream reaches at macro-scale and inferred seasonality, receptors associated with monitoring wells).</li> <li>d. A map showing all the areas where studies with a groundwater component have been carried out or are ongoing (e.g. groundwater investigations in support of the design of the intake for water treatment plants).</li> <li>e. Proposed areas requiring additional data collection and/or studies. This should include a list of proposed modifications of the existing Study Areas, if any are warranted; a system for prioritizing the implementation of groundwater studies for the areas where gaps are identified; a tentative schedule for the additional studies.</li> <li>f. Groundwater triggers that integrate with the Elk Valley Adaptive Management Plan, based on the framework discussed within the Groundwater Working Group.</li> <li>g. A framework for the development of a Groundwater Trigger Response Plan.</li> </ul>	Teck commits to submission of the RGMP Update to the Director by October 31st, 2020. However, the Adaptive Management Plan (AMP) 2018 Approval Letter from Doug Hill (ENV) dated May 23, 2019 indicated that groundwater triggers should be finalized, through engagement with EMC, prior to the December 15, 2021 AMP update. Teck will continue to engage with the Groundwater Working Group and EMC to develop and finalize the groundwater triggers, which will be included in the December 15, 2021 AMP update and 2021 RGMP report. The framework for the groundwater triggers will be the Response Framework developed under the AMP.

Please Note: The timeline for the proposed investigations and drilling program presented in this table do not represent the finalized 2020 program schedule and are subject to change due to limitations in access, permit application and approvals, pre-disturbance work, results of additional evaluations and drilling activities outside the scope of this program, and other factors.

**Accompanying Table of Numbered Proposed Drilling Locations**

Possible Location ID <sup>1</sup>	Location <sup>2</sup>	Summary of Gap <sup>3</sup>	Proposed Studies <sup>4</sup>	Proposed Timing <sup>5</sup>
1	SA1/background	There is no background well upgradient of mine operations in the Fording River Valley	Drill a well location in the Upper Fording River Valley, north of Henretta Creek and influence from spoils.	2020
2	SA1/background	Concentrations of Cl in monitoring well FR_HMW5 are increasing and this well is no longer suitable as a background well.	Drill a well location in the Henretta Creek valley bottom upstream of FR_HMW5 to replace FR_HMW5 as a background well.	2020
3	SA4/background	Background monitoring well network sufficiency.	Further evaluate background monitoring network through trigger development. If greater spatial coverage is required, drill a well location near surface water sampling station GH_ER2.	post 2020
4	SA4	Well GH_MW-ERSC-1 may not be a suitable downgradient sentry well for monitoring.	Monitoring well network, flow accretion and geophysical studies to be completed as part of the Mass Balance Investigation in late 2019/2020. Once complete, assess the need for and location of additional wells near the southern boundary of Study Area 4 and north of Elkford	post 2020
5	SA2	Groundwater quality in the Fording River valley bottom downgradient of the confluence with Dry Creek is not currently monitored.	As above, Mass Balance Investigation to perform studies in this area. If results suggest a gap remains, consider adding a well location in the Dry Creek alluvial fan	post 2020
6	SA4/background	Background monitoring well network sufficiency.	Further evaluate background monitoring network through trigger development. If greater spatial coverage is required, evaluate the need for a well location in the Boivin Creek alluvial fan north of Elkford.	post 2020
7	SA3	Possibility of deep groundwater flow to the west and surface water infiltration from the Fording River before Josephine Falls.	Flow and load accretion studies to be completed in Fording River to Josephine Falls as part of Mass Balance Investigation. Pending results, consider adding a well location in the glaciofluvial sediment upgradient of Josephine Falls	post 2020
10	SA6	There are limited data for the Elk River valley-bottom aquifer downgradient of LCO to monitor possible effects from the LCO process plant site and CCR pile.	Drill a nested well pair downgradient of CCR Pile and adjacent to Order Station EV_ER4.	2020
11	SA7	Grave Creek potentially loses to ground over an alluvial fan. There are currently no monitoring wells in the valley bottom in this area.	Flow and load accretion studies over the Grave Creek alluvial fan at confluence with Elk River will be completed in 2020, with the last study to be completed in fall 2020. Results will inform the need for and location of a well in the alluvial fan.	post 2020
12	SA8/Background	Background monitoring well network sufficiency	Further evaluate background monitoring network through trigger development. If greater spatial coverage is required, evaluate the need for a well location in Cummings Creek alluvial fan.	post 2020
13	SA9	Uncertain whether EV_MCgWS/D is suitable for monitoring based on the materials they are screened in. These wells do not intersect deep pathway, but newly-installed monitoring wells do.	Hydraulic conductivity testing to be completed in 2019 at EV_MCgWS/D. Collect a year of baseline data from the newly-installed monitoring well network and review data to assess deep flow pathway. Based on a review of these data, a well location may be drilled west of RG_DW-03-01.	2020
15	SA10	There are no groundwater monitoring data for the Michel Creek valley-bottom aquifer downgradient of Erickson Creek and the South Pit Decant Pond and local groundwater conditions are unknown.	Load and flow accretions studies have been completed on Erickson Creek. Drill a nested well pair after a review of the flow accretion studies from Erickson Creek.	2020
16	SA11/background	Background monitoring well network sufficiency.	Further evaluate background monitoring network through trigger development, including suitability of review of data from CH_MW3-SH and CM_MW3-DP as background monitoring wells. If greater spatial coverage is required, evaluate the need for adding a well location upstream of the confluence of Leach Creek with Michel Creek	post 2020
17	SA11	Only one monitoring well (CM-MW1-OB) is in gravel in the valley bottom in Michel Creek downgradient of CMO.	Drill a well location in the Michel Creek valley-bottom aquifer downgradient of CM_MW1-OB/SH/DP and RG_DW-07-01 (and downgradient boundary of SA11).	2020
18	SA10/background	Background monitoring well network sufficiency.	Further evaluate background monitoring network through trigger development. If greater spatial coverage is required, evaluate the possibility of adding a well location in Alexander Creek valley bottom sediment at the confluence with Lower Alexander Creek.	post 2020
21	SA7/background	Background monitoring well network sufficiency.	Further evaluate background monitoring network through trigger development. If greater spatial coverage is required, evaluate the need for a nested well pair in Grave Creek valley-bottom sediment upstream of the confluence with Harmer Creek.	post 2020
22	SA8	Groundwater quality is unknown in shallow and deep valley-bottom aquifers near Goddard Creek Sedimentation Pond.	Drill a well location near the Goddard Creek Sedimentation Pond by EV_GC2.	2020
-	SA4	Additional data required in targeted areas where groundwater is used for drinking water supply to support the development and implementation of groundwater triggers.	Monitoring well will be drilled where groundwater is used for drinking water supply to support the groundwater trigger development (location TBD).	2020
-	SA7	Additional data required in targeted areas where groundwater is used for drinking water supply to support the development and implementation of groundwater triggers.	Monitoring well will be drilled where groundwater is used for drinking water supply to support the groundwater trigger development (location TBD).	2020
-	SA12	Additional data required in targeted areas where groundwater is used for drinking water supply to support the development and implementation of groundwater triggers.	Monitoring well will be drilled where groundwater is used for drinking water supply to support the groundwater trigger development (location TBD).	2020

Notes: 1) Refers to the assigned possible well location number outlined on the wall map as 'Proposed RGMP Monitoring Well to drill in 2020' or 'Proposed RGMP Monitoring Well to drill post 2020'; 2) Refers to associated Study Area (SA) or closest Study Area and whether or not the possible well location is related to background monitoring well network; 3) Brief summary of gap as outlined in previous 2019 GWG meetings; 4) Proposed studies to fill the gap, as outlined in previous 2019 GWG meetings and ENV correspondence, as well as November 26/29 GWG meeting; 5) 2020 refers to work to be completed pre-2020 RGMP Update (shown in green highlight) and post 2020 refers to work to be completed afterwards.

# Appendix III

2022 Seep Monitoring Program (SRK, 2023)



FINAL

# Elk Valley Regional Seep Monitoring: 2022 Annual Report

CAPR002058, Elk Valley, BC, Canada

Teck Coal Limited

SRK Consulting (Canada) Inc. ■ CAPR002058 ■ February 2023



**FINAL**

## Elk Valley Regional Seep Monitoring: 2022 Annual Report

CAPR002058, Elk Valley, BC, Canada

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**File Name:**

CAPR002058\_RSMP2022Report\_FINAL\_20230223.docx

**Suggested Citation:**

SRK Consulting (Canada) Inc. 2023. Elk Valley Regional Seep Monitoring: 2022 Annual Report. FINAL.  
Prepared for Teck Coal Limited: Vancouver, BC. Project number: CAPR002058. Issued February. 2023.

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## Definitions

This list contains definitions of symbols, units, abbreviations, and terminology that may be unfamiliar to the reader.

FWAL BCWQG	British Columbia Water Quality Guideline for Freshwater Aquatic Life (approved and working)
CCR	Coarse coal reject
DL	Detection limit
DO	Dissolved oxygen (milligrams per litre, mg/L)
DOC	Dissolved organic carbon (milligrams per litre, mg/L)
EC	Electrical conductivity (micro siemens per centimeter, $\mu\text{S}/\text{cm}$ )
EMLI	Ministry of Energy, Mines, and Low Carbon Innovation
EMPR	BC Ministry of Energy and Petroleum Resources
High Flow	March 15 <sup>th</sup> to July 15 <sup>th</sup>
MF	Morrissey Formation
ORP	Oxidation reduction potential (millivolts, mV)
PAG	Potentially acid-generating
The Plan	Regional Seep Monitoring Plan – Phase 3
QA/QC	Quality assurance/quality control
RPD	Relative percent difference
RSMP	Regional Seep Monitoring Program
SI	Saturation indices
Teck	Teck Coal Limited
TDS	Total dissolved solids (milligrams per litre, mg/L)
TOC	Total organic carbon (milligrams per litre, mg/L)
TSS	Total suspended solids (milligrams per litre, mg/L)
WR	Waste rock

## Executive Summary

This report presents the 2022 results of the Elk Valley Regional Seep Monitoring Program (RSMP). The objectives of the RSMP are to improve understanding of source loading and aid in water management planning. Seep monitoring occurs across Teck Coal Limited's (Teck) five Elk Valley operations: Fording River Operations (FRO), Greenhills Operations (GHO), Line Creek Operations (LCO), Elkview Operations (EVO), and Coal Mountain Mine (CMm) (previously called Coal Mountain Operations [CMO] and currently in care and maintenance). Teck's RSMP began in 2018. Seeps were visited at least twice during 2022; during high flows (between March 15, 2022 and July 15, 2022) and low flows (between September 1, 2022 and December 31, 2022). In 2022, Teck Coal personnel sampled 86 seeps during high flow and 76 during low flow (Table 4).

A conformity review of the 2022 RSMP to commitments in previous reports and letters was conducted. A QA/QC review found that the data quality of the 2022 dataset is acceptable for annual reporting. Samples collected in 2022 were screened against the BC Water Quality Guidelines (BCWQG) for Freshwater Aquatic Life (FWAL).

A geochemical review was conducted to develop interpretations based on the five years of accumulated data. Mann-Kendall trend analysis was conducted. PHREEQC was used to evaluate solubility controls by interpreting saturation indices and calcite controls. Seeps were compared to nearby permitted surface water monitoring location using sulfate as a conservative tracer and suboxic indicator ratios.

Saturation indices (SI) for calcite are essential to evaluate the potential for calcite to form. Ferrihydrite can help understand disequilibrium with oxygen and the potential for sequestration of metals. Gypsum can potentially control sulfate concentrations. Apart from CMm, seeps at FRO, GHO, LCO, and EVO do not show apparent spatial trends in calcite saturation indices. At CMm, seeps to the east of the site have been categorized as undersaturated and seeps to the west as oversaturated. About half of all the RSMP seeps had a calcite SI above 0.6 and may exhibit a predisposition to precipitate calcite. No seeps had a gypsum SI above zero and therefore are not likely to be precipitating gypsum, and most seeps are in equilibrium or precipitating ferrihydrite.

During the initial seep prioritization by SRK in 2019, seeps were categorized based on Zn/Cd and sulfate concentration to estimate source conditions related to the Morrissey Formation (MF). Parts of the MF are known to be potentially acid-generating (PAG), and seeps showing possible MF influences may indicate areas where future changes in water quality might be expected. Seeps were also categorized based on Se/SO<sub>4</sub> and sulfate concentration to evaluate the influence of low-oxygen conditions on seeps originating from waste materials.

- One seep at FRO, FR\_FRVWSEEP3, has been classified as potentially possibly MF influenced. To date, FR\_FRVWSEEP3 is pH neutral. One seep at FRO, FR\_HENSSEEP1, has been classified as suboxic.
- At GHO, GH\_E1 in the GH\_CCR group has been categorized as possibly MF influenced. To date, GH\_E1 is pH neutral. Several GHO seeps downstream of the GHO CCR storage facility have been

classified as potentially suboxic or suboxic, indicating possible suboxic zones within the GHO CCR storage facility.

- No LCO seeps have been categorized as suboxic or possibly MF influenced.
- At EVO, EV\_SEEP\_ERICKSON1 and EV\_SEEP\_PLANT23 continue to be categorized as possibly MF influenced. To date, both seeps are pH neutral. All seeps at EVO except EV\_SEEP\_PLANT10, have been categorized as oxic.
- At CMm, CM\_PLANT-SEEP1 is categorized as possibly MF influenced and is pH neutral to date. Six seeps at CMm have been classified as potentially suboxic or suboxic.

Two seeps (FR\_SHNSEEP1 and FR\_FSEAMWSEEP4) have been formally retired from the RSMP after being covered over with waste rock. One new seep (CM\_WD9-SOURCE) was identified at CMm.

# 1 Introduction

## 1.1 Background

Teck Coal Limited carried out monitoring under the Regional Seep Monitoring Program (RSMP) within the Elk Valley (Figure 1) during high flows (March 15 to July 15, 2022) and low flows (September 1 to December 31, 2022). The purpose of the RSMP is to comply with a directive from the Ministry of Energy, Mines, and Low Carbon Innovation (EMLI). In addition, the RSMP can improve Teck's understanding of source loading, provide early warning of site water quality changes, assess potential effects to surface and groundwater, and track trends in water quality and quantity over time. The purpose of this report is to demonstrate Teck's compliance with monitoring commitments of the RSMP for 2022.

This report summarizes results collected under the RSMP in 2022 and provides an initial geochemical interpretation of all the data collected under the RSMP thus far. Sampling was conducted by Teck personnel, and annual reporting provided herein was prepared using information and data supplied by Teck.

The report has been structured as follows:

- Section 1**      **Introduction**
- Section 2**      **Conformity Review:** The implementation of the RSMP in 2022 was assessed for conformity with recommendations and commitments made in the SRK 2018 seep assessment (SRK 2019), 2019 annual RSMP report (SRK 2020), 2020 annual RSMP report (SRK 2021), EMPR's (now the Ministry of Energy, Mines and Low Carbon Innovation [EMLI]) review letter, and Teck's response to EMLI.
- Section 3**      **Review Methods:** Summary of methods applied to review the water chemistry of seeps.
- Section 4**      **Quality Assurance/Quality Control (QAQC):** Summary of QAQC of all seep samples collected in 2022.
- Section 5**      **Site-Specific Interpretation:** The water chemistry review compared seep water quality results against the BC Approved and Working Water Quality Guidelines (BCWQGs) and water chemistry criteria described in SRK (2019). In addition, site-specific seepage geochemical interpretations are provided.  
  
The tables below summarize each seep's main characteristics during high flow and low flow seasons that have been identified thus far.  
Table 7 – Fording River Operations (FRO),  
Table 11 – Greenhills Operations (GHO),  
Table 15 – Line Creek Operations (LCO),  
Table 19 – Elkview Operations (EVO),  
Table 23 – Coal Mountain Mine (CMm)
- Section 6**      **Regional Interpretation:** The geochemical review builds on interpretations from previous years and summarizes key geochemical controls that affect water chemistry both at the seeps monitoring within the RSMP and at downstream permitted surface water locations. This section will summarize controls and trends that apply in a regional context to the Elk Valley.
- Section 7**      **Seep Dataset Modifications:** New seeps review and seep retirement review.
- Section 8**      **Summary:** Summary of the results of the 2021 review.



## 1.2 Regulatory Context

Teck operates four steelmaking coal mines in the Elk Valley: Fording River Operations (FRO), Greenhills Operations (GHO), Line Creek Operations (LCO), and Elkview Operations (EVO), and Coal Mountain mine (CMm) (formerly Coal Mountain Operations [CMO]), which is currently in the care and maintenance stage of closure. These are referred to collectively herein as the Elk Valley Operations. Teck monitored select seeps at mine site facilities at these operations; however, based on an inspection in 2017, the Ministry of Energy, Mines, and Low Carbon Innovation (EMLI) ordered Teck to develop a Regional Seep Monitoring Plan for the Elk Valley Operations. In response, Teck (2018) proposed to implement the Plan in three phases:

- Phase 1: Identification of seep locations, development of sampling procedures, and collection of samples.
- Phase 2: Technical evaluation of seep water quality and quantity data collected during Phase 1. The assessment completed in Phase 2 aided in determining the sampling locations and frequency for seeps in Phase 3 (SRK 2019). Future monitoring would also consider the following:
  - Comparison of monitoring data to the BCWQGs freshwater aquatic life median to understand the potential risk to aquatic health
  - The classification of seeps and the potentially associated discharge point to the receiving environment (via ground infiltration, surface water sediment pond, directly to receiving environment, etc.)
  - Mining related constituent concentrations relative to discharge water in the case where the seep flows into existing mine infrastructure
  - Unexpected changes in water quality in seeps, associated discharges, or the receiving environment
- Phase 3: A longer-term Regional Seep Monitoring Program was developed and implemented, including reducing redundant seep sampling and sampling of seeps collected by existing site infrastructure (Teck 2019b). Phase 3 described any changes to the water quality analyses for seep monitoring and the locations and frequencies for ongoing seep monitoring.

Previous RSMP annual reports were submitted with that year's Annual Reclamation Report (ARR) for each operation. The 2022 Elk Valley Regional Seep Monitoring Program Report will be submitted with the 2022 ARR in March 2023. In addition, data from the Elk Valley Regional Seep Monitoring Reports may be discussed in other studies, such as the Regional Groundwater Monitoring Program (RGMP), the Site-Specific Groundwater Monitoring Program (SSGMPs), and the Mine Water Management Plans (MWMP) at each operation or in other monitoring program reporting, as appropriate.

## 2 Conformity Review

Table 1 summarizes commitments from previous reports or letters and reviews and whether the 2022 RSMP met these commitments. The Elk Valley Regional Seep Monitoring 2019 and 2021 Annual reports did not include any new recommendations in addition to those previously stated.

**Table 1: Commitment Review**

Category	Commitment	Source	Implementation Review	Additional Recommendations
Sampling Procedure	Samples will be collected (or attempted to be collected) for all seeps identified in the Plan two times per year, once during high flows (between March 15 and July 15) and once during low flows (Between September 1 and December 31).	Regional Seep Monitoring Plan – Phase 3 SRK (2019)	Commitment met.	-
	A standardized field form will collect field information to ensure appropriate and consistent information is collected across all operations.	Regional Seep Monitoring Plan – Phase 3 SRK (2019)	Commitment met.	-
	Blanks and duplicates will each account for 10% of the sampling.	Regional Seep Monitoring Plan – Phase 3 SRK (2019)	Commitment met.	Prepare QAQC samples before beginning sampling.
	Field parameters will be measured at the time of seep sampling.	Regional Seep Monitoring Plan – Phase 3 SRK (2019)	Commitment met.	-
	Field filtering and preservation of samples will occur at the collection point to determine element concentrations for dissolved metals analysis.	Regional Seep Monitoring Plan – Phase 3 SRK (2019)	Commitment met.	-
	Seep samples collected will be analyzed for water quality parameters outlined in Section 3.8 of the Plan.	Regional Seep Monitoring Plan – Phase 3	Commitment met.	-
	When possible and safe to do so, flow measurements will be taken at each location at the time of sample, following the Teck Coal Flow Monitoring Protocol.	Regional Seep Monitoring Plan – Phase 3	Commitment met.	-
	The direction of flow of the seeps will be noted in the field sheets to help map and track possible changes to seep water quality.	Regional Seep Monitoring Plan – Phase 3 SRK (2019) EMLI Review (April 2019)	Commitment met.	-
	Observations of calcite precipitate presence will be noted in the field sheets if observed at seep locations.	Regional Seep Monitoring Plan – Phase 3 EMLI Review (April 2019)	Calcite precipitate presence notes were not completed at GHO during low flow sampling. Other sites met commitment.	Use a standardized field form when collecting samples.

Category	Commitment	Source	Implementation Review	Additional Recommendations
New Seep Identification	General site surveys will be conducted annually to identify any new seeps.	Regional Seep Monitoring Plan – Phase 3  EMLI Review (April 2019)	Commitment met.	-
	Newly identified seeps will be sampled (or attempted to be sampled) two times in the first year, once during high flow (March 15 to July 15) and once during low flow (September 1 to December 31).	Regional Seep Monitoring Plan – Phase 3	Commitment met.	-
Seep Retirement	When seeps are found to be dry or covered by mined-out material, the seep retirement framework will be used to determine if a seep can be retired from the RSMP.	SRK (2021)	Commitment met.	-
QAQC	Data will be reviewed in a timely manner upon receipt from the laboratory to rectify any discrepancies to initiate resampling if required. Teck's data quality objectives (DQOs) are implemented.	Regional Seep Monitoring Plan – Phase 3	Commitment met.	-

## 3 Review Methods

The purpose of review in this report is to conduct an initial screening of seep water quality and relative flow contributions of seeps. Natural variability can exaggerate the scale of minor changes within a small dataset of two samples each year over five years. All annual RSMP reports have reported on the constituents of interest identified in the *Environmental Management Act* (EMA) Permit 107517 (dissolved selenium<sup>1</sup>, dissolved cadmium, sulfate, and nitrate-N, called Order Constituents [OC]). In addition, the 2019 annual report reported on field pH, dissolved cobalt, and dissolved nickel.

In 2020, the annual report reported on the OCs and on nitrite as nitrogen (nitrite-N), total dissolved solids (TDS), dissolved antimony, dissolved molybdenum, and dissolved uranium. Consistent with the findings of the Background Assessment conducted as part of the 2020 Regional Groundwater Monitoring Program Update (RGMP BGA; SNC-Lavalin 2020), this report will assess seepage water quality for ten constituents, the four OCs and the following non-Order Constituents (non-OCs): dissolved antimony, dissolved cobalt, dissolved nickel, nitrite-N, TDS, and dissolved uranium. The six non-OCs assessed have been identified as mine-related constituents by SNC-Lavalin (SNC-Lavalin 2020). The list of mine-related constituents in groundwater will be reassessed, as needed, every three years as part of the RGMP update. Field pH has also been evaluated yearly because of its relationship with many water quality constituents.

### 3.1 Seep Quality Screening Criteria

Seep water quality results were screened against the British Columbia Water Quality Guidelines (BCWQG) for Freshwater Aquatic Life (FWAL; ENV 2019, 2022). The purpose of screening seep water quality results against the BC FWAL guidelines is to identify seeps with changing water quality that may influence water chemistry in the downstream receiving environment. Seepages with changing BCWQG categorization may indicate where further monitoring or water management should potentially be considered.

Seeps were highlighted if the BCWQG screening categorization for field pH, sulfate, nitrate-N, dissolved cadmium, total selenium, total cobalt, total nickel, nitrite-N, or total uranium changed. The BCWQG screening guidelines are presented in Table 2.

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<sup>1</sup> Selenium is an Order Constituent where screening is performed on the total fraction. However, it is more appropriate to use dissolved selenium for geochemical interpretation of seeps.

**Table 2: BC Water Quality Guidelines for Freshwater Aquatic Life**

Parameter	Rationale	Unit	BCWQG FWAL	Notes
Field pH	RSMP specific parameter	pH units	Minimum Maximum 6.5 9	-
Sulfate	Order Constituent	mg/L	Chronic 128 to 429	Hardness dependent <sup>1</sup>
Nitrate-N	Order Constituent	mg-N/L	Chronic Acute 3 32.8	-
Dissolved Cadmium	Order Constituent	mg/L	Chronic Acute 0.004 to 2.5 0.003 to 18.5	Hardness dependent <sup>2</sup>
Total Selenium	Order Constituent	µg/L	Chronic 2	-
Antimony	GW mine-related CI <sup>3</sup>	mg/L	-	-
Total Cobalt	GW mine-related CI	µg/L	Chronic Acute 4 110	-
Total Nickel	GW mine-related CI	µg/L	Chronic 25 to 150	Working Guideline Hardness dependent
Nitrite-N	GW mine-related CI	mg-N/L	Chronic Acute 0.02 to 0.2 0.06 to 0.6	Chloride dependent
Total Dissolved Solids	GW mine-related CI	mg/L	-	-
Total Uranium	GW mine-related CI	mg/L	Chronic 0.0085	Working Guideline

<sup>1</sup> If water hardness exceeds 250 mg/L, a site-specific assessment may be required.

<sup>2</sup> Short-term acute WQG applies to water hardness below 455 mg/L, the long-term chronic WQG applies to water hardness below 285 mg/L. When water hardness exceeds the upper bound, a site-specific assessment may be required.

<sup>3</sup> GW mine-related CI = Groundwater mine-related constituent of interest

### 3.2 Statistical Trend Analysis

Concentration trends for OCs were evaluated based on available analytical data using Mann-Kendall analysis. Statistical tests help identify quantifiable concentration patterns over time; however, a statistical test should be used along with other lines of evidence to confirm patterns over time. The Mann-Kendall test has a high probability of not finding a trend when one would be present if more points were provided. This approach was conducted with a limited dataset and potential trends will continue to be assessed in the future as more data becomes available. Seeps showing notable trending in OCs and/or field pH have been highlighted within their respective site-specific sections below. Summary tables of the Mann-Kendall analysis results for all the RSMP seeps are available in Appendix D.

The Mann-Kendall statistical test is a non-parametric trend analysis test that identifies changes in environmental conditions (Gilbert, 1987). The analysis tests the null hypothesis of no trend against the alternative hypothesis of a significant trend. The same methods applied in the RGMP and SSGMP programs were applied to the RSMP seeps for consistency:

- Sampling locations with less than seven sampling events were not selected for assessment.

- Where field duplicates were collected, the higher value was selected for analysis.
- Concentrations below the method detection limit (MDL) were assigned the MDL concentration.
- Where the sample size of a dataset exceeded 40 samples, the trend analysis was completed for the 40 most recent samples, based on probability available in the Kendall table.
- Trend analysis was not completed for parameters where concentrations were consistently less than or within five times the MDL.
- The analytical results were reviewed before completing trend analysis, and any obvious outliers were removed from the dataset based on the below equation and the judgement of the qualified professional.

Outliers were defined as values below [*lower quartile* – (*IQR* \* 3)] or above [*upper quartile* + (*IQR* \* 3)]. Where IQR is the interquartile range.

The analysis for each parameter is determined by calculating the Mann-Kendall Statistic (S), the percent confidence of a significant trend, and the coefficient of variance (COV). The percent confidence of a significant trend is calculated using a Kendall probability table, which requires the S value of the test and the number of samples (n). The Kendall table identifies the probability of rejecting a null hypothesis (no trend) of a given level of significance. The confidence level is subsequently calculated by subtracting the probability from 1 (Newell et al., 2007). A COV value is the standard deviation divided by the average and presented as a percent. A COV below 100% can be used to infer stability in concentrations. In contrast, a value above 100% indicates a non-stable trend and a greater degree of scatter. The process of determining a significant trend and stability is in Table 3 (Aziz et al., 2003).

“No trend” and “stable” indicate that neither an increasing nor a decreasing trend could be discerned within the specified confidence limit. A “stable” result also signifies that the data had minimal scatter (less than 100% COV), further emphasizing that concentrations are relatively unchanging over time.

**Table 3: Mann-Kendall Analysis Decision Matrix**

Mann-Kendall Statistic (S)	Trend Confidence	Concentration Trend
S>0	> 95%	Increasing
S>0	90 – 95%	Probably Increasing
S>0	< 90%	No Trend
S≤0	< 90% and COV <sup>1</sup> ≥ 100%	No Trend
S≤0	< 90% and COV < 100%	Stable
S<0	90 – 95%	Probably Decreasing
S<0	> 95%	Decreasing

Source: SNC-Lavalin (2022)

<sup>1</sup> COV – coefficient of variance

### 3.3 Water Chemistry Criteria

During seep prioritization in 2019, seeps were categorized based on Zn/Cd and sulfate concentration to estimate source conditions related to the Morrissey Formation (MF). Parts of the MF are potentially acid generating (PAG), and seeps showing possible MF influences may indicate areas where future changes in water quality might be expected. Based on experience with acid rock drainage in the Elk Valley, seeps with a Zn/Cd above 200 mg/mg and a sulfate concentration greater than 100 mg/L are considered possibly influenced by the MF.

Seeps were also classified as suboxic or oxic during the 2019 seep prioritization based on the sulfate concentration and Se/SO<sub>4</sub> ratios. Se/SO<sub>4</sub> was used to evaluate the influence of low-oxygen conditions on seeps originating from waste materials (Hay et al., 2016). Based on experience primarily with evaluating waters in saturated backfills, Se/SO<sub>4</sub> of about 1x10<sup>-4</sup> mol/mol represents dominantly oxidizing conditions. It is consistent with the typical characteristics of unsaturated oxidizing waste rock. In comparison, ratios below 1x10<sup>-5</sup> mol/mol are considered to show selenium attenuation under oxygen-deficient conditions, including backfills, reject spoils, suboxic zones in waste rock or along groundwater flow pathways.

Seeps with a sulfate concentration greater than 500 mg/L and a Se/SO<sub>4</sub> less than 1x10<sup>-5</sup> mol/mol are considered to be suboxic. Seeps where the oxidation or MF influence classification has changed between 2019 and 2020 were highlighted in the results section for each operation (Section 5).

### 3.4 PHREEQC Modelling Methods

Saturation indices (SI) for gypsum (CaSO<sub>4</sub>·2H<sub>2</sub>O), calcite (CaCO<sub>3</sub>), and ferrihydrite (Fe(OH)<sub>3</sub>) were modelled using PHREEQC with the minteq.v4 database. Gypsum is considered due to its potential to control sulfate concentrations. Calcite is considered due to the potential for calcite concretions to form. Ferrihydrite can help understand disequilibrium with oxygen and the potential for the sequestration of metals. Modelling inputs included field pH, oxidation-reduction potential (ORP) (corrected to Eh), and temperature. Seeps that did not include a field ORP measurement were not modelled. All remaining seeps had field pH and field temperature measurements. Concentrations below the detection limit were modelled using the detection limit concentration.

An SI value of zero conventionally indicates the mineral is at equilibrium (neither forming nor dissolving); however, this might change due to dilution, dissolution of other minerals, and changes in the gas phases. An evaluation of calcite precipitates and water chemistry in the Elk Valley shows that calcite has a practical SI reference value of 0.6 (i.e., an SI of at least 0.6 is needed before calcite precipitates) (SRK 2011). This is inferred to be due to the slow kinetics of calcite nucleation resulting from dissolved magnesium in the waters. Samples with a modelled calcite SI of 0.6 were considered at equilibrium. Any seeps below or above the reference value were considered undersaturated or oversaturated, respectively. If oversaturated, the seep has the potential to precipitate calcite given the right environmental conditions.

No gypsum or ferrihydrite SI reference values have been established for the Elk Valley. An SI value of zero generally represents equilibrium for gypsum and ferrihydrite. It was assumed that seeps with



gypsum or ferrihydrite SIs below -0.5 indicated undersaturation, values between -0.5 and 0.5 indicated near equilibrium, and values above 0.5 indicated oversaturation.

### **3.5 Relative Flow and Loading Comparisons**

Seep flow and loading estimates were compared to a permitted surface water monitoring location. Comparison permitted surface water monitoring locations were selected based on proximity and suspected connectivity to each seep. Based on professional judgement, seep estimated flow or load greater than 15% compared to the permitted surface water monitoring flow or load have been considered as significant and have been highlighted in the site-specific sections below.

Seep flow estimates were taken during the field surveys following the Teck Coal Flow Monitoring Protocol. However, due to the often-diffuse nature of seeps, flow measurements are inherently imprecise. In many cases, it is not possible to capture flow from the whole seep in one measurement. In addition, because seep flows are only measured during seepage surveys, it is difficult to determine if the measured flow is representative of “low” or “high” flow conditions in the annual hydrological cycle at each location. Therefore, loadings calculated here should be regarded as semi-quantitative. Seasonal flow and loading averages at the seep monitoring locations were estimated using flow and analytical data collected between 2018 and 2022. The 2022 analytical results at the seep monitoring locations are in Appendix B.

Permitted surface water monitoring locations were selected based on proximity and relationship to seeps. When possible, the nearest downstream permitted surface water monitoring location was used as a comparison point. Seasonal flow and loading averages at the permitted surface water monitoring locations were estimated using flow and analytical data collected between 2018 and 2022. The 2022 analytical results at the permitted surface water monitoring locations are in Appendix C.

## 4 Quality Assurance/Quality Control

QA/QC is essential for establishing data reliability. Teck provided field and lab quality control data to SRK, which were reviewed regarding the QA/QC program in the Plan and using SRK's internal chemical analysis quality control systems. Separate memos summarizing SRK's QAQC findings can be found in Appendix B, and Appendix F for the high flow and low flow seep surveys, respectively.

During the high flow seep survey, there were ten paired field duplicates and eight field blank samples, representing 21% of all samples collected compared to a target of 10%.

During the low flow seep survey, eight paired field duplicates and six field blanks, represented 19% of all samples collected compared to a target of 10%.

SRK's opinion is that data quality is acceptable for 2022 annual reporting.

## 5 Site-Specific Interpretation

The analysis and review detailed below were conducted on the seeps recommended by SRK for carryover from 2018 through 2021. Table 4 summarizes the number of seeps identified and sampled during 2022. Some RSMP seeps were dry or covered by mined-out material (spoiled over) and could not be sampled in 2022.

The number of seeps recommended by SRK (2022) in Table 4 includes:

- The number of seeps initially identified for inclusion in the RSMP
- The addition of any newly identified seeps assessed for inclusion since 2018
- The removal of any seeps that have been formally retired following the seep retirement framework in SRK (2022)

The number of seeps identified and sampled during high flows in Table 4 refers to all seeps revisited and sampled between March 15 and July 15, 2022, following Teck’s formal definition of the high flows monitoring period (Appendix 3 of Permit 107517). The number of seeps identified and sampled during low flows in Table 4 refers to all the seeps revisited and sampled between September 1, 2022, and December 31, 2022.

The results of the review are discussed below by operation.

**Table 4: Summary of Seep Samples Collected by Operation**

Operation	Number of seeps recommended for continued sampling in RSMP (SRK 2022)	Seeps Revisited in 2022		Seeps Sampled in 2022	
		High Flow <sup>1</sup>	Low Flow <sup>2</sup>	High Flow <sup>1</sup>	Low Flow <sup>2</sup>
FRO	24	22	22 <sup>3</sup>	22	19 <sup>4</sup>
GHO	20	19 <sup>5</sup>	19	15	12
LCO	12	12	12	12	11
EVO	20	20	20	19	17
CMm	16	16	16	18	17
All	92	89	89	86	76

<sup>1</sup> High flow includes samples collected between March 15, 2022, and July 15, 2022.

<sup>2</sup> Low flow includes samples collected between September 1, 2022, and December 31, 2022.

<sup>3</sup> Two seeps at FRO (FR\_FSEAMWSEEP4 and FR\_SHNSEEP1) were unsafe to access during sampling.

<sup>4</sup> Three seeps were dry at FRO during low flow sampling.

<sup>5</sup> One seep at GHO, RG\_ERSP3, was unsafe to access during both sampling events.

The group name associated with each seep ID in the seep tables for each operation is a product of the seep grouping conducted by SRK (2019). Seeps were assigned a sub-area/material type on an operation-by-operation basis to help identify each seep based on the general area and upstream material type related to each seep. The groupings were used for graphing purposes to evaluate the geochemical influence of different material types. In addition, each group of seeps was assigned a

downstream comparison point, either a surface water monitoring location or an authorized discharge location. Grouping seeps to a nearby comparison point was used to make concentration comparisons, evaluate the overall significance of a given seep to a group, and evaluate seepage water for possible attenuation.

Seeps in groupings ending with the WR suffix have been assigned to a sub-area that is assumed to be downstream of a waste rock dump. Seeps in groupings ending with the CCR suffix have been assigned to a sub-area that is assumed to be downstream of a coarse coal reject (CCR) pile. Seeps in groupings ending with the PIT suffix have been assigned to a sub-area that is assumed to be downstream of a pit. Seeps in groupings ending with the TAILINGS suffix have been assigned to a sub-area downstream of a tailings storage facility. Seeps in groupings ending with the PLANT suffix have been assigned to a sub-area downstream of a plant facility.

## **5.1 Fording River Operation**

### **5.1.1 Overview**

Seep monitoring locations at the FRO mine site facilities are presented in Figure 2. Seeps are color-coded by the comparison permitted surface water sampling location. Table 5 summarizes the seeps visited during the 2022 RSMP.

FR\_SHNSEEP1 and FR\_FSEAMWSEEP4 have been formally retired from the RSMP, effective December 31, 2022, after undergoing a seep retirement assessment (Section 7.2).

Mann-Kendall trend analyses were completed for OCs and field pH for seep samples with seven or more sampling events and are summarized in Table 6. A summary of Mann-Kendall trend analysis for all COIs is available in Appendix D.

The oxidation and MF influence categorization of seeps and modelled calcite and ferrihydrite saturation at FRO are summarised in Table 7.

**Table 5: 2022 FRO Seeps**

Seep ID	Group Name	Comparison Permitted Surface Water Sampling Location	Permitted Surface Water Sampling Location Type	Notes	Seep Status
FR_HENSEEP3	FR_HEN_WR	FR_FR1	SW	-	ACTIVE
FR_HENSSEEP1	FR_HEN_WR	FR_FR1	SW	Dry Sept 2022	ACTIVE
FR_TURNSEEP1	FR_TURNBULLWREAST_WR	FR_FR1	SW	-	ACTIVE
FR_TBWSEEP1	FR_TURNBULLWRWEST_WR	FR_PP1	DL	-	ACTIVE
FR_TURNSEEP2	FR_TURNBULLWRWEST_WR	FR_PP1	DL	-	ACTIVE
FR_FCSEEP2	FR_TURNBULLWREAST_WR	FR_CC1	DL	-	ACTIVE
FR_CCSEEP1	FR_CLODECR_WR	FR_CC1	DL	-	ACTIVE
FR_CCSEEPSE1	FR_CLODECR_WR	FR_CC1	DL	-	ACTIVE
FR_LMCWSEEP5	FR_LAKEMTN_WR_PITS	FR_LMP1	DL	-	ACTIVE
FR_EAGLENORTH	FR_EAGLE_WR	FR_EC1	DL	-	ACTIVE
FR_ASPSEEP1	FR_A_CCR	FR_LP1	DL	-	ACTIVE
FR_DOKASEEP1	FR_DOKA_WR	FR_NL1	DL	-	ACTIVE
FR_FSEAMSEEP7	FR_DOKA_UNKNOWN	FR_NL1	DL	Dry Sept 2022	ACTIVE
FR_SPRWSEEP1	FR_BLAINE_CCR	FR_NL1	DL	-	ACTIVE
FR_BLAKESEEP1	FR_BLAINE_CCR	FR_FR2	SW	-	ACTIVE
FR_FRVWSEEP3	FR_SMITH_WR	FR_SP1	DL	-	ACTIVE
FR_STPNSEEP	FR_SOUTHTAILS_TAILINGS	FR_FR2	SW	Dry Sept 2022	ACTIVE
FR_BLAINESEEP1	FR_BLAINE_CCR	FR_FR2	SW	-	ACTIVE
FR_STPWSEEP	FR_SOUTHTAILS_TAILINGS	FR_FR2	SW	-	ACTIVE
FR_STPSWSEEP	FR_SOUTHTAILS_TAILINGS	FR_FR2	SW	-	ACTIVE
FR_BLAINESEEP5	FR_BLAINE_CCR	FR_FR2	SW	-	ACTIVE
FR_SCRDSEEP1	FR_SWIFTWR_ROCKDRAIN_WR	FR_SCOUT	DL	-	ACTIVE

Notes: Permitted surface water sampling location types are surface water (SW) or discharge location (DL).

**Table 6: FRO – Summary of Mann-Kendall Trend Analysis for OC**

Site ID	Parameter	Dissolved Cadmium	Nitrate-N	Dissolved Selenium	Sulfate	Field pH
FR_HENSEEP3		Stable	Stable	Decreasing	No Trend	No Trend
FR_HENSEEP1		-	Increasing	No Trend	Prob. Increasing	-
FR_TURNSEEP1		Decreasing	Stable	No Trend	No Trend	-
FR_TBWSEEP1		Decreasing	Stable	Prob. Increasing	Increasing	No Trend
FR_TURNSEEP2		No Trend	Stable	Increasing	Increasing	Prob. Decreasing
FR_FCSEEP2		No Trend	Stable	Stable	Stable	Stable
FR_CCSEEP1		No Trend	Increasing	Increasing	Increasing	Prob. Increasing
FR_CCSEEPSE1		Stable	Stable	Decreasing	Prob. Decreasing	Decreasing
FR_LMCWSEEP5		Prob. Increasing	No Trend	No Trend	No Trend	Decreasing
FR_EAGLENORTH		No Trend	No Trend	Decreasing	Stable	Prob. Decreasing
FR_ASPSEEP1		No Trend	Prob. Decreasing	Decreasing	No Trend	No Trend
FR_DOKASEEP1		-	-	-	-	-
FR_FSEAMSEEP7		Stable	Decreasing	Decreasing	Stable	-
FR_SPRWSEEP1		Stable	No Trend	No Trend	Decreasing	No Trend
FR_BLAKESEEP1		-	No Trend	No Trend	No Trend	No Trend
FR_FRVWSEEP3		Prob. Increasing	No Trend	Increasing	Stable	Stable
FR_STPNSEEP		Decreasing	Stable	No Trend	Stable	No Trend
FR_BLAINESEEP1		Prob. Increasing	Prob. Decreasing	Stable	Stable	No Trend
FR_STPWSEEP		Decreasing	No Trend	No Trend	Decreasing	No Trend
FR_STPSWSEEP		Decreasing	No Trend	No Trend	Decreasing	Stable
FR_BLAINESEEP5		Stable	Stable	No Trend	Prob. Decreasing	No Trend
FR_SCRDSEEP1		Increasing	Increasing	Prob. Increasing	Increasing	No Trend

Notes: “-” denotes trend analysis was not completed because of insufficient data or because concentrations of parameter have been consistently less than, or marginally greater than the detection limit. Where increasing trends are noted (except for field pH), the cell is shaded in orange. Decreasing trends in field pH at shaded orange.

**Table 7: Summary of Trends and Controls on Water Quality for Seeps at FRO**

Seep ID	Group Name	Flow Period	Oxidation Category	MF Influence	Calcite Status (CaCO <sub>3</sub> aq)	Calcite (CaCO <sub>3</sub> aq) SI	Calcite Precipitate Presence (2022) <sup>1</sup>	Ferrihydrite Status	OC and field pH Mann-Kendall Trend <sup>2</sup>	Seasonality <sup>3</sup>	Parameters Above FWAL BCWQGs <sup>5</sup>
FR_HENSEEP3	FR_HEN_WR	High Flow	Oxic	Not MF Influenced	Potentially Undersaturated	0.54	-	Not determined	Stable or decreasing	-	SO <sub>4</sub> , NO <sub>3</sub> -N, Se-T
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.38	No	Potentially Oversaturated		Higher SO <sub>4</sub>	
FR_HENSEEP1	FR_HEN_WR	High Flow	Potentially Suboxic	Not MF Influenced	Oversaturated	0.97	-	Oversaturated	Increasing NO <sub>3</sub> -N Prob. Increasing SO <sub>4</sub>	-	SO <sub>4</sub> , NO <sub>3</sub> -N, Se-T, U-T
		Low Flow	Suboxic	Not MF Influenced	No Samples	-	No	No Samples			
FR_TURNSEEP1	FR_TURNBULLWREAST_WR	High Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.73	-	Potentially Oversaturated	Stable or decreasing	-	SO <sub>4</sub> , NO <sub>3</sub> -N, Se-T, U-T
		Low Flow	Oxic	Not MF Influenced	Oversaturated	0.67	No	Oversaturated			
FR_TBWSEEP1	FR_TURNBULLWRWEST_WR	High Flow	Oxic	Not MF Influenced	Undersaturated	-0.13	-	Oversaturated	Increasing SO <sub>4</sub> Prob. Increasing Se-D	-	-
		Low Flow	Oxic	Not MF Influenced	No Samples	-	No	No Samples			
FR_TURNSEEP2	FR_TURNBULLWRWEST_WR	High Flow	Oxic	Not MF Influenced	Undersaturated	-0.052	-	Oversaturated	Increasing SO <sub>4</sub> and Se-D Prob. Decreasing field pH.	-	NO <sub>3</sub> -N, Se-T
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.074	No	Not determined			
FR_FCSEEP2	FR_TURNBULLWREAST_WR	High Flow	Oxic	Not MF Influenced	Undersaturated	-0.091	No	Oversaturated	Stable or decreasing	-	-
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.12	-	Oversaturated		Higher NO <sub>3</sub> -N, SO <sub>4</sub> , Se-D, U-D	
FR_CCSEEP1	FR_CLODECR_WR	High Flow	Oxic	Not MF Influenced	Potentially Oversaturated	1.2	No	Oversaturated	Increasing NO <sub>3</sub> -N, Se-D, SO <sub>4</sub>	-	-
		Low Flow	Oxic	Not MF Influenced	Oversaturated	1.2	No	Oversaturated		Higher SO <sub>4</sub> , Cd-D, Ni-D, U-D	
FR_CCSEEPSE1	FR_CLODECR_WR	High Flow	Oxic	Not MF Influenced	Undersaturated	0.47	No	Oversaturated	Decreasing field pH	-	Se-T
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.56	No	Oversaturated			
FR_LMCWSEEP5	FR_LAKEMTN_WR_PITS	High Flow	Oxic	Not MF Influenced	Undersaturated	0.093	No	Oversaturated	Prob. Increasing Cd-D Decreasing field pH	-	SO <sub>4</sub> , NO <sub>3</sub> -N, Se-T, U-T
		Low Flow	Oxic	Not MF Influenced	Not determined	0.45	No	Not determined		Higher NO <sub>3</sub> -N, NO <sub>2</sub> -N, SO <sub>4</sub> , Se-D, U-D	
FR_EAGLENORTH	FR_EAGLE_WR	High Flow	Oxic	Not MF Influenced	Not determined	0.7	No	Oversaturated	Prob. decreasing field pH	-	-
		Low Flow	Oxic	Not MF Influenced	Not determined	0.72	No	Oversaturated		Higher Ni-D	
FR_ASPSEEP1	FR_A_CCR	High Flow	Oxic	Not MF Influenced	Potentially Undersaturated	0.38	No	Potentially Oversaturated	Stable or decreasing	-	-
		Low Flow	Oxic	Not MF Influenced	Not determined	0.59	No	Potentially Oversaturated		Higher NO <sub>3</sub> -N, SO <sub>4</sub> , Se-D, U-D	
FR_DOKASEEP1	FR_DOKA_WR	High Flow	Oxic	Not MF Influenced	Oversaturated	0.81	No	Oversaturated	-	-	-
		Low Flow	Oxic	Not MF Influenced	Not determined	1.1	No	Not determined			
FR_FSEAMSEEP7	FR_DOKA_UNKNOWN	High Flow	Oxic	Not MF Influenced	Oversaturated	0.86	No	Oversaturated	Stable or decreasing	Higher Cd-D	-
		Low Flow	Oxic	Not MF Influenced	Not determined	0.82	No	Oversaturated		-	

Seep ID	Group Name	Flow Period	Oxidation Category	MF Influence	Calcite Status (CaCO <sub>3</sub> aq)	Calcite (CaCO <sub>3</sub> aq) SI	Calcite Precipitate Presence (2022) <sup>1</sup>	Ferrihydrite Status	OC and field pH Mann-Kendall Trend <sup>2</sup>	Seasonality <sup>3</sup>	Parameters Above FWAL BCWQGs <sup>3</sup>
FR_SPRWSEEP1	FR_BLAIN_CCR	High Flow	Oxic	Not MF Influenced	Not determined	0.28	No	Oversaturated	Stable or decreasing	-	SO <sub>4</sub> , NO <sub>3</sub> -N, NO <sub>2</sub> -N, Se-T, U-T
		Low Flow	Oxic	Not MF Influenced	Not determined	0.73	No	Oversaturated			
FR_BLAKESEEP1	FR_BLAIN_CCR	High Flow	Oxic	Not MF Influenced	Oversaturated	1	No	Oversaturated	Stable or decreasing	-	Se-T
		Low Flow	Oxic	Not MF Influenced	Oversaturated	0.94	-	Not determined			
FR_FRVWSEEP3	FR_SMITH_WR	High Flow	Oxic	Potentially Possibly MF Influenced	Oversaturated	0.81	No	Oversaturated	Increasing Se-D Prob. Increasing Cd-D	-	Se-T
		Low Flow	Oxic	Potentially Possibly MF Influenced	Oversaturated	0.92	-	Potentially Oversaturated			
FR_STPNSEEP	FR_SOUTHTAILS_TAILINGS	High Flow	Oxic	Not MF Influenced	Undersaturated	0.012	No	Oversaturated	Stable or decreasing	-	-
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.3	No	Oversaturated			
FR_BLAINESEEP1	FR_BLAIN_CCR	High Flow	Oxic	Not MF Influenced	Oversaturated	0.92	-	Oversaturated	Prob. Increasing Cd-D	-	-
		Low Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.98	No	Oversaturated			
FR_STPWSEEP	FR_SOUTHTAILS_TAILINGS	High Flow	Oxic	Not MF Influenced	Not determined	0.55	No	Oversaturated	Stable or decreasing	-	SO <sub>4</sub> , Se-T, U-T
		Low Flow	Oxic	Not MF Influenced	Not determined	0.5	No	Potentially Oversaturated			
FR_STPSWSEEP	FR_SOUTHTAILS_TAILINGS	High Flow	Oxic	Not MF Influenced	Undersaturated	0.41	No	Potentially Oversaturated	Stable or decreasing	-	SO <sub>4</sub>
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.37	No	Oversaturated			
FR_BLAINESEEP5	FR_BLAIN_CCR	High Flow	Oxic	Not MF Influenced	Oversaturated	0.83	No	Oversaturated	Stable or decreasing	-	SO <sub>4</sub> , Se-T, U-T
		Low Flow	Oxic	Not MF Influenced	Oversaturated	0.87	Dry	Oversaturated			
FR_SCRDSEEP1	FR_SWIFTWR_ROCKDRAIN_WR	High Flow	Oxic	Not MF Influenced	Potentially Undersaturated	0.69	No	Potentially Oversaturated	Increasing Cd-D, NO <sub>3</sub> -N, SO <sub>4</sub> Prob. Increasing Se-D	-	SO <sub>4</sub> , Se-T
		Low Flow	Oxic	Potentially Not MF Influenced	Oversaturated	1.1	No	Oversaturated			

Notes: Categorizations labelled as "Not Determined" indicate a seep where an equal number of instances occurred for each category, so classification could not be determined.

<sup>1</sup> "-" calcite precipitate presence (2022) denotes that the seep was visited, but no calcite presence field notes were made. Low flow calcite observations were conducted in July 2022.

<sup>2</sup> "Stable or decreasing" indicates that Cd-D, NO<sub>3</sub>-N, Se-D, and SO<sub>4</sub> concentrations show stable, no trend, or decreasing trends while field pH shows a stable trend or no trend. "-" denotes that there was insufficient data to conduct trend analysis.

<sup>3</sup> "-" for seasonality denotes that no seasonality has been visually identified and for parameters above FWAL BCWQGs "-" indicates that no COLs were identified as above FWAL BCWQGs.



## 5.1.2 Discussion

### Summary

There are 22 RSMP seeps at FRO. The seeps will be discussed from upstream to downstream along the Fording River.

All seeps at FRO (except FR\_HENSSEEP1, as discussed below) were categorized as oxic, and all seeps (except for FR\_FRVWSEEP3 discussed below) were categorized as not MF influenced (Table 7). Ferrihydrite was modelled and classified as oversaturated or potentially oversaturated for all seeps at FRO. Maps of modelled calcite saturation and field presence during high and low flows in Figure 3 and Figure 4, respectively, show no apparent spatial trends for calcite saturation at FRO.

A comparison of average flows during high and low flows at each FRO seep and its associated comparison permitted surface water monitoring location is reported in Table 8. Four FRO seeps are estimated to contribute at least 15% of the flow to their corresponding downstream surface water monitoring station: FR\_TURNSEEP2, FR\_CCSEEP1, FR\_FCSEEP2, and FR\_EAGLENORTH.

### Henretta Seeps

FR\_HENSEEP3 and FR\_HENSSEEP1 are downstream of the Henretta waste rock dump area and upstream of the FR\_FR1 surface water monitoring location. Neither seep appears to significantly contribute flow or load to FR\_FR1.

FR\_HENSEEP3 has the highest dissolved selenium concentrations (average 560 µg/L) among all the FRO RSMP seeps (average 180 µg/L), however, Mann-Kendall analysis indicates that dissolved selenium concentrations are decreasing. Dissolved selenium concentrations at FR\_HENSSEEP1 are significantly lower compared to FR\_HENSEEP3 and closer to the 2 µg/L BC FWAL guideline. Total selenium concentrations at FR\_FR1 (average 15 µg/L) are above the BC FWAL guideline.

Nitrate-N concentrations at FR\_HENSEEP3 (average 85 mg/L-N) are some of the highest of the FRO seeps (average 45 mg/L-N). However, nitrate-N concentrations at FR\_FR1 (2.4 mg/L-N) are below the BC FWAL guideline (3.0 mg/L-N chronic and 33 mg/L-N acute). Sulfate concentrations at FR\_HENSSEEP1 (average 840 mg/L) are probably increasing and may be related to recent reclamation activity upstream to the east of the Henretta Pit Lake. Based on calcite modelling, FR\_HENSSEEP1 has been categorized as oversaturated during high flows; however, no field presence has been historically noted.

### Turnbull Seeps

FR\_TURNSEEP1 is downstream of the Turnbull waste rock area and upstream of the FR\_FR1 surface water monitoring location. Mann-Kendall analysis indicates stable or no trends thus far. Like FR\_HENSEEP3 and FR\_HENSSEEP1 upstream of FR\_FR1, FR\_TURNSEEP1 does not appear to significantly contribute flow or load to FR\_FR1 (Table 8). Calcite modelling indicates that

FR\_TURNSEEP1 is potentially oversaturated; however, no field presence has been historically observed.

FR\_TBWSEEP1 and FR\_TURNSEEP2 are also downstream of the Turnbull waste rock area but upstream of the FR\_PP1 surface water monitoring location. The semi-quantitative load comparison in Table 8 indicates that FR\_TURNSEEP2 may contribute up to 23% of the flow and 27% of the sulfate load at FR\_PP1, depending on the time of year. Both seeps' nitrate concentrations are above the chronic BC FWAL guideline. Average nitrate concentrations at FR\_TBWSEEP1 and FR\_TURNSEEP2 are 13 and 19 mg/L-N, respectively, compared to the 3 mg/L-N chronic BC FWAL and 33 mg/L-N acute guidelines. Downstream at FR\_PP1, nitrate-N concentrations are also above the nitrate BC FWAL guidelines, averaging 35 mg/L-N. Total selenium concentrations at FR\_TBWSEEP1 (average 68 µg/L), FR\_TURNSEEP2 (average 92 µg/L), and FR\_PP1 (average 120 µg/L) are above the chronic total selenium BC FWAL guideline of 2 µg/L. In addition, dissolved selenium concentrations are increasing at FR\_TURNSEEP2 and probably increasing at FR\_TBWSEEP1. Field pH at FR\_TBWSEEP1 (average 7.2) and FR\_TURNSEEP2 (average 7.1) is the lowest of all the FRO RSMP seeps (average 7.7) and shows a probably decreasing trend at FR\_TURNSEEP2 in Mann-Kendall analysis.

FR\_FCSEEP2 is also downstream of the Turnbull waste rock area, but upstream of the FR\_CC1 surface water monitoring location. The semi-quantitative load comparison in Table 8 indicates that FR\_FCSEEP2 may contribute up to 18% of the flow but only up to 1% of the sulfate load at FR\_CC1, depending on the time of year. Nitrate-N, sulfate, dissolved selenium, and dissolved uranium concentrations show a seasonal pattern at FR\_FCSEEP2, with higher concentrations during low flows. FR\_FCSEEP2 has the lowest TDS and sulfate concentrations (260 mg/L and 84 mg/L, respectively), compared to all the FRO RSMP seeps (1,600 mg/L and 770 mg/L, respectively).

### **Clode Catchment Seeps**

Clode Catchment Seeps FR\_CCSEEP1 and FR\_CCSEEPSE1 are also upstream of the FR\_CC1 surface water monitoring location, downstream of the Clode waste rock area. Semi-quantitative flow and load calculations estimate that FR\_CCSEEP1 could contribute up to 38% of the flow and 41% of the sulfate load at FR\_CC1, depending on the time of year.

Nitrate-N concentrations at FR\_CCSEEP1 are some of the highest of the FRO RSMP seeps (61 mg/L-N compared to 45 mg/L-N) and above the BC FWAL. FR\_CCSEEP1 and FR\_CCSEEPSE1 also have the highest dissolved cadmium (1.0 and 1.4 µg/L, respectively) and dissolved nickel (0.07 and 0.07 mg/L, respectively) concentrations of the FRO RSMP seeps (0.5 µg/L average cadmium and 0.03 mg/L average nickel). In addition, Mann-Kendall analysis indicates that nitrate-N, dissolved selenium, sulfate, dissolved cobalt, dissolved nickel, dissolved uranium, and TDS are increasing at FR\_CCSEEP1. Dissolved selenium, and sulfate concentrations at FR\_CCSEEPSE1 are decreasing. No COIs are exhibiting notable trends at FR\_CCSEEPSE1, aside from field pH, which is decreasing (becoming more acidic). Downstream at FR\_CC1, nitrate-N, total selenium, and sulfate concentrations are above the BC FWAL guidelines. Based on calcite modelling, FR\_CCSEEP1 is calcite oversaturated. However, calcite presence in the field has not been noted since 2020.

## Lake Mountain Seeps

FR\_LMCWSEEP5 is downstream of the Lake Mountain area and upstream of the FR\_LMP1 surface water monitoring location. FR\_LMCWSEEP5 does not appear to significantly contribute flow or load to FR\_LMP1 (Table 8). Mann-Kendall analysis shows dissolved cadmium and nickel concentrations are probably increasing, and field pH is decreasing. OC concentrations show seasonality trends, with higher concentrations during low flows at FR\_LMCWSEEP5.

## FRO CCR Seeps

FR\_ASPSEEP1 is downstream of a CCR area and upstream of the FR\_LP1 surface water monitoring location. There was increased sampling at FR\_ASPSEEP1 in 2022 to support pumping plan development. Mann-Kendall analysis indicates no increasing trends. At FR\_ASPSEEP1, sulfate, nitrate, and total selenium concentrations are consistently above BC FWAL guidelines. The same constituent concentrations are above the BC FWAL guidelines at FR\_LP1, however, FR\_ASPSEEP1 does not appear to significantly contribute flow or load to FR\_LP1 (Table 8).

## Eagle Catchment Seeps

FR\_EAGLENORTH is downstream of the Eagle waste rock area and upstream of the FR\_EC1 surface water monitoring location. During high flows, FR\_EAGLENORTH is estimated to contribute up to 30% of flows and 56% of sulfate load to FR\_EC1. Sulfate, nitrate-N and total selenium concentrations are consistently above the BC FWAL guidelines; however, Mann-Kendall analysis shows no trend for these OCs. Field pH is probably decreasing at FR\_EAGLENORTH based on Mann-Kendall analysis. FR\_EAGLENORTH has the highest TDS (average 3,340 mg/L) of all FRO RSMP seeps (average 1,610 mg/L) and relatively elevated sulfate, dissolved cadmium, dissolved nickel, dissolved selenium, and dissolved uranium concentrations.

There are three seeps upstream of the FR\_NL1<sup>2</sup> surface water monitoring location: FR\_FSEAMSEEP7, FR\_DOKASEEP1, and FR\_SPRWSEEP1. All three seeps do not appear to significantly contribute flow or load to FR\_NL1. FR\_FSEAMSEEP7 and FR\_DOKASEEP1 are downstream of the Doka waste rock area. FR\_SPRWSEEP1 is downstream of the Blain CCR area. Nitrate-N concentrations are consistently above the BC FWAL guideline at FR\_FSEAMSEEP7 (13 mg/L-N) and FR\_SPRWSEEP1 (7.6 mg/L). Total selenium concentrations are also above the BC FWAL guideline at these two seeps (average of 140 µg/L at FR\_FSEAMSEEP7, 35 µg/L at FR\_SPRWSEEP1). However, Mann-Kendall analysis indicates no increasing trends for all OCs and COIs at all three seeps. During high flows, FR\_FSEAMPSEEP7 and FR\_DOKASEEP1 have been categorized as calcite oversaturated; however, calcite presence has not been noted in the field since 2019.

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<sup>2</sup> FR\_NL1 did not discharge in 2022 (pers. comm. David Burroughs January 16, 2022).

## Smith Seeps

FR\_FRVWSEEP3 is downstream of the Smith waste rock area and upstream of the FR\_SP1 surface water monitoring location. FR\_FRVWSEEP3 does not appear to significantly contribute flow or load to FR\_SP1 (Table 8). Total selenium and sulfate concentrations are consistently above the BC FWAL guideline (80 µg/L and 510 mg/L, respectively). In addition, Mann-Kendall analysis indicates that dissolved selenium concentrations are increasing, and dissolved cadmium and antimony concentrations are probably increasing at FR\_FRVWSEEP3. FR\_FRVWSEEP3 is the only seep at FRO that has been categorized as potentially<sup>3</sup> possibly MF influenced. Sulfate concentrations are consistently above 100 mg/L (average 510 mg/L), and Zn/Cd has been mostly above 200 mg/mg (average 300 mg/mg). However, to date, pH is neutral (average 8.0 pH units).

## Blaine CCR Seeps

There are six seeps in the FRO RSMP that are upstream of the FR\_FR2 surface water monitoring location. Three seeps (FR\_BLAKESEEP1, FR\_BLAINESEEP1 and FR\_BLAINESEEP5) are downstream of the Blaine CCR area. Three seeps (FR\_STPNSEEP, FR\_STPWSEEP, and FR\_STPSWSEEP) are downstream of the South Tailings Pond (see section below). The three seeps downstream of the Blaine CCR area do not appear to significantly contribute flow or load to FR\_FR2.

Sulfate, total selenium, and nitrate-N concentrations are above the BC FWAL guideline at all three seeps downstream of the Blaine CCR area. In addition, total uranium concentrations are above the BC FWAL guideline at FR\_BLAINESEEP1 and FR\_BLAINESEEP5. Nitrite-N concentrations are also above the guideline at FR\_BLAINESEEP5. The OC concentrations at these three seeps are stable or show no trend, apart from probably increasing dissolved cadmium concentrations at FR\_BLAINESEEP1. The TDS is relatively elevated at FR\_BLAINESEEP1 and FR\_BLAINESEEP5 (average of 2,860 mg/L and 3,340 mg/L, respectively) compared to all the FRO RSMP seeps (average of 1,610 mg/L). Likewise, FR\_BLAINESEEP1 shows relatively elevated sulfate, dissolved nickel, dissolved selenium, and dissolved uranium concentrations compared to all the FRO RSMP seeps. FR\_BLAINESEEP5 also shows relatively elevated sulfate and dissolved uranium concentrations. The three seeps downstream of the Blaine CCR area have all been categorized as oversaturated or potentially oversaturated for calcite. However, calcite has not been observed at these seeps.

## South Tailings Pond Seeps

The three seeps downstream of the South Tailings Pond do not appear to significantly contribute flow or load to FR\_FR2. FR\_STPNSEEP is the only seep of the three seeps downstream of the South Tailings Pond with concentrations above a BC FWAL guideline for total selenium (18 µg/L) and nitrate-N (5.6 mg/L-N). The OC concentrations at all three seeps are stable or decreasing based on Mann-Kendall analysis.

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<sup>3</sup> Seeps categorized as potentially possibly MF influenced indicate that the majority but not all samples indicate possible MF influenced conditions.

## Swift Seeps

FR\_SCRDSEEP1 is downstream of the Swift waste rock area and upstream of the FR\_SCOUT surface water monitoring location. Based on the qualitative flow and sulfate loading analysis, FR\_SCRDSEEP1 does not have significant flow or sulfate loading rates relative to FR\_SCOUT. Sulfate, nitrate-N, nitrite-N, total cobalt, and total selenium concentrations are consistently above BC FWAL guidelines. In addition, Mann-Kendall analysis indicates that all COI concentrations (except field pH) are increasing at FR\_SCRDSEEP1 (Figure 5). Several COIs have shown a relatively significant concentration increase in recent years, including nitrate-N, nitrite-N, dissolved antimony, dissolved cobalt, dissolved nickel, and dissolved selenium. FR\_SCRDSEEP1 has been classified as calcite oversaturated during low flows; however, calcite has not been observed in the field since 2019.

**Table 8: Average seasonal flow and SO<sub>4</sub> load for FRO seeps and comparison permitted surface water monitoring locations**

Permitted Surface Water Monitoring Location	Permitted Surface Water Monitoring Location Flow (m <sup>3</sup> /d)		Permitted Surface Water Monitoring Location SO <sub>4</sub> Load (kg/d)		Seep Location	Seep Flow <sup>1</sup>							
	High Flow	Low Flow	High Flow	Low Flow		High Flow		Low Flow		High Flow		Low Flow	
						Flow (m <sup>3</sup> /d)	% of Permitted Location Flow	Flow (m <sup>3</sup> /d)	% of Permitted Location Flow	SO <sub>4</sub> Load (kg/d)	% of Permitted Location Load	SO <sub>4</sub> Load (kg/d)	% of Permitted Location Load
FR_CC1	9,200	4,800	6,100	3,000	FR_CCSEEP1	3,500	38%	650	14%	2,500	41%	650	22%
					FR_CCSEEPSE1	84	0.91%	46	0.97%	110	1.8%	70	2.3%
					FR_FCSEEP2	1,700	18%	240	5.1%	57	0.94%	38	1.3%
FR_EC1	520	350	500	380	FR_EAGLENORTH	150	30%	10	2.9%	280	56%	19	5.0%
FR_FR1	180,000	31,000	15,000	3,600	FR_HENSEEP3	29	0.02%	4	0.01%	38	0.25%	5	0.14%
					FR_HENSSEEP1	51	0.03%	1	0.002%	48	0.32%	1	0.02%
					FR_TURNSEEP1	28	0.02%	1	0.002%	11	0.07%	0	0.01%
FR_FR2	170,000	71,000	28,000	18,000	FR_BLAINESEEP1	150	0.09%	210	0.30%	250	0.89%	370	2.1%
					FR_BLAINESEEP5	15	0.01%	0	0.001%	36	0.13%	1	0.004%
					FR_BLAKESEEP1	61	0.04%	20	0.03%	30	0.11%	21	0.12%
					FR_STPNSEEP	330	0.19%	-	-	41	0.14%	-	-
					FR_STPSWSEEP	82	0.05%	67	0.10%	28	0.10%	22	0.12%
					FR_STPWSEEP	450	0.26%	390	0.55%	140	0.50%	110	0.59%
FR_LMP1	24,000	4,800	5,100	1,900	FR_LMCWSEEP5	430	1.7%	150	3.2%	35	0.68%	62	3.3%
FR_LP1	2,400	2,000	890	900	FR_ASPSEEP1	230	9.4%	120	6.0%	110	12%	91	10%
					FR_FSEAMWSEEP4	160	6.5%	-	-	21	2.4%	-	-
					FR_SHNSEEP1	160	6.7%	-	-	20	2.3%	-	-
FR_NL1	1,700	4,200	460	1,500	FR_DOKASEEP1	32	1.9%	14	0.34%	2	0.43%	1	0.05%
					FR_FSEAMSEEP7	22	1.3%	1	0.03%	9	1.9%	1	0.03%
					FR_SPRWSEEP1	23	1.3%	20	0.48%	8	1.8%	8	0.51%
FR_PP1	5,800	2,100	1,400	1,300	FR_TBWSEEP1	460	7.9%	140	6.6%	130	9.5%	31	2.3%
					FR_TURNSEEP2	1,000	17%	490	23%	380	27%	170	13%
FR_SCOUT	5,400	3,900	4,200	7,900	FR_SCRDSEEP1	99	1.8%	170	4.4%	40	1.0%	-	-
FR_SP1	3,500	2,500	860	790	FR_FRVWSEEP3	35	1.0%	15	0.59%	17	2.0%	8	1.0%

<sup>1</sup> Due to the often-diffuse nature of seeps, seep flow measurements are inherently imprecise. The comparisons reported here should be regarded as semi-quantitative.

## 5.2 Greenhills Operation

### 5.2.1 Overview

Seep monitoring locations at GHO are presented in Figure 6. Seeps are color-coded by the comparison permitted surface water sampling location. Table 9 summarizes the seeps visited during the 2022 RSMP.

Mann-Kendall trend analyses were completed for OC for seep samples with seven or more sampling events and are summarized in Table 10. A summary of Mann-Kendall trend analysis for all COIs is available in Appendix D.

The oxidation and MF influence categorization of seeps and modelled calcite and ferrihydrite saturation at GHO is summarised in Table 11. Calcite precipitate presence was not noted down during the 2022 low flow sampling survey.

**Table 9: 2022 GHO Seeps**

Seep ID	Group Name	Comparison Permitted Surface Water Sampling Location	Permitted Surface Water Sampling Location Type	Notes	Seep Status
GH_SEEP_12	GH_PORTER_CREEK	GH_PC1	DL	-	ACTIVE
GH_SEEP_76	GH_LEASK_WR	GH_LC1	DL	-	ACTIVE
GH_SEEP_77	GH_WOLFRAM_WR	GH_WC1	DL	-	ACTIVE
GH_SEEP_79	GH_WOLFRAM_WR	GH_TC2	DL	-	ACTIVE
GH_SEEP_60	GH_THOMPSON_WR	GH_TC2	DL	Dry Sept 2022	ACTIVE
GH_SEEP_46	GH_THOMPSON_WR	GH_TC2	DL	Dry Sept 2022	ACTIVE
GH_SEEP_5	GH_THOMPSON_WR	GH_TC2	DL	-	ACTIVE
GH_SEEP_50	GH_UPSTREAM_CCR	GH_TC2	DL	Dry Sept 2022	ACTIVE
GH_SEEP_15	GH_UPSTREAM_CCR	GH_FC1	SW	Dry Sept 2022	ACTIVE
GH_SEEP_30	GH_UPSTREAM_CCR	GH_FC1	SW	Dry June & Sept 2022	ACTIVE
GH_WTDS	GH_CCR	GH_FC1	SW	-	ACTIVE
GH_SEEP_16	GH_CCR	GH_GH1	DL	Dry June 2022	ACTIVE
GH_SEEP_21	GH_CCR	GH_GH1	DL	-	ACTIVE
GH_SEEP_22	GH_CCR	GH_GH1	DL	-	ACTIVE

Seep ID	Group Name	Comparison Permitted Surface Water Sampling Location	Permitted Surface Water Sampling Location Type	Notes	Seep Status
GH_SEEP_26	GH_CCR	GH_GH1	DL	Dry June & Sept 2022	ACTIVE
GH_W-SEEP	GH_CCR	GH_GH1	DL	Dry June & Sept 2022	ACTIVE
GH_E1	GH_CCR	GH_GH1	DL	-	ACTIVE
GH_E3	GH_CCR	GH_GH1	DL	-	ACTIVE
GH_SEEP_98	GH_RAILLOOP	GH_FR1	SW	-	ACTIVE

Notes: Permitted surface water sampling location types are surface water (SW) or discharge location (DL).

**Table 10: GHO – Summary of Mann-Kendall Trend Analysis for OC**

Parameter Site ID	Dissolved Cadmium	Nitrate-N	Dissolved Selenium	Sulfate	Field pH
GH_SEEP_12	Stable	-	Stable	Stable	Prob. Decreasing
GH_SEEP_76	No Trend	Decreasing	No Trend	Increasing	No Trend
GH_SEEP_77	Prob. Decreasing	Stable	Stable	Stable	No Trend
GH_SEEP_79	-	Stable	Stable	No Trend	Stable
GH_SEEP_60	-	-	-	-	-
GH_SEEP_46	-	-	-	-	-
GH_SEEP_5	No Trend	Increasing	Increasing	Increasing	-
GH_SEEP_50	-	-	-	-	-
GH_SEEP_15	-	-	-	-	-
GH_SEEP_30	-	-	-	-	-
GH_WTDS	Decreasing	Prob. Decreasing	Stable	Decreasing	Stable
GH_SEEP_16	-	-	Decreasing	Stable	-
GH_SEEP_21	Stable	Stable	Decreasing	Stable	No Trend
GH_SEEP_22	Decreasing	Stable	Decreasing	Stable	Stable
GH_SEEP_26	-	-	-	-	-
GH_W-SEEP	-	-	No Trend	Prob. Decreasing	No Trend
GH_E1	Prob. Increasing	No Trend	No Trend	Stable	Stable
GH_E3	Stable	Stable	Decreasing	No Trend	Prob. Decreasing
GH_SEEP_98	-	-	-	-	-
RG_ERSP3	-	-	-	-	-

Notes: “-” denotes trend analysis was not completed because of insufficient data or because concentrations of parameter have been consistently less than, or marginally greater than the detection limit. Where increasing trends are noted (except for field pH), the cell is shaded in orange. Decreasing trends in field pH at shaded orange.



## 5.2.2 Discussion

### Summary

There are 20 RSMP seeps at GHO. The seeps will be discussed from upstream to downstream along the Fording River and then from upstream to downstream along the Elk River.

Several GHO seeps downstream of the GHO CCR storage facility were categorized as potentially suboxic or suboxic (Table 11). All seeps (except for GH\_E1, discussed below) were categorized as not MF influenced. Ferrihydrite was modelled and classified as oversaturated for all seeps at GHO. Maps of modelled calcite saturation and field presence during high and low flows in Figure 7 and Figure 8, respectively, show no apparent spatial trends for calcite saturation at GHO.

A comparison of average instantaneous flows during high and low flows at each GHO seep and its associated permitted surface water monitoring location is reported in Table 12. No GHO seeps (except GH\_WTDS and GH\_SEEP\_15 discussed below) contribute significantly to their comparison permitted surface water monitoring location counterparts.

### Porter Creek Seeps

GH\_SEEP\_12 is downstream of the Porter Creek area and upstream of the GH\_PC1 surface water monitoring location. When flow measurements are available for GH\_SEEP\_12, it does not appear to significantly contribute flow or sulfate load to GH\_PC1. Total selenium concentrations (average 3.2 µg/L) are above the BC FWAL guideline (2 µg/L), however, selenium concentrations are not likely to increase further above the BC FWAL guideline as Mann-Kendall analysis indicates a stable trend for dissolved selenium concentrations. Downstream, total selenium concentrations are also above the BC FWAL guideline at FR\_PC1 (average 65 µg/L). GH\_SEEP\_12 has the lowest TDS (average 250 mg/L) and sulfate (average 24 mg/L) concentrations of all the GHO RSMP seeps (average 1,380 mg/L TDS and 680 mg/L sulfate). According to the Mann-Kendall analysis, field pH is probably decreasing, however GH\_SEEP\_12 field pH is still neutral-alkaline, the last and lowest measurement was 7.8 in September 2022.

### Leask Seeps

GH\_SEEP\_76 is downstream of the West Spoil area and upstream of the GH\_LC1 surface water monitoring location. GH\_SEEP\_76 does not appear to significantly contribute flow or sulfate load to GH\_LC1. Sulfate, nitrate-N, nitrite-N, total selenium, and total uranium concentrations are above the BC FWAL guidelines. In addition, sulfate and dissolved uranium concentrations show increasing trends based on Mann-Kendall analysis. GH\_SEEP\_76 has the highest nitrate-N (average 130 mg/L-N), nitrite-N (0.06 mg/L-N), and dissolved selenium (570 µg/L) concentrations of the GHO RSMP seeps (9.9 mg/L-N nitrate, 0.01 mg/L-N nitrite, and 54 µg/L selenium). Downstream at GH\_LC1, nitrate-N and total selenium are above the BC FWAL guidelines. This seep has also has relatively elevated levels of dissolved antimony, dissolved cobalt, dissolved nickel, and dissolved uranium compared to the other GHO RSMP seeps. Active spoiling above this seep may be contributing to the higher-than-average concentrations compared to other GHO RSMP seeps. Concentrations at GH\_SEEP\_76 show a strong

seasonal pattern, with higher concentrations during high flows. Calcite modelling indicates that GH\_SEEP\_76 may be potentially oversaturated during high flows and oversaturated during low flows. Calcite precipitate presence has also been observed in the field during high flow sampling events.

### **Wolfram Seeps**

GH\_SEEP\_77 is also downstream of the West Spoil area and upstream of the GH\_WC1 surface water monitoring location. GH\_SEEP\_77 does not appear to significantly contribute flow or sulfate load to GH\_WC1. Sulfate, nitrate-N, nitrite-N, total selenium, and total uranium concentrations are above the BC FWAL guidelines; however, no further increases above the guidelines are expected as no COI concentrations show an increasing trend based on Mann-Kendall analysis. Like GH\_SEEP\_76, GH\_SEEP\_77 has relatively elevated concentrations of dissolved uranium, dissolved selenium, dissolved nickel, dissolved antimony, nitrite-N, and nitrate-N compared to the whole GHO RSMP seep group. Downstream at GH\_WC1, sulfate, nitrate, total selenium, and total uranium concentrations are above the BC FWAL guidelines. GH\_SEEP\_77 has also been categorized as calcite oversaturated, and calcite precipitate presence has been consistently observed in the field since 2021.

GH\_SEEP\_79 is also downstream of the West Spoil area but upstream of the GH\_TC2 surface water monitoring location. Based on a semi-quantitative estimate, GH\_SEEP\_79 does not appear to significantly contribute flow or sulfate load to downstream GH\_TC2. No COIs are above BC FWAL guidelines at this seep, and OC concentrations based on Mann-Kendall analysis are stable or show no trending. Only TDS shows a probably increasing trend. Compared to the other seeps downstream of the West Spoil area, GH\_SEEP\_79 has relatively low concentrations for COIs. Based on calcite SI modelling, GH\_SEEP\_79 has been categorized as potentially oversaturated. The first occurrence of calcite presence at this seep was recently noted during 2022 high flow sampling.

### **West Spoil Seeps**

GH\_SEEP\_5, GH\_SEEP\_46, and GH\_SEEP\_60 are also upstream of GH\_TC2 but downstream of the West Spoil area. It is estimated that these seeps do not significantly contribute flow or sulfate load to GH\_TC2 (Table 12). Total selenium concentrations are above the BC FWAL guideline at GH\_SEEP\_5 (average 2.3 µg/L) and GH\_SEEP\_46 (average 160 µg/L). Sulfate and nitrate-N concentrations are also above BC FWAL guidelines at GH\_SEEP\_46 (averages of 410 mg/L sulfate and 6.1 mg/L-N nitrate). In addition to having concentrations above BC FWAL guidelines, Mann-Kendall analysis indicates that nitrate-N, dissolved selenium, and sulfate concentrations are increasing at GH\_SEEP\_5 (Figure 9). Not enough data was available at GH\_SEEP\_46 or GH\_SEEP\_60 for Mann-Kendall analyses. Of the three seeps in this group, GH\_SEEP\_46 shows the highest concentrations when data is available. At the downstream GH\_TC2, sulfate, nitrate, total selenium, and uranium concentrations are above BC FWAL guidelines.

## GHO CCR Seeps

GH\_SEEP\_50 is upstream of GH\_TC2, and downstream of the GHO CCR area. Calcite SI modelling indicates that GH\_SEEP\_50 may be oversaturated during low flows; however, no calcite presence has been observed in the field.

Three seeps (GH\_SEEP\_15, GH\_SEEP\_30 and GH\_WTDS) downstream of the GHO CCR area are compared to the GH\_FC1 surface water monitoring location. In Table 12 below, the relative sulfate loading is estimated to be 190% from GH\_SEEP\_15 and 1500% from GH\_WTDS compared to sulfate loadings at GH\_FC1 during low flows. The relative flow is estimated to be 5% from GH\_SEEP\_15 and 1500% from GH\_WTDS compared to GH\_FC1 during low flows. GH\_WTDS is also estimated to have 150% sulfate loading compared to GH\_FC1 during high flows.

Total selenium concentrations are consistently above the BC FWAL guideline at GH\_WTDS (average 9.2 µg/L); however, selenium concentrations are not likely to increase further above the BC FWAL guideline as Mann-Kendall analysis indicates no trend for dissolved selenium concentrations. No COI concentrations are above the BC FWAL guidelines at the downstream GH\_FC1 monitoring location. Based on calcite SI modelling, all three seeps have been categorized as potentially oversaturated or oversaturated. Field calcite presence has historically been observed at GH\_SEEP\_15 and GH\_WTDS but not at GH\_SEEP\_30.

Seven RSMP seeps are downstream of the GHO CCR area and upstream of the GH\_GH1 surface water monitoring location. None of the seeps in this group appear to significantly contribute flow or sulfate load to GH\_GH1. Sulfate, total selenium, and total uranium are often above BC FWAL guidelines at these seeps (group averages of 940 mg/L for sulfate, 5.2 µg/L for total selenium, and 68 µg/L for total uranium). Concentrations for these parameters are often above the BC FWAL guidelines downstream at GH\_GH1 (averages of 590 mg/L for sulfate, 120 µg/L for total selenium, and 66 µg/L for total uranium). Mann-Kendall analysis indicates that GH\_E1 has probably increasing dissolved cadmium concentrations and GH\_E3 has decreasing field pH. As in previous years, several of the seeps downstream of the GHO CCR have been categorized as potentially suboxic or suboxic. This could indicate possible suboxic zones within the GHO CCR storage facility. GH\_SEEP\_15 is the only seep in this group that was categorized as oxidic. GH\_E1 has been categorized as possibly MF influenced. Sulfate concentrations at GH\_E1 are consistently above 100 mg/L (average 1,200 mg/L) and Zn/Cd is consistently above 200 mg/mg (average 710 mg/mg). The field pH at GH\_E1 continues to be neutral (average 7.8 pH units). The calcite status of this group of seeps varies. All the seeps in this group, except for GH\_SEEP\_16 and GH\_SEEP\_22, have been categorized as potentially oversaturated or oversaturated. Calcite presence in the field has been consistently observed at GH\_E1, GH\_E3, GH\_SEEP\_21 and GH\_SEEP\_22.

GH\_SEEP\_98 is upstream of the GH\_FR1 surface water monitoring location. Samples collected thus far since GH\_SEEP\_98's addition to the RSMP have been above the sulfate and total selenium BC FWAL guidelines. There is insufficient data to conduct statistical trend analysis on this seep.

**Table 11: Summary of Trends and Controls on Water Quality for Seeps at GHO**

Seep ID	Group Name	Flow Period	Oxidation Category	MF Influence	Calcite Status (CaCO <sub>3</sub> aq)	Calcite (CaCO <sub>3</sub> aq) SI	Calcite Precipitate Presence (2022) <sup>1</sup>	Ferrihydrite Status	OC and field pH Mann-Kendall Trend <sup>2</sup>	Seasonality <sup>3</sup>	Parameters Above FWAL BCWQGs <sup>4</sup>
GH_SEEP_12	GH_PORTER_CREEK	High Flow	Oxic	Not MF Influenced	Undersaturated	0.39	No	Potentially Oversaturated	Prob. Decreasing field pH	-	Se-T
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.4	-	Oversaturated			
GH_SEEP_76	GH_LEASK_WR	High Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.72	Yes	Oversaturated	Increasing SO <sub>4</sub>	Higher Sb-D, Co-D, Ni-D, Se-D	SO <sub>4</sub> , NO <sub>3</sub> -N, NO <sub>2</sub> -N, Se-T, U-T
		Low Flow	Oxic	Not MF Influenced	Oversaturated	0.82	-	Oversaturated			
GH_SEEP_77	GH_WOLFRAM_WR	High Flow	Oxic	Not MF Influenced	Oversaturated	1	Yes	Oversaturated	-	-	SO <sub>4</sub> , NO <sub>3</sub> -N, Se-T
		Low Flow	Oxic	Potentially Not MF Influenced	Oversaturated	0.98	-	Oversaturated			
GH_SEEP_79	GH_WOLFRAM_WR	High Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.77	Yes	Oversaturated	-	-	Se-T
		Low Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.71	-	Oversaturated			
GH_SEEP_60	GH_THOMPSON_WR	High Flow	Oxic	Not MF Influenced	Undersaturated	0.3	Yes	Potentially Oversaturated	-	-	Ni-T, Se-T, U-T
		Low Flow	Oxic	Not MF Influenced	Not determined	0.45	-	Not determined			
GH_SEEP_46	GH_THOMPSON_WR	High Flow	Oxic	Not MF Influenced	Potentially Undersaturated	0.47	No	Oversaturated	-	-	SO <sub>4</sub> , NO <sub>3</sub> -N, Se-T
		Low Flow	No Samples	No Samples	No Samples	-	-	No Samples			
GH_SEEP_5	GH_THOMPSON_WR	High Flow	Oxic	Not MF Influenced	Undersaturated	-0.061	No	Potentially Oversaturated	Increasing NO <sub>3</sub> -N, Se-D, SO <sub>4</sub>	-	Se-T
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.32	-	Oversaturated			
GH_SEEP_50	GH_UPSTREAM_CCR	High Flow	Oxic	Not MF Influenced	Potentially Undersaturated	0.22	No	Oversaturated	-	-	-
		Low Flow	Oxic	Not MF Influenced	Oversaturated	0.63	-	Oversaturated			
GH_SEEP_15	GH_UPSTREAM_CCR	High Flow	Potentially Oxic	Not MF Influenced	Not determined	0.69	No	Oversaturated	-	-	-
		Low Flow	Suboxic	Not MF Influenced	Oversaturated	0.87	-	Oversaturated			
GH_SEEP_30	GH_UPSTREAM_CCR	High Flow	Oxic	Not MF Influenced	Oversaturated	1.1	No	Oversaturated	-	-	-
		Low Flow	No Samples	No Samples	No Samples	-	-	No Samples			
GH_WTDS	GH_CCR	High Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.84	No	Oversaturated	-	-	Se-T
		Low Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.85	-	Potentially Oversaturated			

Seep ID	Group Name	Flow Period	Oxidation Category	MF Influence	Calcite Status (CaCO <sub>3</sub> aq)	Calcite (CaCO <sub>3</sub> aq) SI	Calcite Precipitate Presence (2022) <sup>1</sup>	Ferrihydrite Status	OC and field pH Mann-Kendall Trend <sup>2</sup>	Seasonality <sup>3</sup>	Parameters Above FWAL BCWQGs <sup>3</sup>
GH_SEEP_16	GH_CCR	High Flow	Oxic	Not MF Influenced	No Samples	-	-	No Samples	-	-	SO <sub>4</sub> , Se-T, U-T
		Low Flow	Oxic	Not Determined	Undersaturated	0.49	-	Oversaturated			
GH_SEEP_21	GH_CCR	High Flow	Suboxic	Not MF Influenced	Oversaturated	0.96	Yes	Oversaturated	-	-	SO <sub>4</sub> , Se-T, U-T
		Low Flow	Suboxic	Not MF Influenced	Potentially Undersaturated	0.54	-	Oversaturated			
GH_SEEP_22	GH_CCR	High Flow	Not Determined	Not MF Influenced	Not determined	0.61	Yes	Oversaturated	-	-	U-T
		Low Flow	Potentially Suboxic	Not MF Influenced	Potentially Undersaturated	0.44	-	Oversaturated			
GH_SEEP_26	GH_CCR	High Flow	Suboxic	Not MF Influenced	Oversaturated	0.83	-	Oversaturated	-	-	-
		Low Flow	No Samples	No Samples	No Samples	-	-	No Samples			
GH_W-SEEP	GH_CCR	High Flow	Suboxic	Not MF Influenced	Oversaturated	0.94	-	Oversaturated	-	-	SO <sub>4</sub> , Se-T
		Low Flow	Suboxic	Not MF Influenced	Oversaturated	0.79	-	Oversaturated			
GH_E1	GH_CCR	High Flow	Suboxic	Possibly MF Influenced	Potentially Oversaturated	0.99	Yes	Oversaturated	Prob. Increasing Cd-D	-	SO <sub>4</sub> , Se-T
		Low Flow	Suboxic	Potentially Possibly MF Influenced	Potentially Oversaturated	0.84	-	Oversaturated			
GH_E3	GH_CCR	High Flow	Potentially Oxic	Not MF Influenced	Potentially Oversaturated	1	Yes	Oversaturated	Prob. Decreasing field pH	-	SO <sub>4</sub>
		Low Flow	Potentially Suboxic	Not MF Influenced	Potentially Oversaturated	0.78	-	Potentially Oversaturated			
GH_SEEP_98	GH_RAILLOOP	High Flow	Oxic	Not MF Influenced	Undersaturated	0.35	Yes	Oversaturated	-	-	SO <sub>4</sub> , Se-T
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.33	-	Oversaturated			

Notes: Categorizations labelled as "Not Determined" indicate a seep where an equal number of instances occurred for each category, so classification could not be determined.

<sup>1</sup> "-" calcite precipitate presence (2022) denotes that the seep was visited, but no calcite presence field notes were made. Low flow calcite observations were conducted in July 2022.

<sup>2</sup> "Stable or decreasing" indicates that Cd-D, NO<sub>2</sub>-N, Se-D, and SO<sub>4</sub> concentrations show stable, no trend, or decreasing trends while field pH shows a stable trend or no trend. "-" denotes that there was insufficient data to conduct trend analysis.

<sup>3</sup> "-" for seasonality denotes that no seasonality has been visually identified and for parameters above FWAL BCWQGs "-" indicates that no COIs were identified as above FWAL BCWQGs.

**Table 12: Average seasonal flow and SO<sub>4</sub> load for GHO seeps and comparison permitted surface water monitoring locations**

Permitted Surface Water Monitoring Location	Permitted Surface Water Monitoring Location Flow (m <sup>3</sup> /d)		Permitted Surface Water Monitoring Location SO <sub>4</sub> Load (kg/d)		Seep Location	Seep Flow <sup>1</sup>							
	High Flow	Low Flow	High Flow	Low Flow		High Flow		Low Flow		High Flow		Low Flow	
						Flow (m <sup>3</sup> /d)	% of Permitted Location Flow	Flow (m <sup>3</sup> /d)	% of Permitted Location Flow	SO <sub>4</sub> Load (kg/d)	% of Permitted Location Load	SO <sub>4</sub> Load (kg/d)	% of Permitted Location Load
GH_FC1	890	76	19	2	GH_SEEP_15	36	4.0%	3.8	5.0%	0.45	2.4%	2.9	190%
					GH_SEEP_30	1.2	0.13%	-	-	0.07	0.4%	-	-
					GH_WTDS	140	16%	130	170%	28	150%	22	1500%
GH_FR1	-	-	-	-	GH_SEEP_98	-	-	-	-	-	-	-	-
GH_GH1	16,000	4,500	6,200	3,400	GH_E1	30	0.18%	78	1.7%	25	0.40%	72	2.1%
					GH_E3	820	5.1%	70	1.6%	480	7.8%	42	1.2%
					GH_SEEP_16	-	-	-	-	-	-	-	-
					GH_SEEP_21	54	0.34%	22	0.49%	61	0.99%	27	0.78%
					GH_SEEP_22	41	0.26%	24	0.54%	76	1.2%	28	0.84%
					GH_SEEP_26	3.4	0.02%	-	-	7	0.11%	-	-
					GH_W-SEEP	3.4	0.02%	-	-	6.3	0.10%	-	-
GH_LC1	2,900	640	500	390	GH_SEEP_76	43	1.5%	12	1.9%	33	6.5%	6	1.5%
GH_PC1	1,300	1,400	420	540	GH_SEEP_12	-	-	3.9	0.27%	-	-	0.14	0.03%
GH_TC2	12,000	2,300	5,800	2,000	GH_SEEP_46	2	0.02%	-	-	0.91	0.02%	-	-
					GH_SEEP_5	36	0.30%	20	0.90%	4.8	0.08%	2	0.10%
					GH_SEEP_50	17	0.14%	8.2	0.36%	1.3	0.02%	1.7	0.09%
					GH_SEEP_60	18	0.15%	-	-	30	0.52%	-	-
					GH_SEEP_79	34	0.3%	8.7	0.38%	2.3	0.04%	0.69	0.04%
GH_WC1	1,900,000	2,100	1,600,000	2,200	GH_SEEP_77	530	0.03%	150	6.9%	660	0.04%	210	10%

<sup>1</sup> Due to the often-diffuse nature of seeps, seep flow measurements are inherently imprecise. The comparisons reported here should be regarded as semi-quantitative.

## 5.3 Line Creek Operation

### 5.3.1 Overview

Seep monitoring locations at LCO are presented in Figure 10. Seeps are color-coded by the comparison permitted surface water sampling location. Table 13 summarizes the seeps visited during the 2022 RSMP.

**Table 13: 2022 LCO Seeps**

Seep ID	Group Name	Comparison Permitted Surface Water Sampling Location	Permitted Surface Water Sampling Location Type	Notes	Seep Status
LC_UDHP	LC_DC_WR	LC_DCDS	SW	-	ACTIVE
LC_UDP1	LC_DC_WR	LC_DCDS	SW	-	ACTIVE
LC_SEEP8	LC_DC_WR	LC_DCDS	SW	-	ACTIVE
LC_SEEP19	LC_HSP_WR	LC_LC12	DL	-	ACTIVE
LC_3KM	LC_MSA_WR	LC_LC9	DL	-	ACTIVE
LC_SEEP1	LC_MSA_WR	LC_LC9	DL	-	ACTIVE
LC_WLC_LOT2	LC_WLC_WR	LC_WLC	DL	-	ACTIVE
LC_SEEP2	LC_MAXAM	LC_LCDSSLCC	DL	-	ACTIVE
LC_SEEP15	LC_DISTURBEDWSLOPE	LC_LCDSSLCC	DL	-	ACTIVE
LC_SEEP14	LC_DISTURBEDWSLOPE	LC_LCDSSLCC	DL	Dry Sept 2022	ACTIVE
LC_SEEP10	LC_PLANT	EV_ER4	DL	-	ACTIVE
LC_SEEP11	LC_PLANT	EV_ER4	DL	-	ACTIVE

**Notes:** Permitted surface water sampling location types are surface water (SW) or discharge location (DL).

Mann-Kendall trend analyses were completed for OC for seep samples with seven or more sampling events and are summarized in Table 14. A summary of Mann-Kendall trend analysis for all COIs is available in Appendix D.

The oxidation and MF influence categorization of seeps and modelled calcite and ferrihydrite saturation at LCO is summarised in Table 15.

**Table 14: LCO – Summary of Mann-Kendall Trend Analysis for OC**

Parameter Site ID	Dissolved Cadmium	Nitrate-N	Dissolved Selenium	Sulfate	Field pH
LC_UDHP	No Trend	No Trend	No Trend	No Trend	Stable
LC_UDP1	Stable	No Trend	Stable	Stable	Stable
LC_SEEP8	No Trend	-	Stable	-	-
LC_SEEP19	No Trend	Stable	No Trend	No Trend	Stable
LC_3KM	Decreasing	Prob. Decreasing	Decreasing	Stable	No Trend
LC_SEEP1	-	-	Decreasing	Stable	No Trend
LC_WLC_LOT2	Stable	Prob. Decreasing	Stable	Prob. Increasing	-
LC_SEEP2	No Trend	No Trend	Stable	Stable	Stable
LC_SEEP15	-	Decreasing	Decreasing	Stable	Stable
LC_SEEP14	Decreasing	-	No Trend	No Trend	-
LC_SEEP10	Prob. Decreasing	No Trend	Stable	No Trend	Prob. Decreasing
LC_SEEP11	No Trend	Stable	No Trend	No Trend	Decreasing

Notes: “-” denotes trend analysis was not completed because of insufficient data or because concentrations of parameter have been consistently less than, or marginally greater than the detection limit. Where increasing trends are noted, the cell is shaded in orange.

### 5.3.2 Discussion

#### Summary

There are 12 RSMP seeps at LCO. The seeps will be discussed from upstream to downstream along Line Creek.

All seeps at LCO were categorized as oxic and all seeps (except for LC\_SEEP1 discussed below) were categorized as not MF influenced (Table 15). Ferrihydrite was modelled and classified as oversaturated for all seeps at LCO. Modelled calcite SIs were categorized as oversaturated for five seeps (LC\_SEEP8, LC\_SEEP1, LC\_3KM, LC\_WLC\_LOT2, and LC\_SEEP15). Calcite presence has not been noted at any of these seeps. Maps of modelled calcite saturation and presence during high and low flows in Figure 11 and Figure 12, respectively, show no apparent spatial trends for calcite saturation at LCO.

A comparison of average flows during high and low flows at each LCO seep and its associated permitted surface water monitoring location is reported in Table 16. Several permitted surface water monitoring locations at LCO do not have flow measurements against which to compare because the location was not discharging or has not been measured over the monitoring period. No LCO seeps (except LC\_WLC\_LOT2 and LC\_3KM discussed below) contribute significantly to their comparison permitted surface water monitoring location counterparts.



**Table 15: Summary of Trends and Controls on Water Quality for Seeps at LCO**

Seep ID	Group Name	Flow Period	Oxidation Category	MF Influence	Calcite Status (CaCO <sub>3</sub> aq)	Calcite (CaCO <sub>3</sub> aq) SI	Calcite Precipitate Presence (2022) <sup>1</sup>	Ferrihydrite Status	OC and field pH Mann-Kendall Trend <sup>2</sup>	Seasonality <sup>3</sup>	Parameters Above FWAL BCWQGs <sup>3</sup>
LC_UDHP	LC_DC_WR	High Flow	Oxic	Not MF Influenced	Undersaturated	-0.19	No	Oversaturated	-	-	NO <sub>3</sub> -N, Se-T
		Low Flow	Oxic	Not MF Influenced	Undersaturated	-0.056	No	Oversaturated	-	Higher SO <sub>4</sub> , Se, U-D	
LC_UDP1	LC_DC_WR	High Flow	Oxic	Not MF Influenced	Undersaturated	-0.12	No	Oversaturated	-	Higher Sb-D	Se-T
		Low Flow	Oxic	Not MF Influenced	Undersaturated	-0.17	No	Oversaturated	-	-	
LC_SEEP8	LC_DC_WR	High Flow	Oxic	Not MF Influenced	Oversaturated	0.99	No	Oversaturated	-	-	Se-T
		Low Flow	Oxic	Not MF influenced	Undersaturated	0.37	No	Oversaturated	-	-	
LC_SEEP19	LC_HSP_WR	High Flow	Oxic	Not MF Influenced	Undersaturated	0.11	No	Oversaturated	-	-	SO <sub>4</sub> , NO <sub>3</sub> -N, Se-T
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.28	No	Oversaturated	-	All studied parameters.	
LC_3KM	LC_MSA_WR	High Flow	Oxic	Not MF Influenced	Oversaturated	1.0	No	Potentially Oversaturated	-	Higher SO <sub>4</sub> , Sb-D, Se	Se-T
		Low Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.76	No	Oversaturated	-	-	
LC_SEEP1	LC_MSA_WR	High Flow	Oxic	Potentially Not MF Influenced	Oversaturated	0.7	No	Oversaturated	-	Higher Ni-D	-
		Low Flow	Oxic	Potentially Not MF Influenced	Oversaturated	0.92	No	Oversaturated	-	-	
LC_WLC_LOT2	LC_WLC_WR	High Flow	Oxic	Not MF Influenced	Undersaturated	0.33	No	Oversaturated	Prob. Increasing SO <sub>4</sub>	-	SO <sub>4</sub> , Se-T, U-T
		Low Flow	Oxic	Not MF Influenced	Oversaturated	0.88	No	Oversaturated		-	
LC_SEEP2	LC_MAXAM	High Flow	Oxic	Not MF Influenced	Undersaturated	0.056	No	Oversaturated	-	Higher TDS, NO <sub>3</sub> -N, SO <sub>4</sub> , Se, U-D	NO <sub>3</sub> -N, Se-T
		Low Flow	Oxic	Not MF Influenced	Potentially Undersaturated	0.16	No	Oversaturated	-	-	
LC_SEEP15	LC_DISTURBEDWSLOPE	High Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.76	No	Oversaturated	-	-	NO <sub>3</sub> -N, Se-T
		Low Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.73	No	Oversaturated	-	-	
LC_SEEP14	LC_DISTURBEDWSLOPE	High Flow	Oxic	Not MF Influenced	Undersaturated	0.37	No	Oversaturated	-	-	NO <sub>3</sub> -N, Se-T
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.44	No	Oversaturated	-	-	
LC_SEEP10	LC_PLANT	High Flow	Oxic	Not MF Influenced	Undersaturated	0.11	No	Oversaturated	Prob. Decreasing field pH	Higher Zn-D	-
		Low Flow	Oxic	Not MF influenced	Undersaturated	0.017	No	Equilibrium		-	
LC_SEEP11	LC_PLANT	High Flow	Oxic	Not MF Influenced	Undersaturated	0.11	No	Oversaturated	Decreasing field pH	-	Se-T
		Low Flow	Oxic	Not MF Influenced	Potentially Undersaturated	0.44	No	Potentially Oversaturated		-	

Notes: Categorizations labelled as "Not Determined" indicate a seep where an equal number of instances occurred for each category, so classification could not be determined.

<sup>1</sup> "-" calcite precipitate presence (2022) denotes that the seep was visited, but no calcite presence field notes were made. Low flow calcite observations were conducted in July 2022.

<sup>2</sup> "Stable or decreasing" indicates that Cd-D, NO<sub>3</sub>-N, Se-D, and SO<sub>4</sub> concentrations show stable, no trend, or decreasing trends while field pH shows a stable trend or no trend. "-" denotes that there was insufficient data to conduct trend analysis.

<sup>3</sup> "-" for seasonality denotes that no seasonality has been visually identified and for parameters above FWAL BCWQGs "-" indicates that no COIs were identified as above FWAL BCWQGs.

## Phase I (Line Creek)

There are nine RSMP seeps in the Line Creek watershed. The seeps will be discussed from upstream to downstream along Line Creek.

### Horseshoe Ridge Seeps

LC\_SEEP19 is located on the north facing Horseshoe Ridge, downstream of previous waste rock dump areas and upstream of Horseshoe Ridge Pond and the LC\_LC12 surface water monitoring location. LC\_SEEP19 shows the most seasonality within the LCO RSMP seeps, with all COIs showing higher concentrations during low flows. Total selenium concentrations at LC\_SEEP19 (average 47 µg/L) are consistently above the BC FWAL guideline; however, concentrations are consistently below the BC FWAL guideline at the downstream LC\_LC12 surface monitoring location (average 28 µg/L). COI concentrations at LC\_SEEP19 are stable based on Mann-Kendall analysis.

### Mine Service Area Seeps

LC\_3KM and LC\_SEEP1 are downstream of the Mine Service Area (MSA) waste rock dump area and upstream of the Line Creek Rock Drain and LC\_LC9 surface water monitoring location. Based on semi-quantitative analysis, LC\_3KM is estimated to contribute up to 35% of the flow and 12% of the sulfate load to LC\_LC9, depending on the time of the year (Table 16). Before 2020, total selenium concentrations at LC\_3KM were consistently above the BC FWAL guideline. However, total selenium concentrations have since decreased to below the BC FWAL guideline. No COI concentrations at LC\_LC9 are above the BC FWAL guidelines. Mann-Kendall analysis indicates no trend for the OC concentrations at LC\_3KM or LC\_SEEP1. However, dissolved uranium concentrations are showing an increasing trend (Appendix D). LC\_SEEP1 is the only RSMP seep at LCO that has been categorized as potentially not MF influenced. However, the field pH at LC\_SEEP1 is neutral (average 8.0 pH), and the seep has been categorized as not MF influenced since 2020. Based on PHREEQC modelling, LC\_3KM and LC\_SEEP1 were classified as calcite oversaturated; however, calcite precipitate presence has not been consistently observed at either location.

### West Line Creek Seeps

LC\_WLC\_LOT2 is downstream of the West Line Creek waste rock dump area and upstream of the LC\_WLC surface water monitoring location. Based on semi-quantitative analysis, LC\_WLC\_LOT2 is estimated to contribute up to 26% of the flow and 20% of the sulfate load to LC\_WLC, depending on the time of the year (Table 16). Sulfate and total selenium concentrations at LC\_WLC\_LOT2 have been consistently above the BC FWAL guidelines (averages of 650 mg/L sulfate and 190 µg/L total selenium). In addition, Mann-Kendall analysis indicates sulfate concentrations are probably increasing. At LC\_WLC, sulfate, nitrate-N, total selenium and total uranium concentrations are above the BC FWAL guidelines (averages of 920 mg/L sulfate, 15 mg/L-N nitrate, 380 µg/L total selenium and 15 µg/L total uranium). Modelled calcite saturation changed seasonally at LC\_WLC\_LOT2 from undersaturated during high flows (average calcite SI of 0.33) to oversaturated during low flows (average calcite SI of 0.88). No calcite presence has been observed at this seep since 2018.

## LCO Valley Seeps

LC\_SEEP2, LC\_SEEP14, and LC\_SEEP15 are located in the Line Creek valley bottom, upstream of the surface water monitoring location LC\_LCDSSLCC. These three seeps do not appear to significantly contribute flow or load to LC\_LCDSSLCC. Total selenium and nitrate-N concentrations are consistently above the BC FWAL guideline at LC\_SEEP14 (average 4 µg/L selenium and 8.2 mg/L-N nitrate) and LC\_SEEP15 (average 140 µg/L selenium and 8.0 mg/L-N nitrate). Total selenium and nitrate-N concentrations fluctuate around the guideline at LC\_SEEP2. Total selenium concentrations at LC\_SEEP2 were measured at 4.8 and 1.6 µg/L during high flows and low flows, respectively, and nitrate-N concentrations were measured at 12 and 0.53 mg/L-N, respectively. Mann-Kendall analysis show no increasing trends for COI concentration at all three seeps. Downstream at LC\_LCDSSLCC, total selenium and nitrate-N concentrations are above BC FWAL guidelines (averages of 39 µg/L selenium, and 8.6 mg/L-N nitrate). LC\_SEEP15 is modelled to be potentially oversaturated for calcite, and historically some calcite presence has been noted. However, no calcite was noted at this seep in 2022. No calcite presence has been observed at LC\_SEEP2 or LC\_SEEP14 and neither seep has been categorized as potentially oversaturated or oversaturated.

## LCO Plant Seeps

LC\_SEEP10 and LC\_SEEP11 are in the plant processing area upstream of the EV\_ER4 surface water monitoring location. Based on Mann-Kendall analysis, field pH is decreasing at LC\_SEEP10 and probably decreasing at LC\_SEEP11. In addition, dissolved uranium is probably increasing (Appendix D).

## Phase II (LCO Dry Creek)

Three seeps in the RSMP are located in the LCO Dry Creek watershed downstream of the LCO Dry Creek Spoil: LC\_UDHP, LC\_UDP1, and LC\_SEEP8. All three seeps have been classified as oxic and not MF influenced. Modelled calcite SIs indicate an increasing trend going downstream, leading to a higher potential for calcite precipitate formation. However, no calcite presence has been noted at any of these locations. These three seeps do not appear to significantly contribute flow or load to LC\_DCDS.

Mann-Kendall analysis indicates that OC concentrations at these three seeps are either stable or show no trend. However, dissolved antimony and dissolved uranium are increasing, dissolved nickel and TDS are probably increasing at LC\_UDHP (Figure 13 and Appendix D). TDS is also probably increasing at LC\_UDP1. Field pH measurements show that LC\_SEEP8 pH (average 8.3 pH) is generally one pH unit higher compared to pH at LC\_UDP1 (average 7.5 pH) and LC\_UDHP (average 7.4 pH). Nitrate-N concentrations are significantly higher at the most upstream seep (LC\_UDHP) (range 3.7 to 40 mg/L-N) compared to LC\_UDP1 and LC\_SEEP8 (range 0.01 to 0.45 mg/L-N). Nitrate-N concentrations at LC\_UDHP are consistently above the BC FWAL guideline and consistently below the guideline downstream at LC\_UDP1 and LC\_SEEP8. Sulfate and dissolved selenium concentrations are also significantly higher at LC\_UDHP (sulfate ranges from 30 to 250 mg/L, and selenium ranges from 10 to 110 µg/L) compared to LC\_UDP1 and LC\_SEEP8 (sulfate ranges from 0.30 to 8.5 mg/L and dissolved selenium ranges from 0.14 to 3.2 µg/L). Total selenium concentrations are

consistently above the BC FWAL guideline at LC\_UDHP, vary around the guideline at LC\_UDP1, and are consistently below the guideline at LC\_SEEP8. Downstream at LC\_DCDS, nitrate-N and total selenium concentrations are above the BC FWAL guidelines (average 24 mg/L-N nitrate and 44 µg/L selenium).

**Table 16: Average seasonal flow and SO<sub>4</sub> load for LCO seeps and comparison permitted surface water monitoring locations**

Permitted Surface Water Monitoring Location	Permitted Surface Water Monitoring Location Flow (m <sup>3</sup> /d)		Permitted Surface Water Monitoring Location SO <sub>4</sub> Load (kg/d)		Seep Location	Seep Flow <sup>1</sup>							
	High Flow	Low Flow	High Flow	Low Flow		High Flow		Low Flow		High Flow		Low Flow	
						Flow (m <sup>3</sup> /d)	% of Permitted Location Flow	Flow (m <sup>3</sup> /d)	% of Permitted Location Flow	SO <sub>4</sub> Load (kg/d)	% of Permitted Location Load	SO <sub>4</sub> Load (kg/d)	% of Permitted Location Load
LC_DCDS	48,000	11,000	3,500	1,800	LC_SEEP8	-	-	-	-	-	-	-	-
					LC_UDHP	270	0.56%	130	1.1%	12	0.34%	18	1.0%
					LC_UDP1	11	0.02%	3	0.03%	0	0.002%	0	0.001%
EV_ER4	-	-	-	-	LC_SEEP10	110	-	88	-	16	-	12	-
					LC_SEEP11	110	-	150	-	10	-	12	-
LC_WLC	7,300	3,800	5,800	3,700	LC_WLC_LOT2	1,900	26%	380	10%	1,200	20%	230	6.1%
LC_LC12	-	-	-	-	LC_SEEP19	160	-	370	-	24	-	110	-
LC_LCDSSLCC	250,000	120,000	50,000	32,000	LC_SEEP15	110	0.05%	19	0.02%	31	0.06%	6	0.02%
					LC_SEEP2	180	0.07%	9	0.01%	5	0.01%	0	0.001%
					LC_SEEP14	8	0.003%	9	0.01%	1	0.003%	1	0.004%
LC_LC9	1,000	-	150	-	LC_3KM	360	35%	96	-	18	12%	4	-
					LC_SEEP1	10	1.0%	52	-	1	0.8%	5	-

Sources: [https://srk.sharepoint.com/sites/NACAPR002058/Internal/Task%20200%20-%20Interpretation/CAPR002058\\_Loading\\_Calculations\\_rev0\\_amd.xlsx](https://srk.sharepoint.com/sites/NACAPR002058/Internal/Task%20200%20-%20Interpretation/CAPR002058_Loading_Calculations_rev0_amd.xlsx)

<sup>1</sup> Due to the often-diffuse nature of seeps, seep flow measurements are inherently imprecise. The comparisons reported here should be regarded as semi-quantitative.

## 5.4 Elkview Operation

### 5.4.1 Overview

Seep monitoring locations at EVO are presented in Figure 14. Seeps are color-coded by the comparison permitted surface water sampling location. Table 17 summarizes the seeps visited during the 2022 RSMP.

**Table 17: 2022 EVO Seeps**

Seep ID	Group Name	Comparison Permitted Surface Water Sampling Location	Permitted Surface Water Sampling Location Type	Notes	Seep Status
EV_SEEP_CFI3	EV_CCR	EV_LC1	DL	Dry June & Sept 2022	ACTIVE
EV_SEEP_CFI2	EV_CCR	EV_LC1	SW	-	ACTIVE
EV_SEEP_CFI1	EV_CCR	EV_LC1	SW	-	ACTIVE
EV_SEEP_10MILE9	EV_CEDARWR	EV_LC1	SW	-	ACTIVE
EV_SEEP_10MILE5	EV_CEDARWR	EV_LC1	SW	-	ACTIVE
EV_CN1	EV_CEDARWR	EV_LC1	SW	-	ACTIVE
EV_SEEP_PLANT23	EV_PLANT	EV_GC2	DL	-	ACTIVE
EV_SEEP_BREAKERLAKE	EV_BALDYRIDGWR	EV_GC2	DL	-	ACTIVE
EV_SEEP_PLANT10	EV_PLANT	EV_GC2	DL	Dry Sept 2022	ACTIVE
EV_WLAGC	EV_CCR/TP	EV_GC2	DL	-	ACTIVE
EV_SEEP_PLANT11	EV_PLANT	EV_OC1	SW	-	ACTIVE
EV_SEEP_PLANT1	EV_PLANT	EV_OC1	SW	Dry Sept 2022	ACTIVE
EV_SPR1B	EV_SPARWOOD_RIDGE	EV_MC2	SW	-	ACTIVE
EV_SEEP_TURCON1	EV_BALDYRIDGWR	EV_AQ6	DL	-	ACTIVE
EV_SEEP_HOPPER2	EV_BALDYRIDGWR	EV_BC1	DL	-	ACTIVE
EV_SEEP_SOUTHPI4	EV_SOUTHSLOPE	EV_TC1	SW	-	ACTIVE
EV_SEEP_SOUTHPI3	EV_SOUTHSLOPE	EV_TC1	SW	-	ACTIVE
EV_SEEP_ERICKSON2	EV_ERICKSON_WR	EV_EC1	SW	-	ACTIVE
EV_SEEP_SOUTHPI6	EV_SOUTHPI_PIT	EV_SP1	DL	-	ACTIVE
EV_SEEP_ERICKSON1	EV_ERICKSON_WR	EV_EC1	SW	-	ACTIVE

Notes: Permitted surface water sampling location types are surface water (SW) or discharge location (DL).

Mann-Kendall trend analyses were completed for OC for seep samples with seven or more sampling events and are summarized in Table 18. A summary of Mann-Kendall trend analysis for all COIs is available in Appendix D.

The oxidation and MF influence categorization of seeps and modelled calcite and ferrihydrite saturation at EVO is summarised in Table 19.

**Table 18: EVO – Summary of Mann-Kendall Trend Analysis for OC**

Site ID	Parameter	Dissolved Cadmium	Nitrate-N	Dissolved Selenium	Sulfate	Field pH
EV_SEEP_CFI3		-	-	-	-	-
EV_SEEP_CFI2		-	-	-	-	-
EV_SEEP_CFI1		-	No Trend	Stable	-	No Trend
EV_SEEP_10MILE9		Prob. Increasing	No Trend	No Trend	Increasing	Stable
EV_SEEP_10MILE5		No Trend	Stable	No Trend	Stable	Stable
EV_CN1		No Trend	Stable	Increasing	No Trend	Stable
EV_SEEP_PLANT23		Stable	No Trend	No Trend	Stable	Prob. Increasing
EV_SEEP_BREAKERLAKE		Stable	Stable	Stable	No Trend	Stable
EV_SEEP_PLANT10		-	-	No Trend	No Trend	Stable
EV_WLAGC		-	Prob. Increasing	-	Stable	No Trend
EV_SEEP_PLANT11		No Trend	-	Stable	No Trend	No Trend
EV_SEEP_PLANT1		No Trend	-	No Trend	Stable	Prob. Increasing
EV_SPR1B		No Trend	No Trend	No Trend	Stable	No Trend
EV_SEEP_TURCON1		-	No Trend	No Trend	Stable	No Trend
EV_SEEP_HOPPER2		No Trend	Stable	No Trend	No Trend	Prob. Decreasing
EV_SEEP_SOUTHPIT4		-	-	No Trend	No Trend	Stable
EV_SEEP_SOUTHPIT3		Stable	-	Decreasing	No Trend	No Trend
EV_SEEP_ERICKSON2		Stable	Prob. Decreasing	No Trend	Stable	No Trend
EV_SEEP_SOUTHPIT6		No Trend	No Trend	Decreasing	No Trend	Stable
EV_SEEP_ERICKSON1		No Trend	-	-	Prob. Increasing	Stable

**Notes:** “-” denotes trend analysis was not completed because of insufficient data or because concentrations of parameter have been consistently less than, or marginally greater than the detection limit. Where increasing trends are noted, the cell is shaded in orange.

## 5.4.2 Discussion

### Summary

There are 20 RSMP seeps at EVO. The seeps will be discussed from North to South.

All seeps at EVO (except for EV\_SEEP\_PLANT10 discussed below) were categorized as oxic (Table 19). All seeps (except for EV\_SEEP\_ERICKSON1 and EV\_SEEP\_PLANT23 discussed below) were categorized as not MF influenced. Ferrihydrite was modelled and classified as oversaturated for all seeps at EVO except at EV\_SEEP\_TURCON1, EV\_SEEP\_PLANT10, and EV\_SEEP\_10MILE9. Modelled calcite SI indicate several seeps at EVO are categorized as oversaturated. Calcite precipitate presence in the field does not consistently correlate with calcite saturation categorization. Maps of modelled calcite saturation and presence during high and low flows in Figure 15 and Figure 16, respectively, show no apparent spatial trends for calcite saturation at EVO.

A comparison of average flows during high and low flows at each EVO seep, and its associated permitted surface water monitoring location is reported in Table 20. Five EVO seeps (EV\_CN1, EV\_SEEP\_CFI1, EV\_SEEP\_CFI2, EV\_SEEP\_HOPPER2, and EV\_SEEP\_PLANT11 discussed below) have significant flow and loading estimates compared to their comparison permitted surface water monitoring location counterpart.

### Erickson Seeps

EV\_SEEP\_ERICKSON1 and EV\_SEEP\_ERICKSON2 are downstream of the South Pit Spoil area and are compared to the EV\_EC1 surface water monitoring location. Neither seep appears to have significantly high flow or sulfate load estimates compared to EV\_EC1. EV\_SEEP\_ERICKSON2 has the highest dissolved uranium (average 17 µg/L) concentrations of the EVO RSMP seeps (averages of 2.9 µg/L uranium). In addition, EV\_SEEP\_ERICKSON2 has relatively elevated concentrations for the OCs and other COIs in comparison to the other EVO RSMP seeps. Apart from dissolved cobalt, EV\_SEEP\_ERICKSON1 (average 1.7 µg/L) has lower concentrations compared to EV\_SEEP\_ERICKSON2 (average 0.39 µg/L). Sulfate, nitrate-N, total selenium, and total uranium are consistently above the BC FWAL guidelines at both seeps (Appendix B). The same four parameters are also above BC FWAL guidelines at EV\_EC1. Mann-Kendall analysis indicates that sulfate concentrations are probably increasing at EV\_SEEP\_ERICKSON1. EV\_SEEP\_ERICKSON1 has also been categorized as possibly MF influenced during low flows. Sulfate concentrations are concisely above 100 mg/L (average 460 mg/L) and Zn/Cd fluctuates close to 200 mg/mg (average 220 mg/mg). The field pH at EV\_SEEP\_ERICKSON1 is neutral (average 7.5 pH units).

### South Pit Seeps

EV\_SEEP\_SOUTHPI6 is downstream of the South Pit Spoil and compared to the EV\_SP1 surface water monitoring location. EV\_SEEP\_SOUTHPI6 estimated sulfate load comes up to 15% compared to EV\_SP1 (Table 20). Sulfate (1,650 mg/L) and total selenium (140 µg/L) concentrations are consistently above the BC FWAL guidelines. Sulfate and total selenium concentrations are also above the BC FWAL guidelines at EV\_SP1. Dissolved selenium concentrations indicate a decreasing trend



based on Mann-Kendall analysis. Based on calcite SI modelling, EV\_SEEP\_SOUTHPI6 has been categorized as oversaturated and potentially oversaturated during high and low flows, respectively. Calcite presence has historically been observed at this seep and was observed during 2022 high flows sampling. EV\_SEEP\_SOUTHPI6 has relatively elevated TDS (2,560 mg/L), sulfate (1,650 mg/L), and dissolved uranium (6.5 µg/L) concentrations compared to other EVO RSMP seeps (averages of 1,010 mg/L TDS, 460 mg/L sulfate, and 2.9 µg/L uranium).

EV\_SEEP\_SOUTHPI3 and EV\_SEEP\_SOUTHPI4 are downstream of the South Slope area and compared to the EV\_TC1 surface water monitoring location. Based on a semi-quantitative analysis, neither seep has relatively high flows or sulfate load compared to EV\_TC1 estimates. Total selenium concentrations are above the BC FWAL guideline at EV\_SEEP\_SOUTHPI3 (average 5.3 µg/L). selenium concentrations are not likely to increase further above the BC FWAL guideline as Mann-Kendall analysis indicates a decreasing trend for dissolved selenium concentrations at EV\_SEEP\_SOUTHPI3. Total selenium concentrations are above the BC FWAL guideline at EV\_TC1 (average 9.5 µg/L).

### **Baldy Ridge Seeps**

EV\_SEEP\_HOPPER2 is downstream of the Sunshine Spoil area and compared to the EV\_BC1 surface water monitoring location. The semi-quantitative loading and flow analysis indicates that EV\_SEEP\_HOPPER2 high flow average sulfate loadings are 18% compared to EV\_BC1 high flow average sulfate loadings. Sulfate, total cobalt, total selenium, and total uranium concentrations are consistently above the BC FWAL guidelines. Concentrations for these parameters at EV\_BC1 are also above the BC FWAL guidelines. Field pH shows a probably decreasing trend based on Mann-Kendall analysis, no other notable trends are noted. Besides EV\_SEEP\_ERICKSON2, EV\_SEEP\_HOPPER2 has the highest concentrations of TDS (average 2,870 mg/L), nitrate (20 mg/L-N), sulfate (1,830 mg/L), dissolved cadmium (9.0 µg/L), dissolved cobalt (2.4 µg/L), dissolved nickel (37 µg/L), dissolved selenium (570 µg/L), and dissolved uranium (15 µg/L) compared to the other EVO RSMP seeps. Concentrations are relatively elevated for all COI. Calcite SI modelling indicates that EV\_SEEP\_HOPPER2 is potentially oversaturated during high flows. However, calcite presence has never been observed in the field at this seep.

EV\_SEEP\_TURCON1 is also downstream of the Baldy Ridge waste rock area but upstream of the EV\_AQ6 surface water monitoring location. Concentrations are relatively low at this seep, Mann-Kendall analysis indicates dissolved uranium concentrations are probably increasing.

EV\_SEEP\_BREAKERLAKE also lies within the Baldy Ridge waste rock area, upstream of the EV\_GC2 surface water monitoring location. All OC concentrations are stable or not trending based on Mann-Kendall analysis. Field pH shows a seasonal trend at EV\_SEEP\_BREAKERLAKE, with lower pH during low flows. Higher dissolved nickel concentrations coincide with lower pH values. In contrast, dissolved antimony concentrations are higher during high flows at EV\_SEEP\_BREAKERLAKE. EV\_SEEP\_BREAKERLAKE was categorized as oversaturated based on calcite SI modelling. No calcite precipitate presence has been historically observed at this seep.

## EVO Plant Seeps

One seep within the EVO plant area (EV\_SEEP\_PLANT23) is compared to the EV\_GC2 surface water monitoring location. Sulfate concentrations (average 430 mg/L) are consistently above the BC FWAL guideline at EV\_SEEP\_PLANT23 and total selenium concentrations (average 14 µg/L) are also above the BC FWAL guideline. At EV\_GC2, total selenium concentrations (50 µg/L) are consistently above the BC FWAL guideline. All OC concentrations show a stable trend, or no trend based on Mann-Kendall analysis. Field pH shows a probably increasing trend. EV\_SEEP\_PLANT23 has been consistently categorized as potentially MF influenced. Sulfate concentrations are consistently above 100 mg/L (average 430 mg/L) and Zn/Cd is consistently above 200 mg/mg (4,600 mg/mg). However, the field pH at EV\_SEEP\_PLANT23 continues to be neutral (average 7.5 pH units). Calcite SI modelling has also categorized EV\_SEEP\_PLANT23 as potentially oversaturated during low flows. Calcite presence in the field has been consistently noted each year since 2019.

Three seeps in the EVO Plant area (EV\_SEEP\_PLANT1, EV\_SEEP\_PLANT10, and EV\_SEEP\_PLANT11) are upstream of the EV\_OC1 surface water location. EV\_SEEP\_PLANT1 and EV\_SEEP\_PLANT10 do not appear to significantly contribute flow or sulfate load to EV\_OC1. Low flow average sulfate loading at EV\_SEEP\_PLANT11 is estimated to be 20% compared to low flow average sulfate loading at EV\_OC1. No OC concentrations show increasing trends based on Mann-Kendall analysis. Field pH shows a probably increasing trend. Based on calcite SI modelling, EV\_SEEP\_PLANT1 is potentially oversaturated during high flows and EV\_SEEP\_PLANT11 is potentially oversaturated during high and low flows. Calcite presence in the field has not been consistently noted at either seep. EV\_SEEP\_PLANT10 was categorized as potentially suboxic during high flows.

## EVO CCR Seeps

EV\_WLAGC is downstream of the EVO CCR area compared to the EV\_GC2 surface water monitoring location. Based on Mann-Kendall analysis, nitrate-N concentrations are probably increasing; however, nitrate-N concentrations are relatively low (average 0.02 mg/L-N).

Three seeps (EV\_CFI1, EV\_CFI2, and EV\_CFI3) within the EVO CCR area are compared to the EV\_LC1 surface water monitoring location. In Table 20, EV\_SEEP\_CFI1 and EV\_SEEP\_CFI2 are estimated to have a relatively large portion of flow and sulfate load compared to EV\_LC1. EV\_SEEP\_CFI1 has flows up to 44% compared to EV\_LC1 flows and EV\_SEEP\_CFI2 has flows up to 33% and sulfate loads up to 44% compared to EV\_LC1 estimate flows and sulfate loading. No OC concentrations show increasing trends based on Mann-Kendall analysis. Calcite SI modelling indicates that all three seeps are oversaturated. Calcite presence has been observed at each seep, but not consistently each year.

## Cedar Seeps

There are three seeps (EV\_CN1, EV\_SEEP\_10MILE5, EV\_SEEP\_10MILE9) within the Cedar waste rock area, upstream of the EV\_LC1 surface water monitoring location. In Table 20, EV\_CN1 is estimated to contribute over 100% of flow and sulfate load to the downstream EV\_LC1 location. As

with other seeps that are estimated to contribute a significant percentage of flow and/or load, flow rates at these seeps may have a high degree of uncertainty due to the challenge of measuring diffuse flow accurately. Total selenium concentrations at EV\_CN1 and EV\_SEEP\_10MILE5 are consistently above the BC FWAL guideline (averages of 170 and 47 µg/L, respectively). Dissolved selenium concentrations at EV\_CN1 are increasing based on Mann-Kendall analysis. At EV\_SEEP\_10MILE9, dissolved cadmium concentrations are probably increasing, and sulfate concentrations are increasing. Dissolved uranium concentrations are increasing at all three seeps. Downstream at EV\_LC1, total selenium concentrations are sometimes above the BC FWAL guideline (average 3.3 µg/L). EV\_SEEP\_10MILE9 has the lowest field pH of the EVO RSMP seeps (average 6.4 pH units). However, this seep has not been categorized as potentially MF influenced. EV\_SEEP\_10MILE9 does show relatively elevated dissolved cadmium concentrations. Based on calcite SI modelling, EV\_CN1 has been categorized as potentially oversaturated during low flows and EV\_SEEP\_10MILE5 has been categorized as potentially oversaturated during high flows and oversaturated during low flows. Calcite precipitate has historically been observed at both seeps, but no precipitate was observed during 2022 sampling.

### **Sparwood Ridge Seeps**

EV\_SPR1B is a new seep added to the RSMP in 2021, upstream of the EV\_MC2 surface water monitoring location. Total selenium concentrations are sometimes above the BC FWAL guideline (average 6.0 µg/L). However, Mann-Kendall analysis indicates no dissolved selenium trending. Total selenium concentration downstream at EV\_MC2 are above the BC FWAL guideline (average 12 µg/L).

**Table 19: Summary of Trends and Controls on Water Quality for Seeps at EVO**

Seep ID	Group Name	Flow Period	Oxidation Category	MF Influence	Calcite Status (CaCO <sub>3</sub> aq)	Calcite (CaCO <sub>3</sub> aq) SI	Calcite Precipitate Presence (2022) <sup>1</sup>	Ferrihydrite Status	OC and field pH Mann-Kendall Trend <sup>2</sup>	Seasonality <sup>3</sup>	Parameters Above FWAL BCWQGs <sup>3</sup>
EV_SEEP_CFI3	EV_CCR	High Flow	Oxic	Not MF Influenced	Oversaturated	1	-	Oversaturated	-	-	-
		Low Flow	No Samples	No Samples	No Samples	-	-	No Samples			
EV_SEEP_CFI2	EV_CCR	High Flow	Oxic	Not MF Influenced	Oversaturated	1.1	Yes	Oversaturated	-	-	-
		Low Flow	Oxic	Not MF Influenced	Oversaturated	0.93	Yes	Oversaturated			
EV_SEEP_CFI1	EV_CCR	High Flow	Oxic	Not MF Influenced	Oversaturated	0.92	No	Oversaturated	-	-	-
		Low Flow	Oxic	Not MF Influenced	Not determined	0.67	-	Potentially Oversaturated			
EV_SEEP_10MILE9	EV_CEDARWR	High Flow	Oxic	Not MF Influenced	Undersaturated	-1.5	No	Potentially at Equilibrium	Increasing SO <sub>4</sub> Prob. Increasing Cd-D	-	-
		Low Flow	Oxic	Not MF Influenced	Undersaturated	-1.1	No	Potentially at Equilibrium			
EV_SEEP_10MILE5	EV_CEDARWR	High Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.82	No	Oversaturated	-	-	Se-T
		Low Flow	Oxic	Not MF Influenced	Oversaturated	0.97	No	Not determined			
EV_CN1	EV_CEDARWR	High Flow	Oxic	Not MF Influenced	Not determined	0.56	No	Potentially Oversaturated	Increasing Se-D	-	SO <sub>4</sub> , Se-T
		Low Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.63	No	Oversaturated			
EV_SEEP_PLANT23	EV_PLANT	High Flow	Oxic	Possibly MF Influenced	Potentially Undersaturated	0.47	Yes	Potentially Oversaturated	Prob. Decreasing field pH	-	SO <sub>4</sub> , Se-T
		Low Flow	Oxic	Possibly MF Influenced	Potentially Oversaturated	0.75	Yes	Oversaturated			
EV_SEEP_BREAKERLAKE	EV_BALDYRIDGEWR	High Flow	Oxic	Not MF Influenced	Oversaturated	0.7	No	Oversaturated	-	Higher Sb	-
		Low Flow	Oxic	Not MF Influenced	Potentially Undersaturated	0.54	No	Oversaturated			
EV_SEEP_PLANT10	EV_PLANT	High Flow	Potentially Suboxic	Potentially Not MF Influenced	Potentially Undersaturated	0.48	No	Potentially at Equilibrium	-	-	-
		Low Flow	Potentially Oxic	Not MF Influenced	Undersaturated	0.46	-	Not determined			
EV_WLAGC	EV_CCR/TP	High Flow	Oxic	Not MF Influenced	Undersaturated	0.54	No	Oversaturated	Prob. Increasing NO <sub>3</sub> -N	Higher TDS, SO <sub>4</sub>	-
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.32	No	Oversaturated			
EV_SEEP_PLANT11	EV_PLANT	High Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.7	Yes	Oversaturated	-	-	-
		Low Flow	Oxic	Potentially Not MF Influenced	Potentially Oversaturated	0.82	No	Not determined			
EV_SEEP_PLANT1	EV_PLANT	High Flow	Oxic	Potentially Not MF Influenced	Potentially Oversaturated	0.71	No	Oversaturated	Prob. Decreasing field pH	-	-
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.5	-	Oversaturated			
EV_SPR1B	EV_SPARWOOD_RIDGE	High Flow	Oxic	Potentially Not MF Influenced	Undersaturated	0.39	-	Oversaturated	-	Higher Se-D	Se-T
		Low Flow	Oxic	Not MF Influenced	Potentially Undersaturated	0.49	-	Potentially Oversaturated			
EV_SEEP_TURCON1	EV_BALDYRIDGEWR	High Flow	Oxic	Not MF Influenced	Undersaturated	0.065	No	Equilibrium	-	-	-
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.076	No	Potentially Undersaturated			
EV_SEEP_HOPPER2	EV_BALDYRIDGEWR	High Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.6	No	Oversaturated	Prob. Decreasing field pH	-	SO <sub>4</sub> , NO <sub>3</sub> -N, Se-T, U-T, Co-T
		Low Flow	Oxic	Not MF Influenced	Potentially Undersaturated	0.5	No	Oversaturated			

Seep ID	Group Name	Flow Period	Oxidation Category	MF Influence	Calcite Status (CaCO <sub>3</sub> aq)	Calcite (CaCO <sub>3</sub> aq) SI	Calcite Precipitate Presence (2022) <sup>1</sup>	Ferrihydrite Status	OC and field pH Mann-Kendall Trend <sup>2</sup>	Seasonality <sup>3</sup>	Parameters Above FWAL BCWQGs <sup>3</sup>
EV_SEEP_SOUTHPI4	EV_SOUTHSLOPE	High Flow	Oxic	Not MF Influenced	Undersaturated	0.23	No	Oversaturated	-	Higher U-D	-
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.25	-	Oversaturated	-	-	-
EV_SEEP_SOUTHPI3	EV_SOUTHSLOPE	High Flow	Oxic	Not MF Influenced	Potentially Undersaturated	0.55	No	Oversaturated	-	Higher Se-D	-
		Low Flow	Oxic	Not MF Influenced	Not determined	0.69	-	Oversaturated	-	-	-
EV_SEEP_ERICKSON2	EV_ERICKSON_WR	High Flow	Oxic	Potentially Not MF Influenced	Potentially Undersaturated	0.78	No	Oversaturated	-	-	SO <sub>4</sub> , NO <sub>3</sub> -N, Se-T, U-T
		Low Flow	Oxic	Potentially Not MF Influenced	Potentially Undersaturated	0.41	No	Oversaturated	-	Higher Cd-D	-
EV_SEEP_SOUTHPI6	EV_SOUTHPI_PIT	High Flow	Oxic	Not MF Influenced	Oversaturated	1	Yes	Oversaturated	-	-	SO <sub>4</sub> , Se-T
		Low Flow	Oxic	Not MF Influenced	Potentially Oversaturated	0.71	No	Oversaturated	-	Lower pH, SO <sub>4</sub> , Cd-D	-
EV_SEEP_ERICKSON1	EV_ERICKSON_WR	High Flow	Potentially Oxic	Not Determined	Undersaturated	0.16	No	Oversaturated	-	-	SO <sub>4</sub>
		Low Flow	Oxic	Possibly MF Influenced	Undersaturated	0.15	-	Potentially Oversaturated	-	-	-

Notes: Categorizations labelled as "Not Determined" indicate a seep where an equal number of instances occurred for each category, so classification could not be determined.  
<sup>1</sup> "-" calcite precipitate presence (2022) denotes that the seep was visited, but no calcite presence field notes were made. Low flow calcite observations were conducted in July 2022.  
<sup>2</sup> "Stable or decreasing" indicates that Cd-D, NO<sub>3</sub>-N, Se-D, and SO<sub>4</sub> concentrations show stable, no trend, or decreasing trends while field pH shows a stable trend or no trend. "-" denotes that there was insufficient data to conduct trend analysis.  
<sup>3</sup> "-" for seasonality denotes that no seasonality has been visually identified and for parameters above FWAL BCWQGs "-" indicates that no COIs were identified as above FWAL BCWQGs.

**Table 20: Average seasonal flow and SO<sub>4</sub> load for EVO seeps and comparison permitted surface water monitoring locations**

Permitted Surface Water Monitoring Location	Permitted Surface Water Monitoring Location Flow (m <sup>3</sup> /d)		Permitted Surface Water Monitoring Location SO <sub>4</sub> Load (kg/d)		Seep Location	Seep Flow <sup>1</sup>							
	High Flow	Low Flow	High Flow	Low Flow		High Flow		Low Flow		High Flow		Low Flow	
						Flow (m <sup>3</sup> /d)	% of Permitted Location Flow	Flow (m <sup>3</sup> /d)	% of Permitted Location Flow	SO <sub>4</sub> Load (kg/d)	% of Permitted Location Load	SO <sub>4</sub> Load (kg/d)	% of Permitted Location Load
EV_AQ6	-	-	-	-	EV_SEEP_TURCON1	40	-	52	-	2.5	-	6.1	-
EV_BC1	770	930	580	700	EV_SEEP_HOPPER2	49	6.5%	33	3.5%	110	18%	81	12%
EV_EC1	20,000	14,000	14,000	10,000	EV_SEEP_ERICKSON1	150	0.72%	210	1.5%	70	0.49%	100	1.0%
					EV_SEEP_ERICKSON2	67	0.33%	15	0.11%	110	0.76%	28	0.28%
EV_GC2	5,100	2,900	1,100	830	EV_SEEP_BREAKERLAKE	-	-	-	-	-	-	-	-
					EV_SEEP_PLANT23	17	0.33%	12	0.41%	6.9	0.63%	5.5	0.66%
					EV_WLAGC	260	5.1%	130	4.4%	7.8	0.71%	3.1	0.38%
EV_LC1	240	200	16	13	EV_CN1	1600	700%	1700	840%	390	2400%	670	5000%
					EV_SEEP_10MILE5	3.5	1.5%	0.9	0.45%	1.2	7.4%	0.36	2.7%
					EV_SEEP_10MILE9	8.3	3.5%	27	14%	0.1	0.61%	0.31	2.3%
					EV_SEEP_CFI1	100	44%	57	29%	0.064	0.39%	0.049	0.37%
					EV_SEEP_CFI2	77	33%	59	29%	7.1	44%	3	23%
					EV_SEEP_CFI3	3.3	1.4%	-	-	0.5	3.1%	-	-
EV_MC2	1,500,000	220,000	130,000	32,000	EV_SPR1B	3.2	0.0002%	9.3	0.004%	0.37	0.0003%	1.2	0.004%
EV_OC1	800	360	61	15	EV_SEEP_PLANT10	1.3	0.17%	1.7	0.49%	0.85	1.4%	0.72	4.7%
					EV_SEEP_PLANT1	14	1.7%	3.7	1.0%	1.3	2.1%	0.39	2.6%
					EV_SEEP_PLANT11	26	3.2%	15	4.1%	4.7	7.7%	3	20%
EV_SP1	910	670	560	470	EV_SEEP_SOUTHPIT6	51	5.6%	43	6.5%	77	14%	70	15%
EV_TC1	1,200	430	60	30	EV_SEEP_SOUTHPIT3	20	1.7%	8.7	2.1%	1.3	2.2%	0.73	2.5%
					EV_SEEP_SOUTHPIT4	28	2.3%	27	6.3%	0.11	0.18%	0.022	0.07%

<sup>1</sup> Due to the often-diffuse nature of seeps, seep flow measurements are inherently imprecise. The comparisons reported here should be regarded as semi-quantitative.

## 5.5 Coal Mountain Mine

### 5.5.1 Overview

Seep monitoring locations at CMm are presented in Figure 17. Seeps are color-coded by the comparison permitted surface water sampling location. Table 21 summarizes the seeps visited during the 2022 RSMP.

**Table 21: 2022 CMm Seeps**

Seep ID	Group Name	Comparison Permitted Surface Water Sampling Location	Permitted Surface Water Sampling Location Type	Notes	Seep Status
CM_37PIT-SEEP-E	CM_37PIT	CM_SPD	DL	-	ACTIVE
CM_37PIT-SEEP-W	CM_37PIT	CM_SPD	DL	-	ACTIVE
CM_WD4	CM_WESTWR	CM_SPD	DL	-	ACTIVE
CM_WD7	CM_WESTWR	CM_SPD	DL	-	ACTIVE
CM_WD15-SOURCE	CM_WESTWR	CM_SPD	DL	-	ACTIVE
CM_WD18	CM_WESTWR	CM_SPD	DL	-	ACTIVE
CM_WD19	CM_WESTWR	CM_SPD	DL	-	ACTIVE
CM_MM-SEEP3	CM_MMCCR	CM_SPD	DL	-	ACTIVE
CM_NS1	CM_EASTWR	CM_SPD	DL	-	ACTIVE
CM_NS7	CM_MMCCR	CM_SPD	DL	-	ACTIVE
CM_NS4	CM_MMCCR	CM_SPD	DL	-	ACTIVE
CM_MM-SEEP1	CM_MMCCR	CM_CC1	DL	-	ACTIVE
CM_MM-SEEP5	CM_MMCCR	CM_SPD	DL	-	ACTIVE
CM_PLANT-SEEP1	CM_EASTWR	CM_SPD	DL	-	ACTIVE
CM_CCDS	CM_EASTWR	CM_CCOFF	DL	Dry Sept 2022	ACTIVE
CM_CS1	CM_EASTWR	CM_CCOFF	DL	-	ACTIVE

**Notes:** Permitted surface water sampling location types are surface water (SW) or discharge location (DL).

Mann-Kendall trend analyses were completed for OC for seep samples with seven or more sampling events and are summarized in Table 22. A summary of Mann-Kendall trend analysis for all COIs is available in Appendix D.

The oxidation and MF influence categorization of seeps and modelled calcite and ferrihydrite saturation at CMm are summarised in Table 23.

**Table 22: CMm – Summary of Mann-Kendall Trend Analysis for OC**

Site ID	Parameter	Dissolved Cadmium	Nitrate-N	Dissolved Selenium	Sulfate	Field pH
CM_37PIT-SEEP-E		Stable	Stable	No Trend	Decreasing	Prob. Increasing
CM_37PIT-SEEP-W		Decreasing	No Trend	No Trend	Decreasing	Increasing
CM_WD4		No Trend	Stable	Stable	No Trend	Stable
CM_WD7		Stable	No Trend	Stable	No Trend	No Trend
CM_WD15-SOURCE		-	-	-	-	-
CM_WD18		No Trend	No Trend	Stable	Stable	No Trend
CM_WD19		Stable	Stable	Stable	No Trend	No Trend
CM_MM-SEEP3		-	-	Stable	Stable	No Trend
CM_NS1		Decreasing	No Trend	No Trend	No Trend	No Trend
CM_NS7		Stable	No Trend	No Trend	No Trend	No Trend
CM_NS4		Stable	Stable	Prob. Decreasing	Stable	Stable
CM_MM-SEEP1		Prob. Increasing	Stable	Stable	Stable	No Trend
CM_MM-SEEP5		-	-	-	-	-
CM_PLANT-SEEP1		-	-	Stable	Decreasing	No Trend
CM_CCDS		-	-	-	-	-
CM_CS1		Prob. Increasing	No Trend	No Trend	No Trend	Stable
CM_MM-SEEP5		-	-	-	-	-

Notes: “-” denotes trend analysis was not completed because of insufficient data or because concentrations of parameter have been consistently less than, or marginally greater than the detection limit. Where increasing trends are noted, the cell is shaded in orange.

## 5.5.2 Discussion

### Summary

Six CMm seeps were categorized as potentially suboxic or suboxic (Table 23). Seven seeps were categorized as potentially MF influenced. Ferrihydrite was modelled and classified as oversaturated for all seeps at CMm. Modelled calcite saturated was categorized as oversaturated at ten CMm seeps. Maps of modelled calcite saturation and field presence during high and low flows in Figure 18 and Figure 19, respectively, show a spatial east-west divide of calcite saturation categorization during low flows at CMm, with more calcite observed along the west side of the facility.



A comparison of average flows during high and low flows at each CMm seep, and its associated permitted surface water monitoring location is reported in Table 24. No CMm seeps contribute significantly to their comparison permitted surface water monitoring location counterparts.

### 37 Pit Seeps

Two seeps (CM\_37PIT-SEEP-E and CM\_37PIT-SEEP-W) are downstream of CMm's 37 Pit and upstream of CM\_SPD. Sulfate (average of 560 mg/L at CM\_37PIT-SEEP-E and 450 mg/L at CM\_37PIT-SEEP-W) and total cobalt concentrations (average of 41 µg/L at CM\_37PIT-SEEP-E and 30 µg/L at CM\_37PIT-SEEP-W) are consistently above the BC FWAL guideline at both these seeps. Concentrations for sulfate and total cobalt are also above BC FWAL guidelines downstream at CM\_SPD (average 710 mg/L for sulfate and 23 µg/L for total cobalt). CM\_37PIT-SEEP-E has been categorized as potentially suboxic during high and low flows. Sulfate concentrations fluctuate around 500 mg/L (average 550 mg/L) and  $\text{Se}/\text{SO}_4$  is consistently below  $1 \times 10^{-5}$  mol/ml (average  $8.6 \times 10^{-7}$  mol/mol). CM\_37PIT-SEEP-E and CM\_37PIT-SEEP-W have been categorized as potentially possibly MF influenced or possibly MF influenced. Field pH at both seeps continues to be neutral (CM\_37PIT-SEEP-E average 7.4 and CM\_37PIT-SEEP-W average 7.6 pH units). Sulfate concentrations at both seeps are consistently above 100 mg/L, averaging 450 mg/L at CM\_37PIT-SEEP-W and 560 mg/L at CM\_37PIT-SEEP-E. Zn/Cd fluctuates around 200 mg/mg (average 430 mg/mg) at CM\_37PIT-SEEP-E, and is consistently above (average 510 mg/mg) at CM\_37PIT-SEEP-W.

### West Seeps

Five seeps (CM\_WD4, CM\_WD7, CM\_WD15-SOURCE, CM\_WD18, CM\_WD19) are downstream of the CMm West waste rock area and upstream of CM\_SPD. Sulfate and total selenium concentrations at all five seeps are consistently above the BC FWAL guidelines. CM\_WD15-SOURCE was categorized as suboxic during both high and low flows. CM\_WD19 was categorized as potentially suboxic during both high and low flows. Sulfate concentrations are consistently above 500 mg/L at all both seeps (average 1,420 mg/L at CM\_WD15-SOURCE and 1,040 mg/L at CM\_WD19).  $\text{Se}/\text{SO}_4$  is consistently below  $1 \times 10^{-5}$  mol/mol at CM\_WD19 (average  $7.9 \times 10^{-5}$  mol/mol) and CM\_WD15-SOURCE (average  $8.4 \times 10^{-6}$  mol/mol). Based on calcite SI modelling, all five seeps are oversaturated during low flows. Calcite presence has not been observed at CM\_WD4 but has been consistently observed at the four other seeps in this area.

### East Seeps

Two seeps (CM\_PLANT-SEEP1 and CM\_NS1) are downstream of CMm's East waste rock area and upstream of CM\_SPD. Sulfate and total selenium concentrations at CM\_NS1 are consistently above BC FWAL guidelines (average 1,400 mg/L sulfate and 18 µg/L total selenium). Total cobalt concentrations are above BC FWAL guidelines at CM\_PLANT-SEEP1 (average 5.2 µg/L). CM\_PLANT-SEEP1 has been categorized as possibly MF influenced. Sulfate concentrations are consistently above 100 mg/L (average 370 mg/L) and Zn/Cd is consistently above 200 mg/mg (average 1,880 mg/mg). The field pH at CM\_PLANT-SEEP1 is neutral (average 7.2 pH units). Calcite SI modelling indicates that CM\_PLANT-SEEP1 is potentially oversaturated and CM\_NS1 is

oversaturated. Calcite presence has been reported at this CM\_NS1 during 2021 low flow sampling and 2022 high flow sampling. Calcite precipitate presence has not been consistently observed at CM\_PLANT-SEEP1.

CM\_CS1 and CM\_CCDS are downstream of the East waste rock area and upstream of the CM\_CCOFF surface water monitoring location. Total selenium and nitrate-N concentrations are above the BC FWAL guidelines (average 130 mg/L sulfate and 5.2 µg/L total selenium) at CM\_CS1. Total selenium concentrations are above the BC FWAL guidelines (5.4 µg/L) at CM\_CCDS. Nitrate-N concentrations at CM\_CS1 are the highest across the CMm RSMP seeps (average 3.0 mg/L-N at CM\_CS1 compared to 0.56 mg/L-N). In contrast, dissolved metal concentrations at CM\_CS1 are relatively low compared to the other CMm RSMP seeps. Mann-Kendall analysis indicates that dissolved cadmium concentrations at CM\_CS1 are probably increasing.

### **CMm CCR Seeps**

Five seeps (CM\_NS4, CM\_NS7, CM\_MM-SEEP1, CM\_MM-SEEP3, and CM\_MM-SEEP5) are downstream of the CCR area. CM\_MM-SEEP1 is upstream of CM\_CC1. CM\_NS4, CM\_NS7, and CM\_MM-SEEP5 are upstream of CM\_SPD. CM\_MM-SEEP3 is not upstream of CM\_SPD. However, CM\_SPD is still the most appropriate permitted surface water comparison point for CM\_MM-SEEP3. All five seeps have sulfate concentrations above the BC FWAL guideline. CM\_NS4, CM\_NS7 and CM\_MM-SEEP1 have total selenium concentrations above the BC FWAL guideline. Total cobalt concentrations at CM\_MM-SEEP5 are above the BC FWAL guideline. Mann-Kendall analysis indicates that dissolved cadmium concentrations are probably increasing at CM\_MM-SEEP1. CM\_MM-SEEP3 is the only seep within the area with a suboxic categorization. CM\_MM-SEEP3 sulfate concentrations are consistently above 500 mg/L (average 770 mg/L) and Se/SO<sub>4</sub> is consistently below 1x10<sup>-5</sup> mol/mol (average 5.3x10<sup>-7</sup> mol/mol). Calcite SI modelling indicates oversaturation at CM\_NS4, CM\_NS7 and CM\_MM-SEEP3. Calcite presence has been observed at every seep except CM\_NS7.

**Table 23: Summary of Trends and Controls on Water Quality for Seeps at CMm**

Seep ID	Group Name	Flow Period	Oxidation Category	MF Influence	Calcite Status (CaCO <sub>3</sub> aq)	Calcite (CaCO <sub>3</sub> aq) SI	Calcite Precipitate Presence (2022) <sup>1</sup>	Ferrihydrite Status	OC and field pH Mann-Kendall Trend <sup>2</sup>	Seasonality <sup>3</sup>	Parameters Above FWAL BCWQGs <sup>5</sup>
CM_37PIT-SEEP-E	CM_37PIT	High Flow	Potentially Suboxic	Potentially Not MF Influenced	Undersaturated	0.086	No	Oversaturated	-	Lower pH, Higher TDS, Cd-D, Co-D, Ni-D	SO <sub>4</sub> , Co-T
		Low Flow	Potentially Suboxic	Potentially Possibly MF Influenced	Potentially Undersaturated	0.46	-	Potentially Oversaturated			
CM_37PIT-SEEP-W	CM_37PIT	High Flow	Potentially Oxidic	Possibly MF Influenced	Potentially Undersaturated	0.47	Yes	Potentially Oversaturated	-	-	Co-T
		Low Flow	Not Determined	Potentially Not MF Influenced	Potentially Undersaturated	0.55	-	Potentially Oversaturated			
CM_WD4	CM_WESTWR	High Flow	Oxidic	Not MF Influenced	Undersaturated	0.4	No	Oversaturated	-	Higher Cd-D, Ni-D, Se-D	SO <sub>4</sub> , Se-T
		Low Flow	Oxidic	Not MF Influenced	Oversaturated	0.93	No	Not determined			
CM_WD7	CM_WESTWR	High Flow	Oxidic	Not MF Influenced	Undersaturated	0.39	No	Oversaturated	-	Lower pH, Higher Sb-D, Cd-D, Se-D	Se-T
		Low Flow	Oxidic	Not MF Influenced	Oversaturated	1.1	-	Oversaturated			
CM_WD15-SOURCE	CM_WESTWR	High Flow	Suboxic	Not MF Influenced	Undersaturated	-	Yes	Undersaturated	-	-	-
		Low Flow	Suboxic	Not Determined	Oversaturated	1	Yes	Oversaturated			
CM_WD18	CM_WESTWR	High Flow	Oxidic	Not MF Influenced	Oversaturated	0.89	Yes	Oversaturated	-	Higher Cd-D	SO <sub>4</sub> , Se-T
		Low Flow	Oxidic	Not MF Influenced	Oversaturated	1	Yes	Oversaturated			
CM_WD19	CM_WESTWR	High Flow	Potentially Suboxic	Potentially Not MF Influenced	Potentially Oversaturated	1.1	Yes	Oversaturated	-	Higher Cd-D	SO <sub>4</sub> , Se-T
		Low Flow	Potentially Suboxic	Potentially Possibly MF Influenced	Oversaturated	0.96	Yes	Oversaturated			
CM_MM-SEEP3	CM_MMCCR	High Flow	Suboxic	Not MF Influenced	Oversaturated	0.93	Yes	Oversaturated	-	Higher SO <sub>4</sub>	SO <sub>4</sub>
		Low Flow	Suboxic	Not MF Influenced	Oversaturated	1	Yes	Potentially Undersaturated			
CM_NS1	CM_EASTWR	High Flow	Oxidic	Not MF Influenced	Potentially Oversaturated	0.69	Yes	Oversaturated	-	Higher Cd-D, Se-D	SO <sub>4</sub> , Se-T
		Low Flow	Potentially Oxidic	Not MF Influenced	Oversaturated	0.99	No	Oversaturated			
CM_NS7	CM_MMCCR	High Flow	Oxidic	Not MF Influenced	Oversaturated	0.84	No	Oversaturated	-	Higher Sb-D, Cd-D, Se-D	SO <sub>4</sub> , Se-T
		Low Flow	Potentially Suboxic	Potentially Possibly MF Influenced	Oversaturated	0.91	No	Oversaturated			
CM_NS4	CM_MMCCR	High Flow	Oxidic	Not MF Influenced	Oversaturated	0.88	Yes	Oversaturated	-	Higher NO <sub>3</sub> -N, Sb-D, Se-D	SO <sub>4</sub> , Se-T
		Low Flow	Potentially Suboxic	Not MF Influenced	Oversaturated	0.94	No	Potentially Oversaturated			
CM_MM-SEEP1	CM_MMCCR	High Flow	Oxidic	Not MF Influenced	Undersaturated	0.41	Yes	Oversaturated	Prob. Increasing Cd-D	-	Se-T
		Low Flow	Oxidic	Not MF Influenced	Potentially Undersaturated	0.48	Yes	Oversaturated			
CM_MM-SEEP5	CM_MMCCR	High Flow	Oxidic	Not MF Influenced	Undersaturated	0.099	Yes	Oversaturated	-	-	SO <sub>4</sub> , Co-T
		Low Flow	Oxidic	Possibly MF Influenced	Undersaturated	0.56	Yes	Oversaturated			

Seep ID	Group Name	Flow Period	Oxidation Category	MF Influence	Calcite Status (CaCO <sub>3</sub> aq)	Calcite (CaCO <sub>3</sub> aq) SI	Calcite Precipitate Presence (2022) <sup>1</sup>	Ferrihydrite Status	OC and field pH Mann-Kendall Trend <sup>2</sup>	Seasonality <sup>3</sup>	Parameters Above FWAL BCWQGs <sup>3</sup>
CM_PLANT-SEEP1	CM_EASTWR	High Flow	Oxic	Possibly MF Influenced	Undersaturated	0.28	No	Potentially Oversaturated	-	-	Co-T
		Low Flow	Oxic	Possibly MF Influenced	Undersaturated	0.24	No	Potentially Oversaturated			
CM_CCDS	CM_EASTWR	High Flow	Oxic	Not MF Influenced	Undersaturated	-0.052	-	Oversaturated	-	-	Se-T
		Low Flow	No Samples	No Samples	No Samples	-	-	No Samples			
CM_CS1	CM_EASTWR	High Flow	Oxic	Not MF Influenced	Undersaturated	0.27	No	Oversaturated	Prob. Increasing Cd-D	Higher Se-D	Se-T, NO <sub>3</sub> -N
		Low Flow	Oxic	Not MF Influenced	Undersaturated	0.27	No	Oversaturated		Higher NO <sub>3</sub> -N, Co-D	

**Notes:** Categorizations labelled as "Not Determined" indicate a seep where an equal number of instances occurred for each category, so classification could not be determined.

<sup>1</sup> "-" calcite precipitate presence (2022) denotes that the seep was visited, but no calcite presence field notes were made. Low flow calcite observations were conducted in July 2022.

<sup>2</sup> "Stable or decreasing" indicates that Cd-D, NO<sub>3</sub>-N, Se-D, and SO<sub>4</sub> concentrations show stable, no trend, or decreasing trends while field pH shows a stable trend or no trend. "-" denotes that there was insufficient data to conduct trend analysis.

<sup>3</sup> "-" for seasonality denotes that no seasonality has been visually identified and for parameters above FWAL BCWQGs "-" indicates that no COLs were identified as above FWAL BCWQGs.

**Table 24: Average seasonal flow and SO<sub>4</sub> load for CMm seeps and comparison permitted surface water monitoring locations**

Permitted Surface Water Monitoring Location	Permitted Surface Water Monitoring Location Flow (m <sup>3</sup> /d)		Permitted Surface Water Monitoring Location SO <sub>4</sub> Load (kg/d)		Seep Location	Seep Flow <sup>1</sup>							
	High Flow	Low Flow	High Flow	Low Flow		High Flow		Low Flow		High Flow		Low Flow	
						Flow (m <sup>3</sup> /d)	% of Permitted Location Flow	Flow (m <sup>3</sup> /d)	% of Permitted Location Flow	SO <sub>4</sub> Load (kg/d)	% of Permitted Location Load	SO <sub>4</sub> Load (kg/d)	% of Permitted Location Load
CM_CC1	61,000	22,000	37,000	16,000	CM_MM-SEEP1	28	0.0%	13	0.1%	5.3	0.01%	2	0.01%
CM_CCOFF	33,000	12,000	23,000	9,500	CM_CCDS	920	3%	-	-	140	1%	-	-
					CM_CS1	67	0%	6.1	0%	9.2	0%	0.62	0%
CM_SPD	16,000	6,400	11,000	4,800	CM_37PIT-SEEP-E	380	2.3%	-	-	200	1.8%	-	-
					CM_37PIT-SEEP-W	27	0%	0.36	0%	7.4	0%	0.035	0%
					CM_MM-SEEP3	7.2	0.04%	3.9	0.1%	5.8	0.051%	2.7	0.06%
					CM_MM-SEEP5	9.9	0%	17	0%	3.8	0%	5.1	0%
					CM_NS1	84	1%	18	0%	98	1%	28	1%
					CM_NS4	48	0%	6.6	0.1%	30	0%	5.5	0%
					CM_NS7	110	1%	18	0%	85	1%	17	0%
					CM_PLANT-SEEP1	3.4	0.02%	3.4	0.1%	1.3	0.01%	1.2	0.03%
					CM_WD15-SOURCE	380	2.3%	69	1.1%	490	4.30%	100	2.10%
					CM_WD18	150	0.9%	21	0.3%	210	1.8%	33	0.7%
CM_WD19	120	1%	34	0.5%	120	1%	38	0.8%					
CM_WD4	1000	6%	170	2.7%	380	3%	95	2%					
CM_WD7	4.6	0.03%	13	0.2%	0.54	0.0%	1.9	0.0%					

<sup>1</sup> Due to the often-diffuse nature of seeps, seep flow measurements are inherently imprecise. The comparisons reported here should be regarded as semi-quantitative.

## 6 Regional Interpretation

### 6.1 Seasonality and Year-on-Year Trends

No consistent year-on-year trends were identified during the Mann-Kendall analysis across all seeps at any one operation or across the Elk Valley as a whole. As previously discussed in the operation-specific sections above, some individual seeps were identified to be showing potential seasonality or year-on-year trends.

### 6.2 Solubility Controls

#### 6.2.1 pH

Across the Elk Valley, pH greater than 7 continues to dominate seepages due to the strong control exerted by the dissolution of carbonate minerals. However, pH has been observed to be below 6 in some areas. pH measured in the seeps during 2022 ranged from 6.5 to 9 except for at EV\_SEEP\_10MILE9. The low pH measurements (2022 samples ranged from 6.2 to 6.7) reported at EV\_SEEP\_10MILE9 showed no other indicators of acidity, such as relatively elevated metal or sulfate concentrations (see Section 5.4.2). Therefore, these low pH measurements are likely not influenced by local PAG materials.

The dominant circumneutral to alkaline pH measured in the seepages across the Elk Valley operations is inferred to act as a solubility control on select parameters. For example, molybdenum shows a positive qualitative correlation with pH in Figure 20. As pH increases, molybdenum is expected to increase (i.e., become more mobile). Dissolved selenium shows no qualitative correlation with pH in Figure 21. Therefore, changes to pH in the range observed across the Elk Valley are not expected to impact dissolved selenium mobility. Dissolved cobalt shows a qualitative negative correlation with pH in Figure 22. As pH increases, dissolved cobalt concentrations are expected to decrease (i.e., become less mobile). The graphs for dissolved molybdenum and dissolved cobalt are examples of elements for which pH may act as a solubility control.

Out of 88 seeps, Mann-Kendall analysis indicates that five seeps show an increasing field pH trend, and nine seeps show a decreasing field pH trend. At FRO, probably increasing field pH at FR\_CCSEPE1 corresponds with increasing uranium concentrations. At CMm, increasing pH at CM\_37PIT-SEEP-E and CM\_37PIT-SEEP-W corresponds with decreasing cobalt concentrations. Apart from the trends noted at these three seeps, the valley-wide trend of pH acting as a control on select parameters is not reflected at a local seep scale.

#### 6.2.2 Mineral Saturation Indices

Across the Elk Valley, 55% of seeps had modelled calcite saturation above 0.6, indicating oversaturation (calcite precipitation may be occurring) for one or both flow regimes. Calcite SIs during low flow were generally higher than in high flows, reflecting the more dilute conditions resulting from snowmelt. Across all operations, calcite saturation for 19% of seeps changed seasonally in 2022. Just over half of the seeps that had a seasonal change in calcite saturation changed from undersaturated

during high flows to oversaturated during low flow (10% of all Elk Valley seeps). The remaining seeps seasonally changed calcite saturation in the opposite direction (9% of all Elk Valley seeps).

Figure 23 shows modelled calcite SI compared to the modelled partial pressure of carbon dioxide ( $p\text{CO}_2$ ).  $p\text{CO}_2$  above  $10^{-3.4}$  atm indicates  $\text{CO}_2$  is over-pressurized (dashed vertical line in Figure 23). As seeps equilibrate with atmospheric pressure, dissolved  $\text{CO}_2$  will decrease along the flow path (White 2020). pH will increase as a result, and calcite may become oversaturated and precipitate. Most seeps in the Elk Valley have  $p\text{CO}_2 > 10^{-3.4}$ , indicating over-pressurization (Figure 23).

No seeps in the Elk Valley had a gypsum SI above zero (-0.41 to -0.11); hence they are not likely to precipitate gypsum. Most seeps (99%) are in equilibrium or oversaturated with ferrihydrite. This may be because iron is commonly non-detect and ferrihydrite SIs are a function of the detection limit. However, the alkaline pH and dominantly oxidizing conditions of the area support the finding that the majority of seeps are in equilibrium or oversaturated with ferrihydrite.

### 6.3 Effect of Low Oxygen Conditions

In reducing environments, iron and manganese may be released through the reductive dissolution of oxyhydroxides. Other metals (e.g., cobalt, nickel, and zinc) adsorbed or co-precipitated with iron, and manganese minerals may also be released. Lower manganese concentrations tended to be associated with higher field DO concentrations (Figure 24). In contrast, higher manganese concentrations were spread across the field DO range measured during the seep sampling events. Qualitatively, a similar relationship between iron and field DO was observed, but to a lesser extent because iron was not detected in many samples (Figure 25). Seeps did not show a correlation of concentrations of other metals with field DO.

Figure 26 shows the suboxic indicator ratio  $\text{Se}/\text{SO}_4$  compared to field DO measurements. There is a cluster of data points where field DO and  $\text{Se}/\text{SO}_4$  are relatively elevated and scatter across the range of  $\text{Se}/\text{SO}_4$  at lower field DO. The scatter is generally consistent with expectations, and it is conceivable that low  $\text{Se}/\text{SO}_4$  can be present under a wide range of DO because water can reoxygenate after being reduced. Still, higher  $\text{Se}/\text{SO}_4$  is less likely to be present in suboxic waters. The criterium previously set by SRK (2019) for identifying suboxic conditions, where  $\text{Se}/\text{SO}_4$  is less than  $1 \times 10^{-5}$  mol/mol, appear to continue to provide a generally reliable indication of waters affected by suboxic conditions.

## 7 Seep Dataset Modifications

### 7.1 New Seeps Review

This section describes the methodology used to evaluate new seep(s) identified in 2022. Teck identified one new seep at CMm in 2022 (Table 25). No new seeps were identified at FRO, GHO, LCO, or EVO in 2022.

The newly identified seeps were compared to the nearest seep sampled in 2022 based on the seep groupings developed by SRK (2019). Seeps were compared based on oxidation categorization, MF categorization, and BCWQG exceedances for sulfate, selenium, and nitrate-N. The new seeps were considered different from the closest historical seep if the categorization of oxidation and MF influence were different, or the new seeps had more or different BCWQG exceedances for sulfate, selenium, or nitrate-N than the comparison seeps' water quality results.

Table 26 summarizes the oxidation, MF influence categorization, and the BCWQG exceedance screening of the newly identified seep to their RSMP seep counterparts sampled in 2022.

**Table 25: New seep identified in 2022 in relation to historical seep location**

Operation	Group Name	Seep ID	Sampling Dates	Nearest Historical Seep Sampled in 2022 in Same Group	Distance to 2022 Seep (m)
CMm	CM_WESTWR	CM_WD9-SOURCE	Oct 28, 2022	CM_WD7	350

**Table 26: New seep: Oxidation, MF Influence, and BCWQGs comparison**

Type	Seep ID	High Flows		Low Flows		BCWQG Exceedances of SO <sub>4</sub> , Se, and NO <sub>3</sub> in 2022
		Oxidation	MF Influence	Oxidation	MF Influence	
New	CM_WD9-SOURCE	N/A	N/A	Suboxic	No MF Influence	1 Exceedance for SO <sub>4</sub> and Se-T for 1 sample
Existing	CM_WD7	Oxic	No MF Influence	Oxic	No MF Influence	2 Exceedances for Se-T for 2 samples

*Notes:* Italicized rows indicate historical seeps

CM\_WD9-SOURCE should be added to the current set of seeps to be monitored during 2023 because it was categorized as suboxic during 2022 low flows, which is different from the closest historical seep (CM\_WD7), which has been consistently categorized as oxic since 2018.

### 7.2 Seep Retirement Review

Following the seep retirement framework laid out in SRK (2021), the following two seeps at FRO listed in Table 27 have been retired from the RSMP, effective January 2, 2023.

**Table 27: RSMP seeps identified for retirement in 2022**

Seep ID	Seep Group	Reason for Retirement
FR_SHNSEEP1	FR_SHANDLEY_WR	Covered over by a road.
FR_FSEAMWSEEP4	FR_FSEAM_WR	Spoiled over and last sampled in 2018.

FRO personnel conducted a retirement survey in 2022 to confirm the retirement of FR\_SHNSEEP1 and FR\_FSEAMWSEEP4 from the RSMP.



## 8 Summary

The following are noted for the 2022 Elk Valley RSMP:

- The RSMP has been implemented with an approach consistent with that used for RGMP, follow-up requirements from EMLI, and previous recommendations made by SRK.
- Data quality was found to be acceptable based on the findings of a QA/QC assessment conducted in support of this report.
- Several parameters' year-on-year trends were identified based on a quantitative review of water quality time-series.
- Valley-wide geochemical interpretations show broad consistency with expected trends. Metals generally become more mobile as pH decreases except when speciated as an oxyanion (i.e., molybdenum and uranium). Evidence for sub-oxic conditions is shown by lower Se/SO<sub>4</sub>, and higher iron and manganese concentrations when dissolved
- One new seep (CM\_WD19-SOURCE) was identified at CMm in 2022.
- Two seeps at FRO (FR\_SHNSEEP1 and FR\_FSEAMWSEEP4) have been retired from the RSMP, effective January 1, 2023.
- One new seep at CMm (CM\_WD9-SOURCE) has been added to the RSMP for sampling in 2023 and onwards.

## Closure

This report, Elk Valley Regional Seep Monitoring: 2022 Annual Report, was prepared by

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Anne Day, MLWS, GIT  
Consultant

and reviewed by



The image shows a professional geoscientist seal for S. J. Day, Province of British Columbia. The seal is circular with a scalloped edge and contains the text "PROFESSIONAL PROVINCE OF BRITISH COLUMBIA GEOSCIENTIST". A handwritten signature is written over the seal, and the date "March 6, 2023" is written below it.

---

Stephen Day, MSc, PGeo  
Corporate Consultant, Geochemistry

All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices.

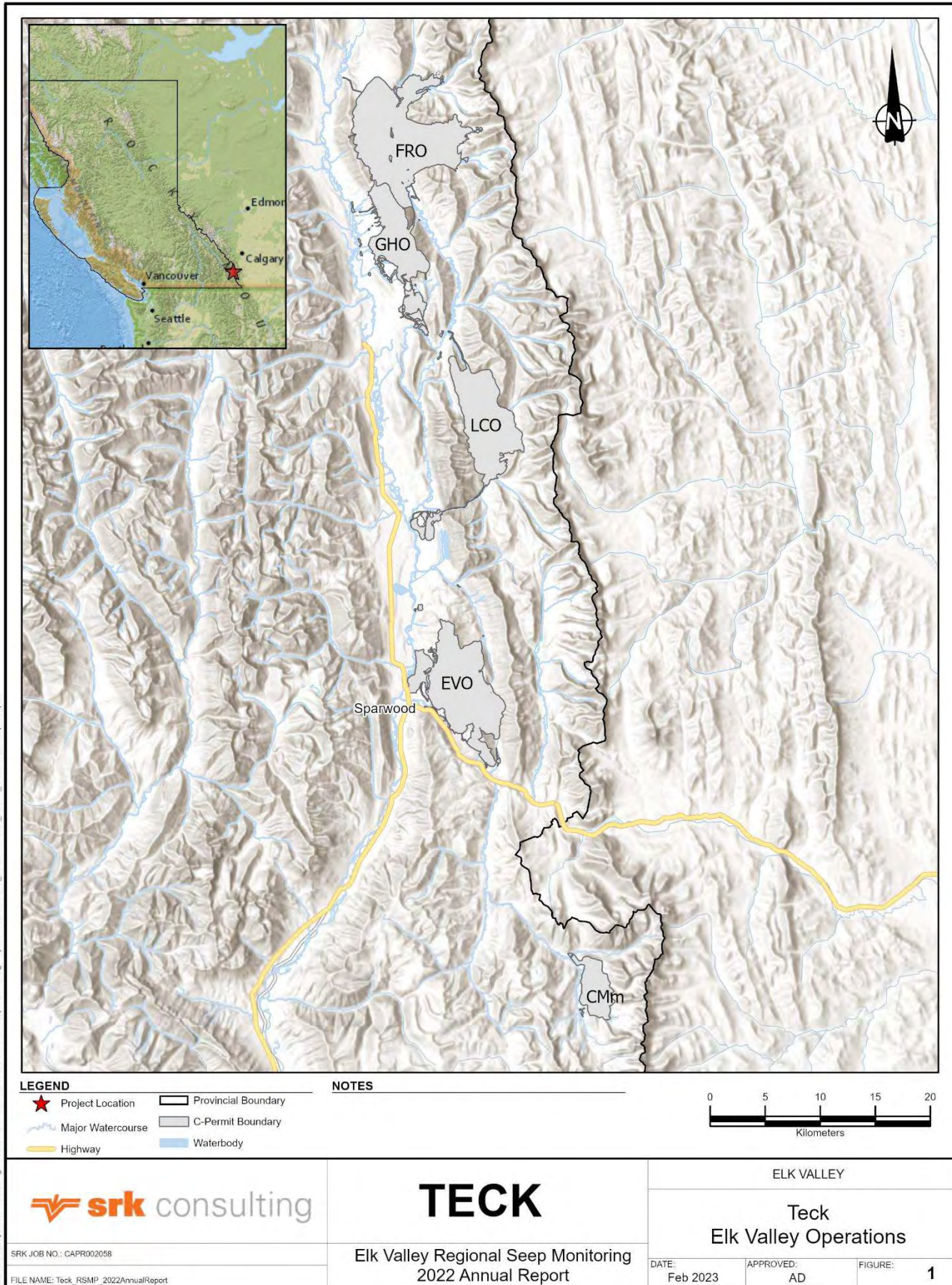
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## Figures

**Figure 1: Teck Operations Map**



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Figure 2: 2022 Seeps and Selected Surface Water Monitoring Locations - FRO

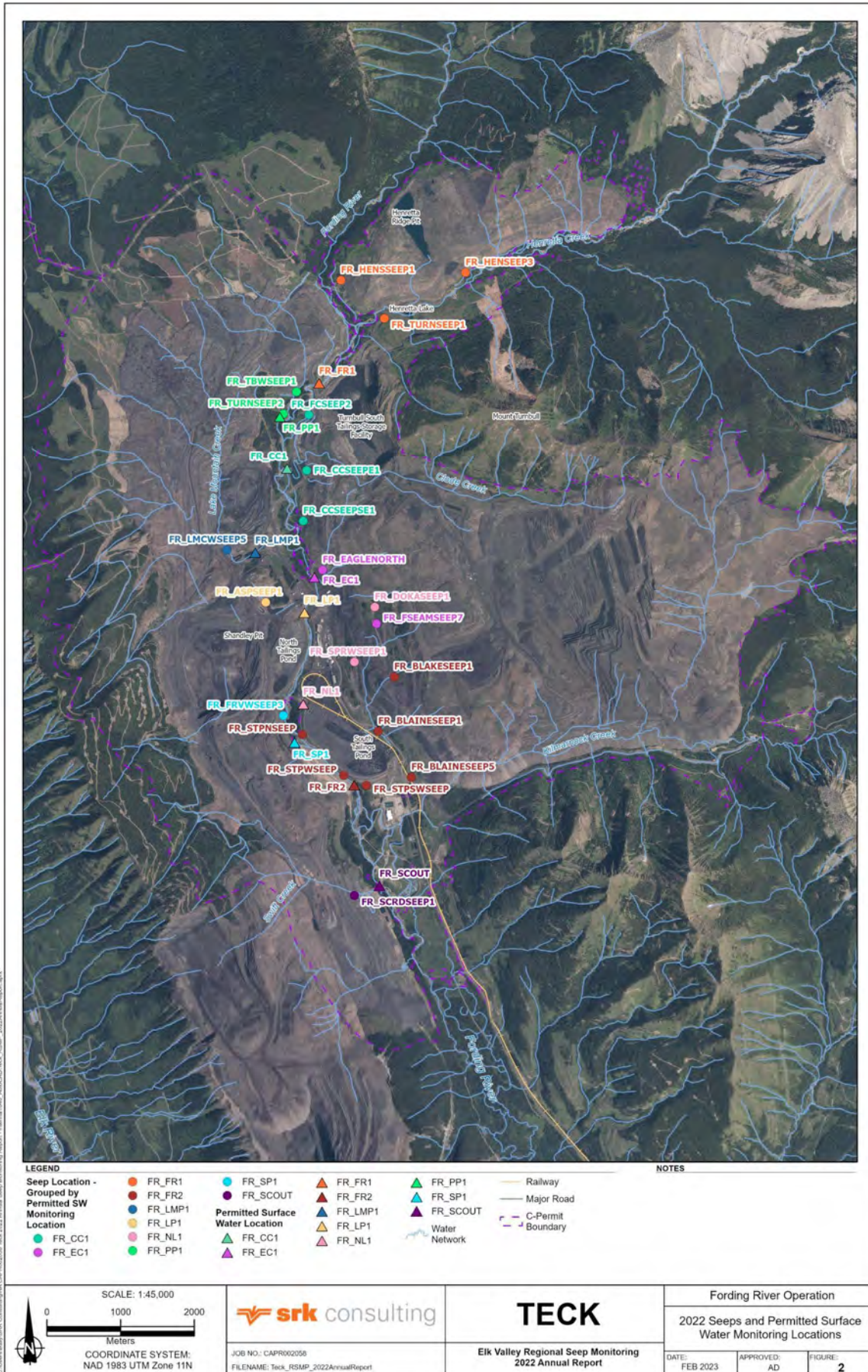


Figure 3: High Flow Calcite Saturation - FRO

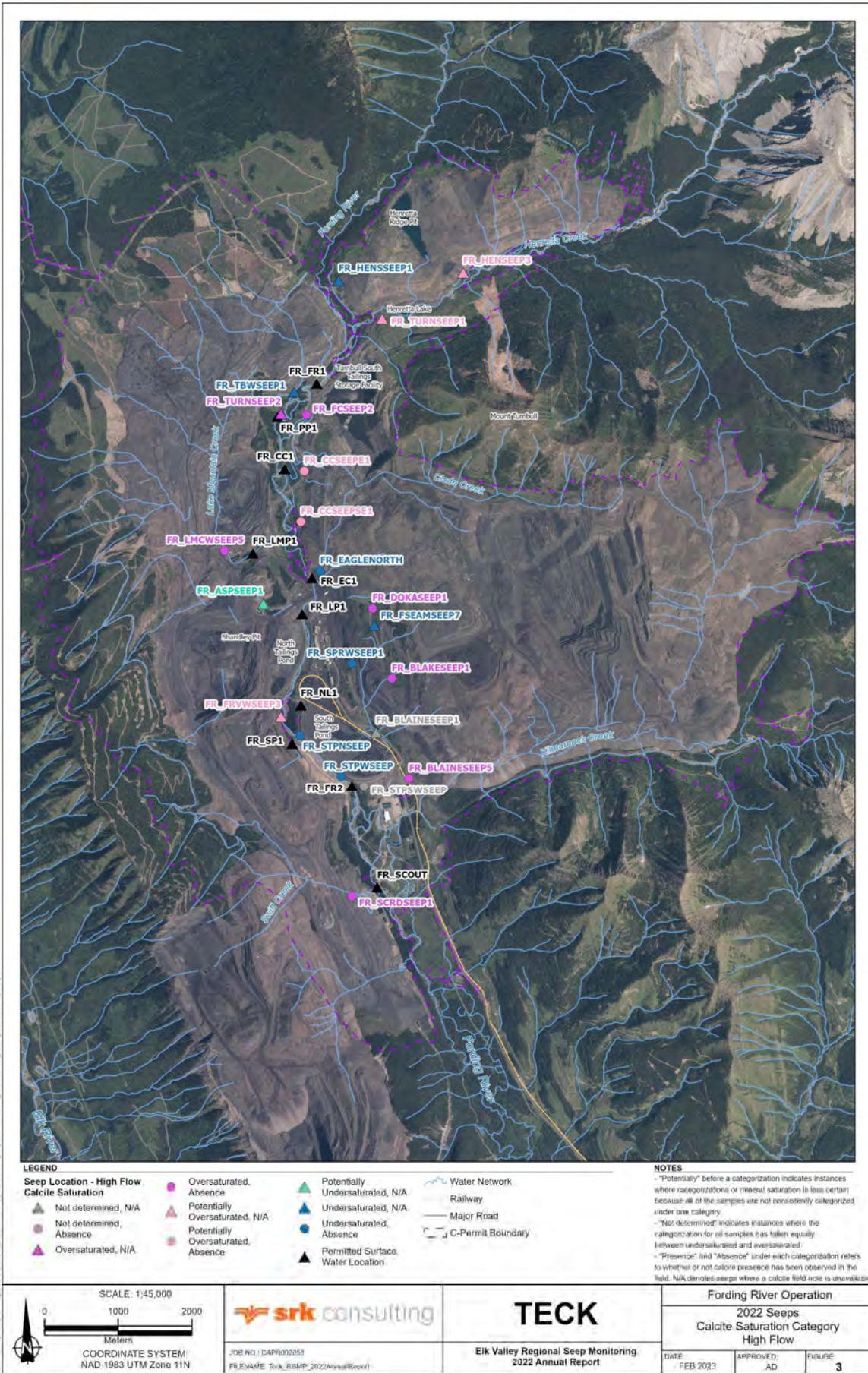


Figure 4: Low Flow Calcite Saturation - FRO

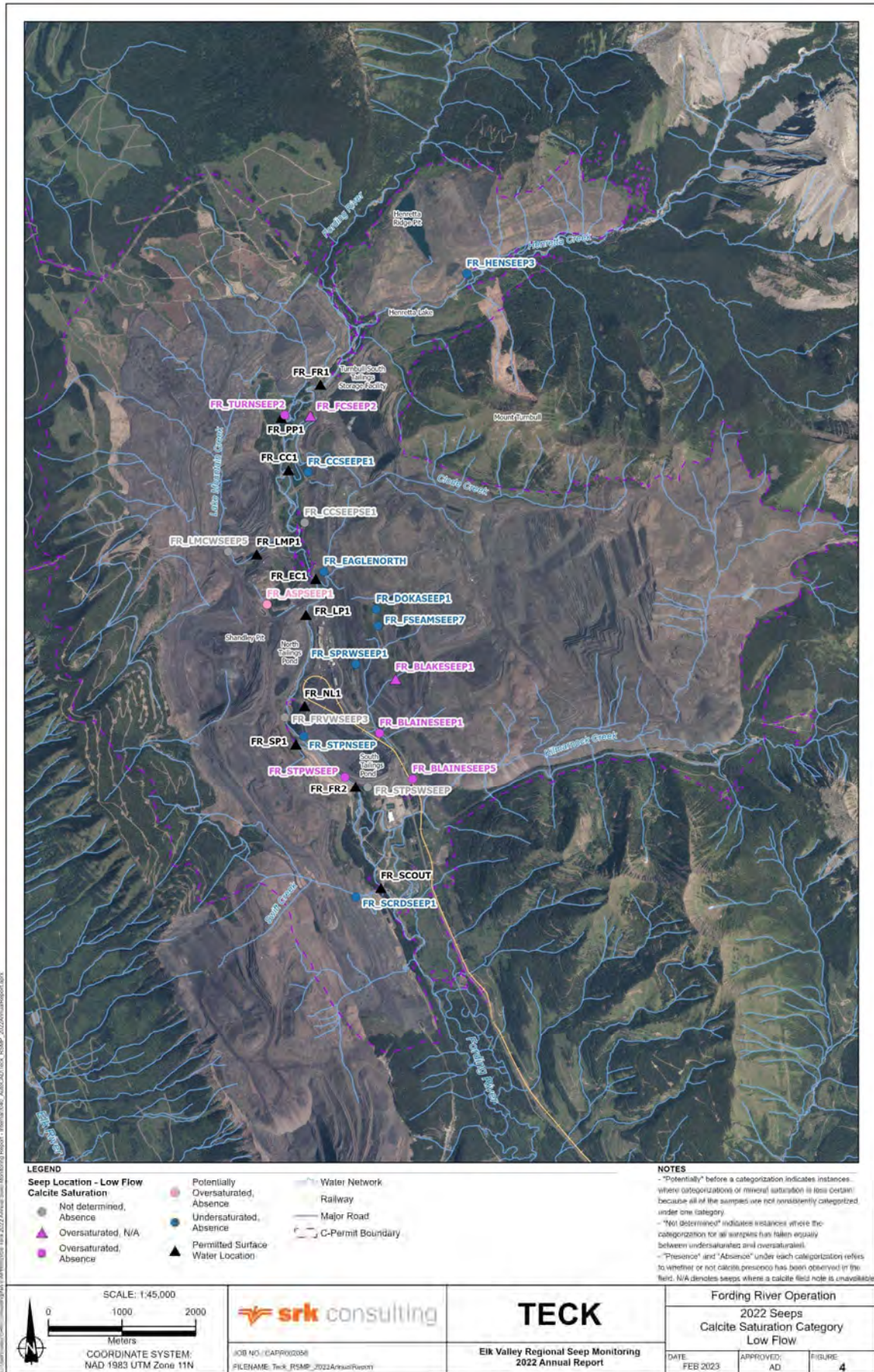




Figure 5: Constituents of Interest Concentration Timeseries at FR\_SCRDSEEP1

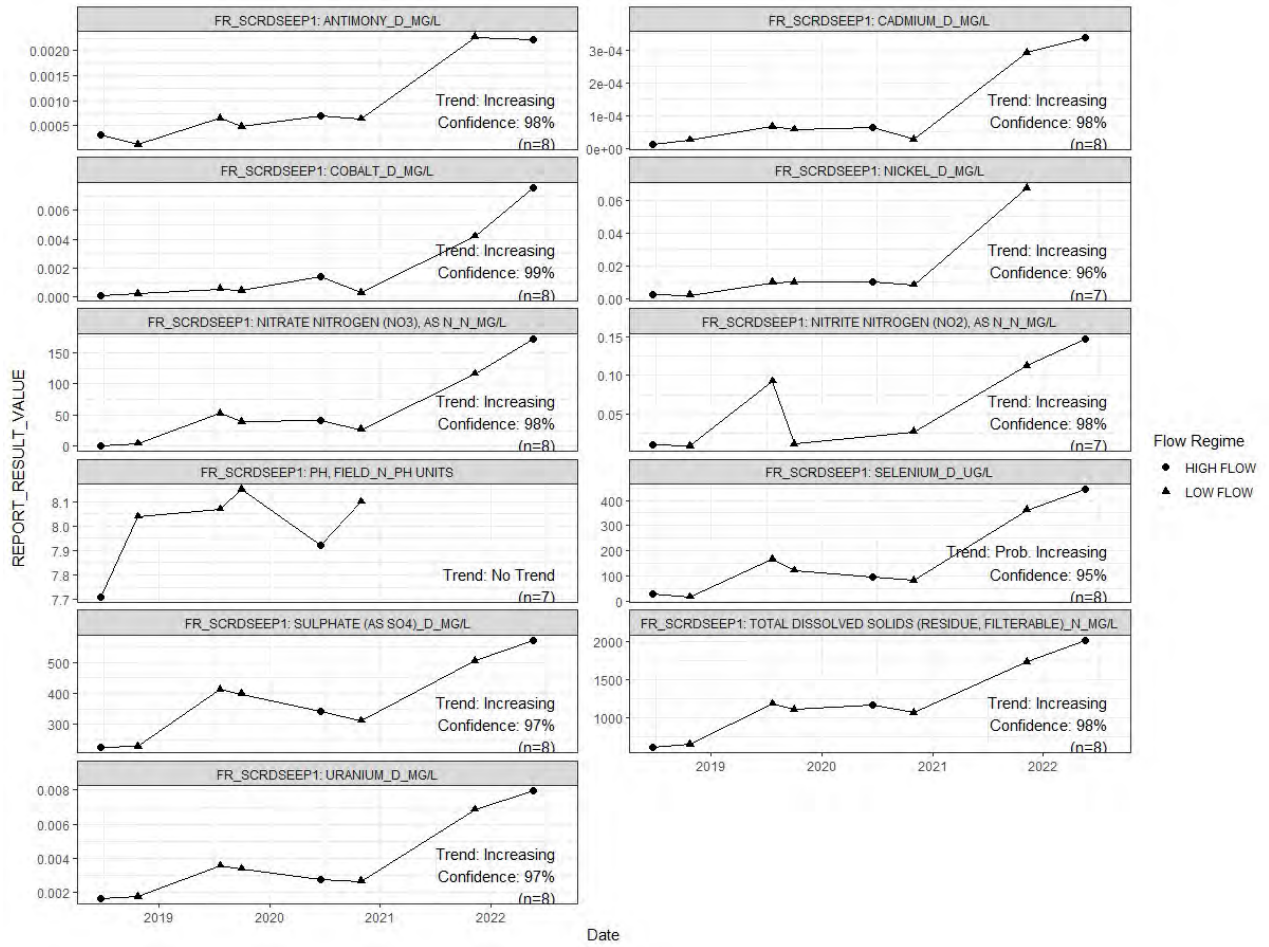


Figure 6: 2022 Seeps and Selected Surface Water Monitoring Locations - GHO

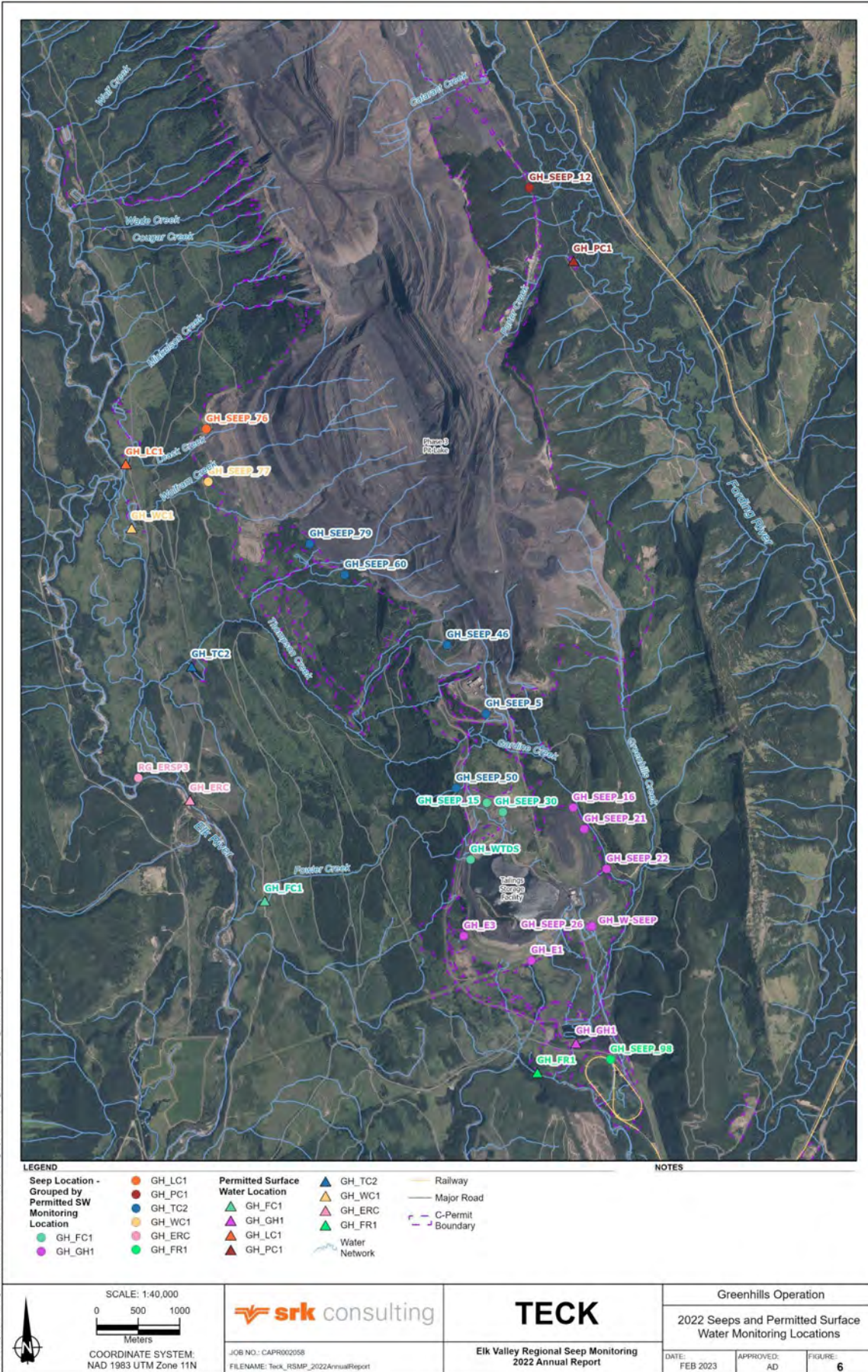


Figure 7: High Flow Calcite Saturation - GHO

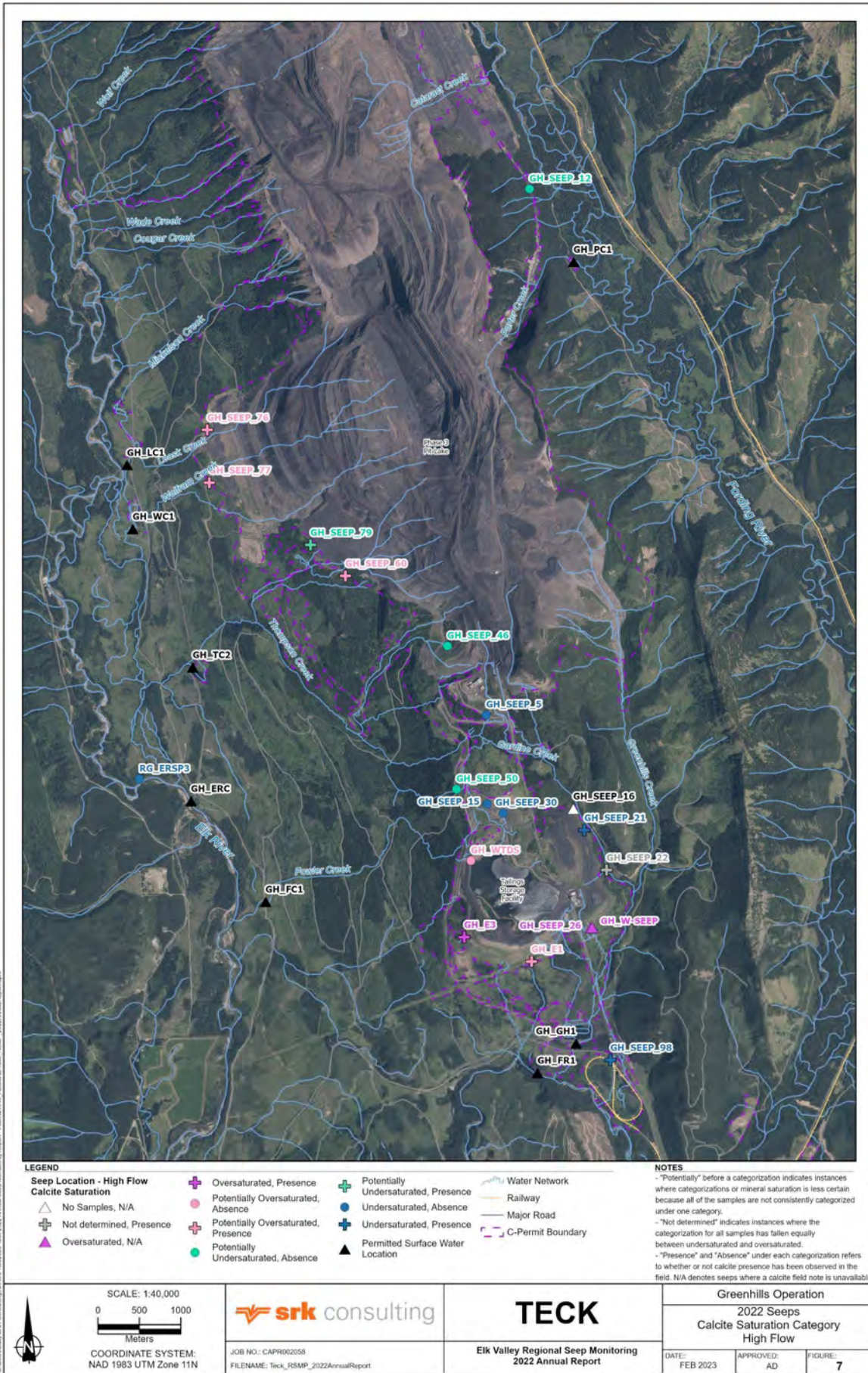
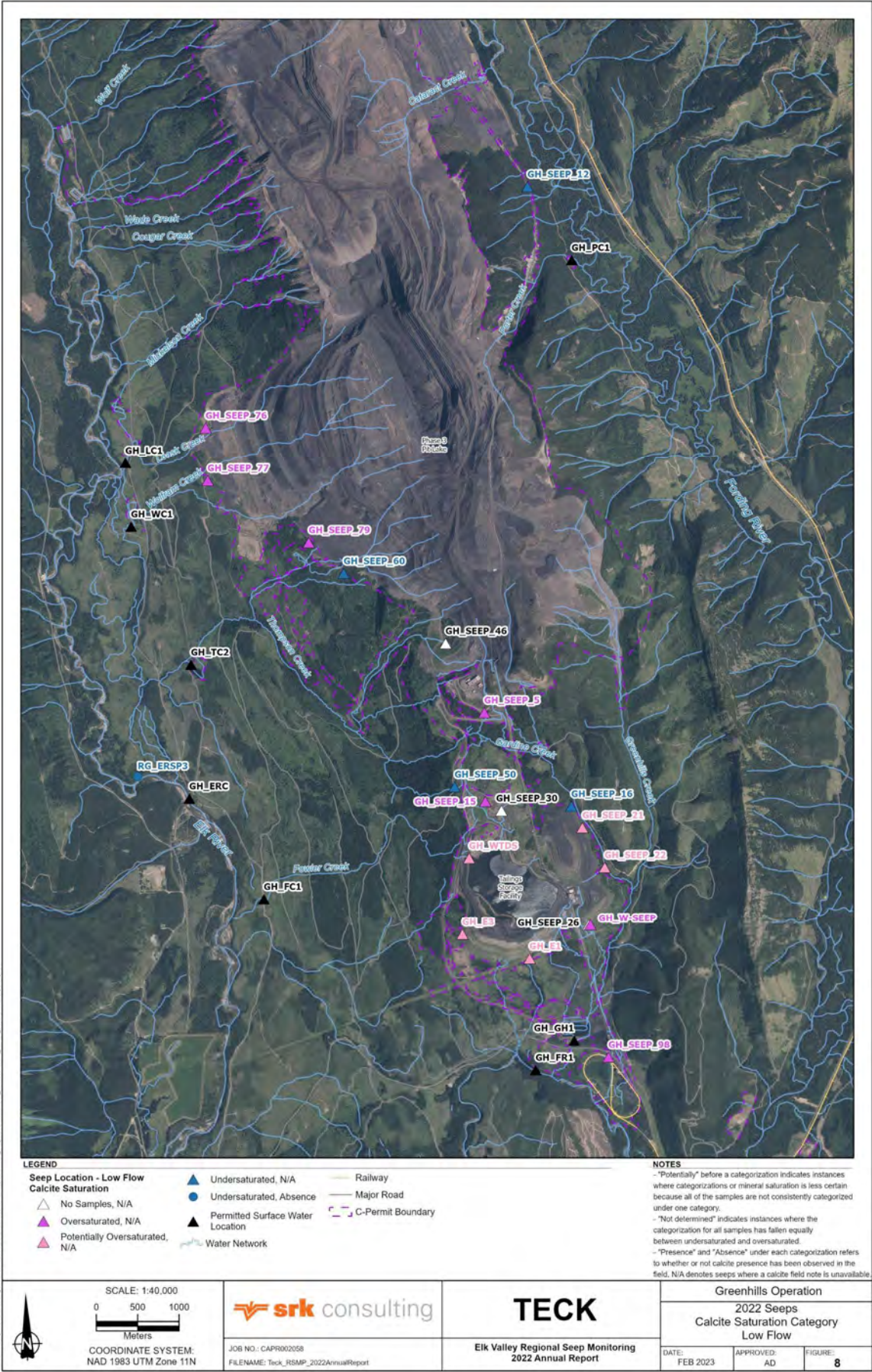


Figure 8: Low Flow Calcite Saturation - GH0



**Figure 9: Constituents of Interest Concentration Timeseries at GH\_SEEP\_5**

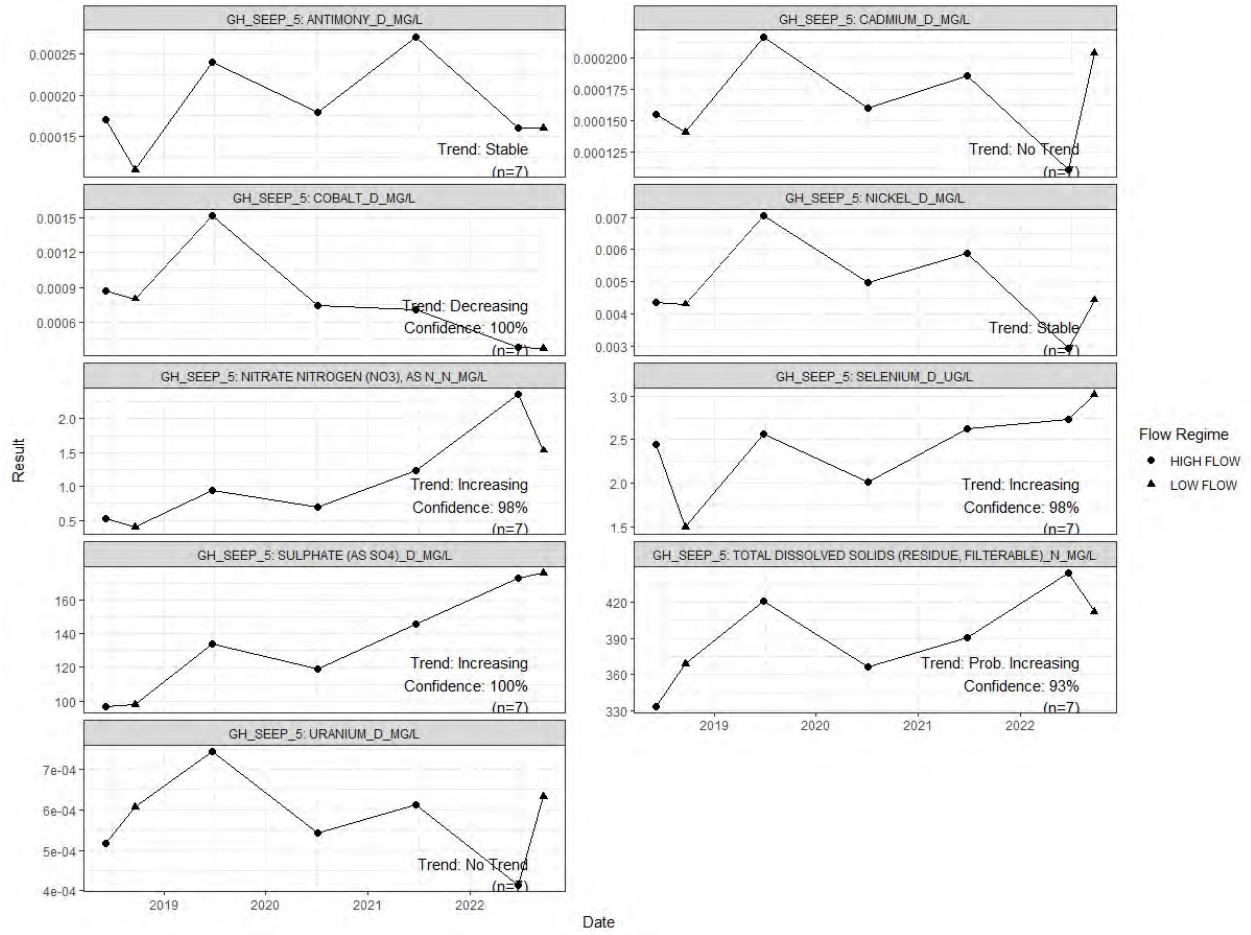


Figure 10: 2022 Seeps and Selected Surface Water Monitoring Locations - LCO

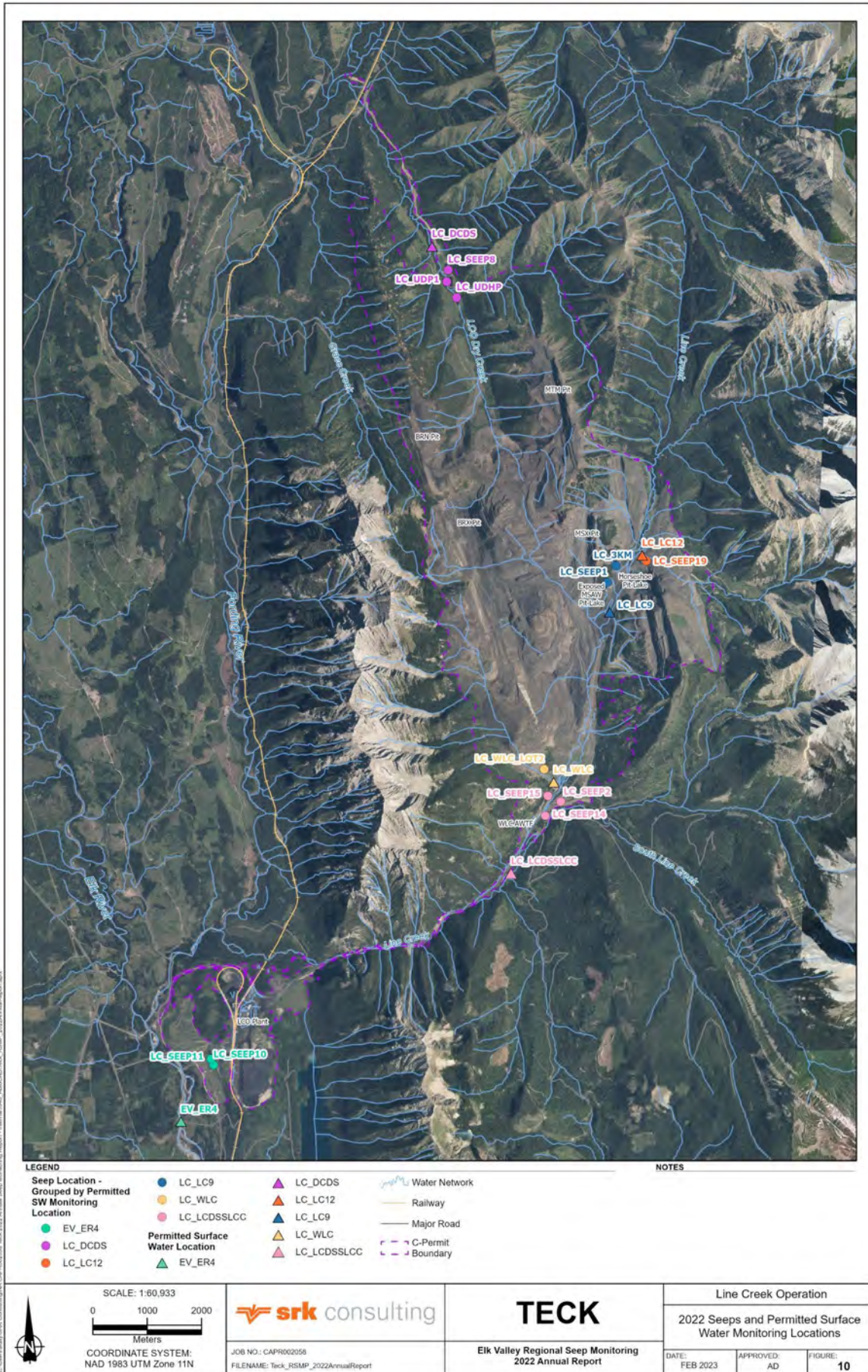


Figure 11: High Flow Calcite Saturation - LCO

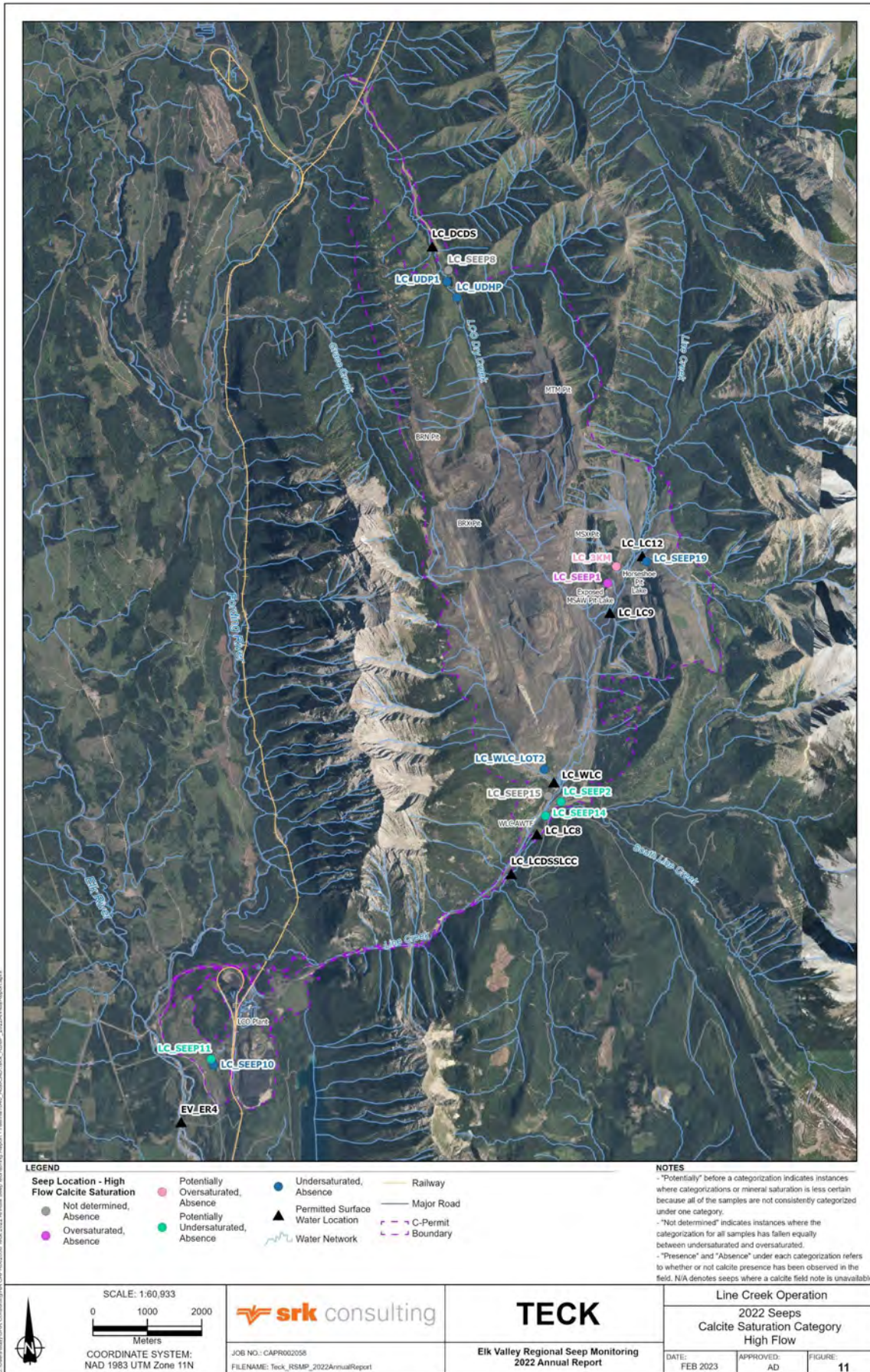
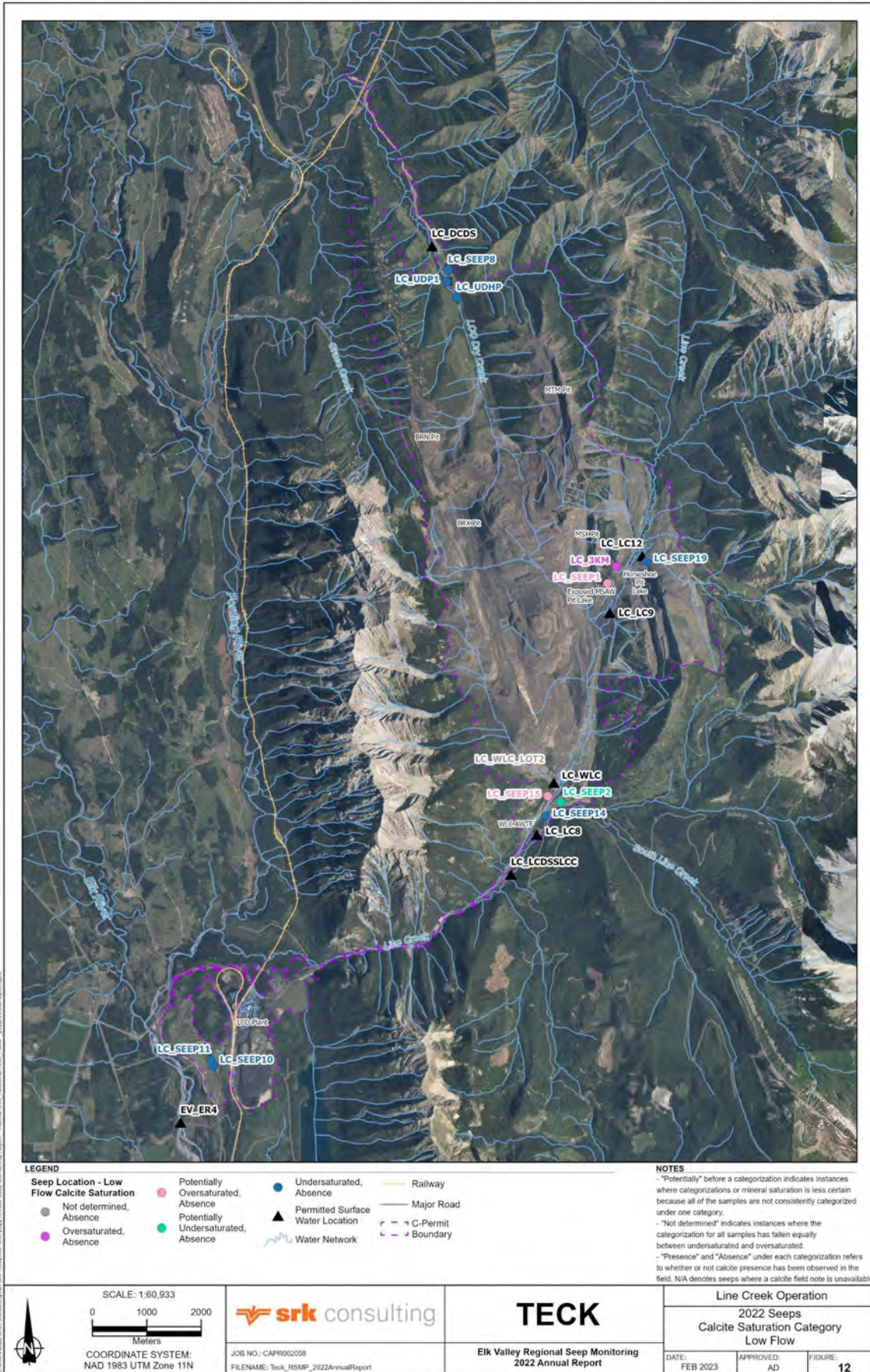


Figure 12: Low Flow Calcite Saturation - LCO





**Figure 13: Constituents of Interest Concentration Timeseries at LC\_UDHP**

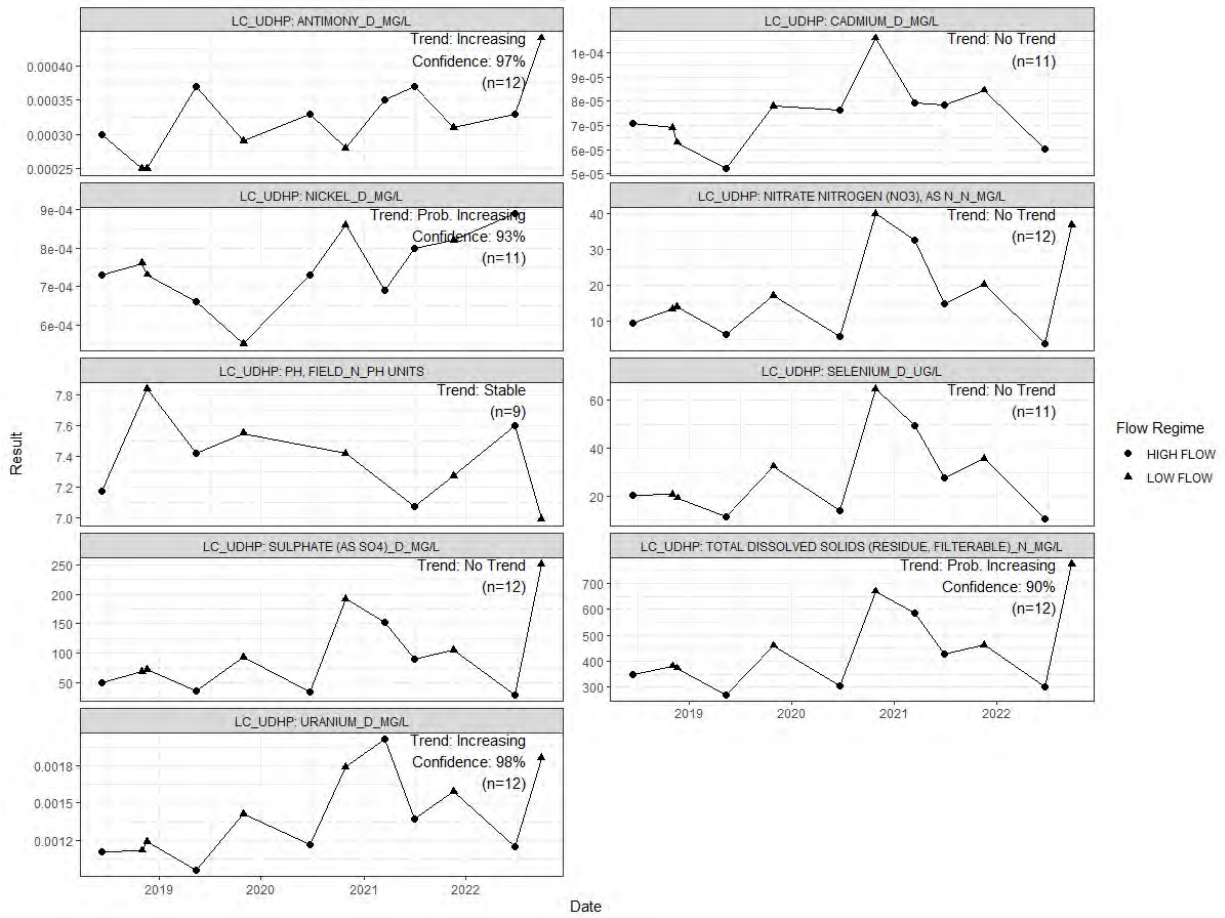


Figure 14: 2022 Seeps and Selected Surface Water Monitoring Locations - EVO

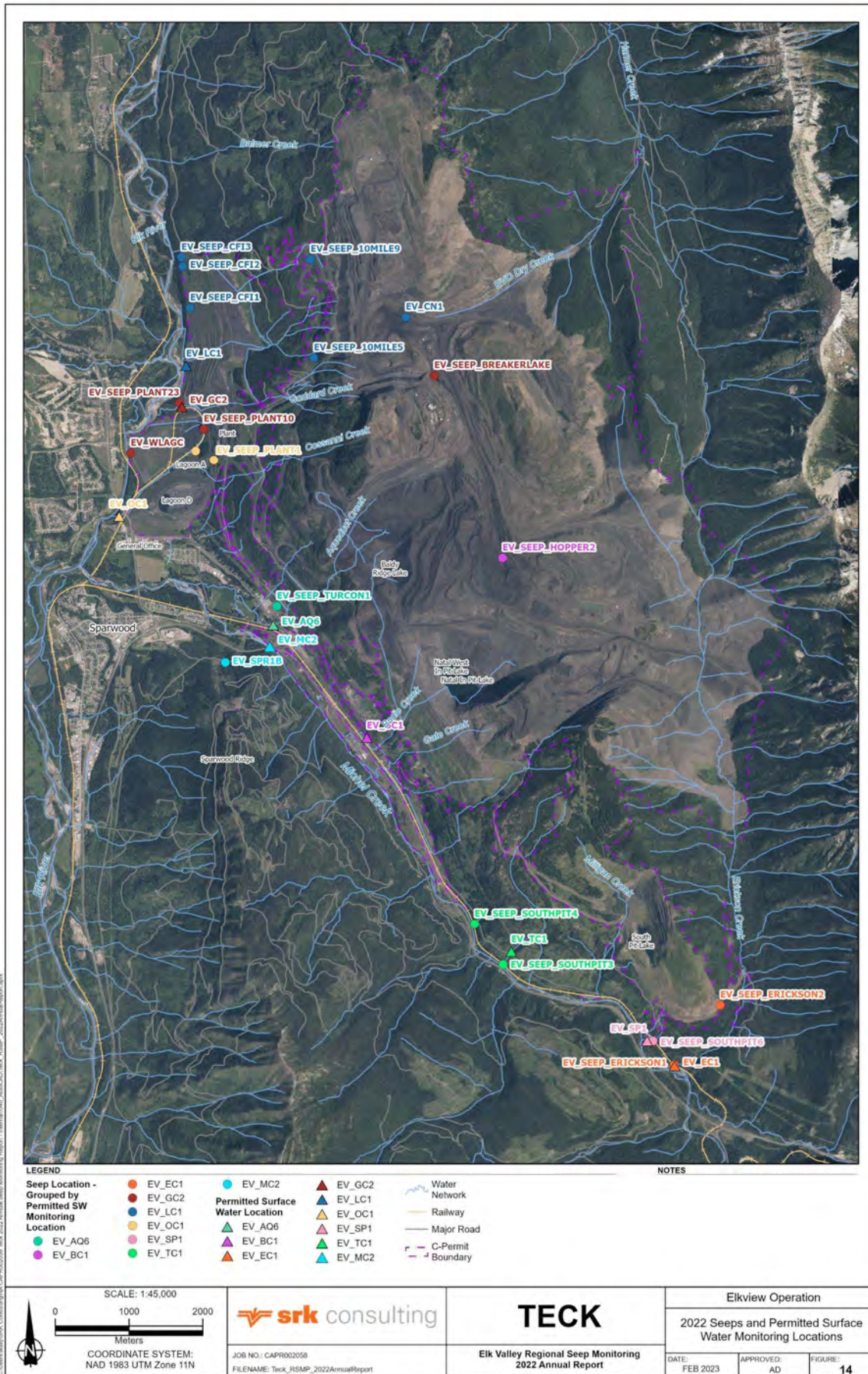


Figure 15: High Flow Calcite Saturation - EVO

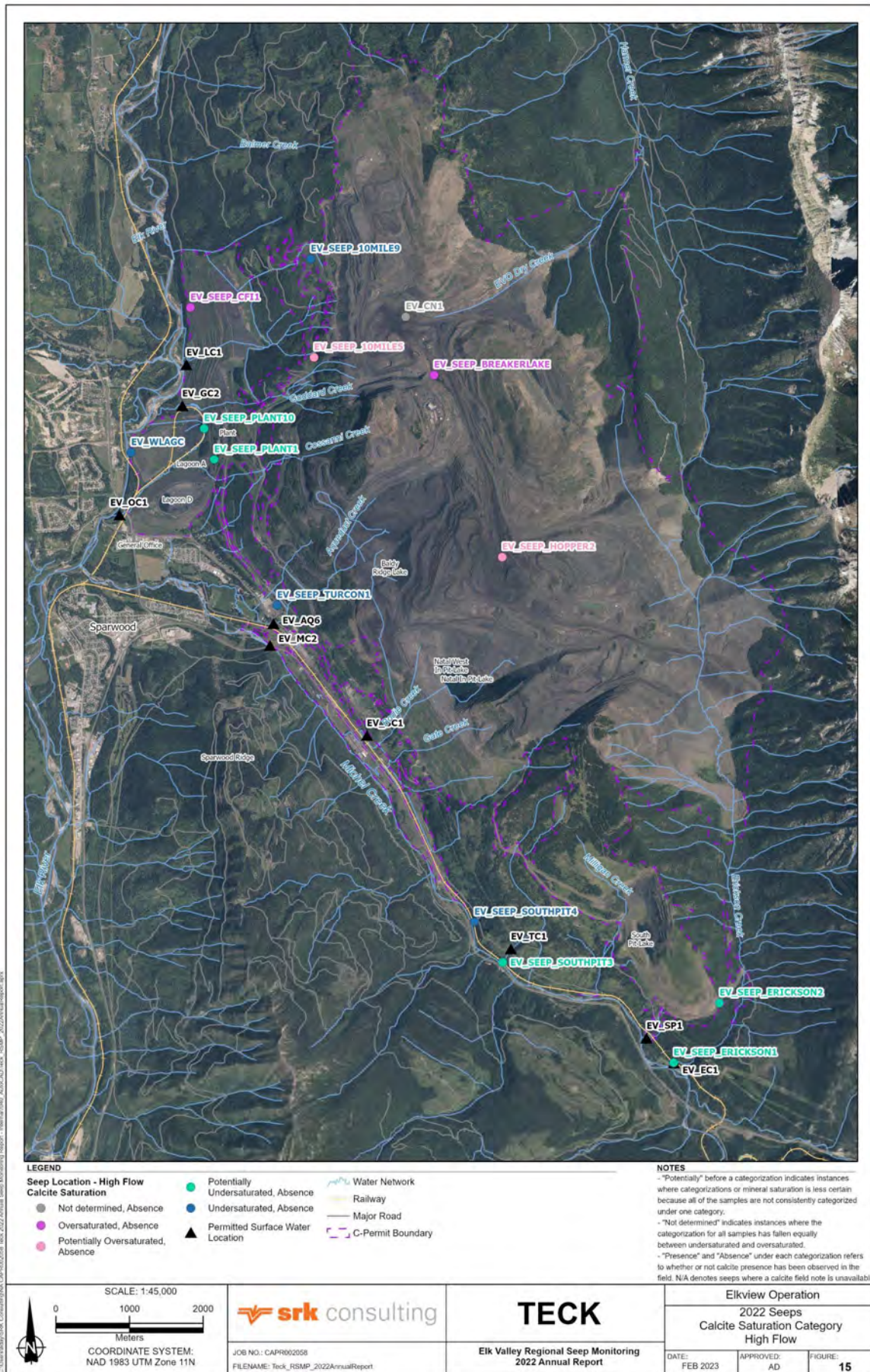


Figure 16: Low Flow Calcite Saturation - EVO

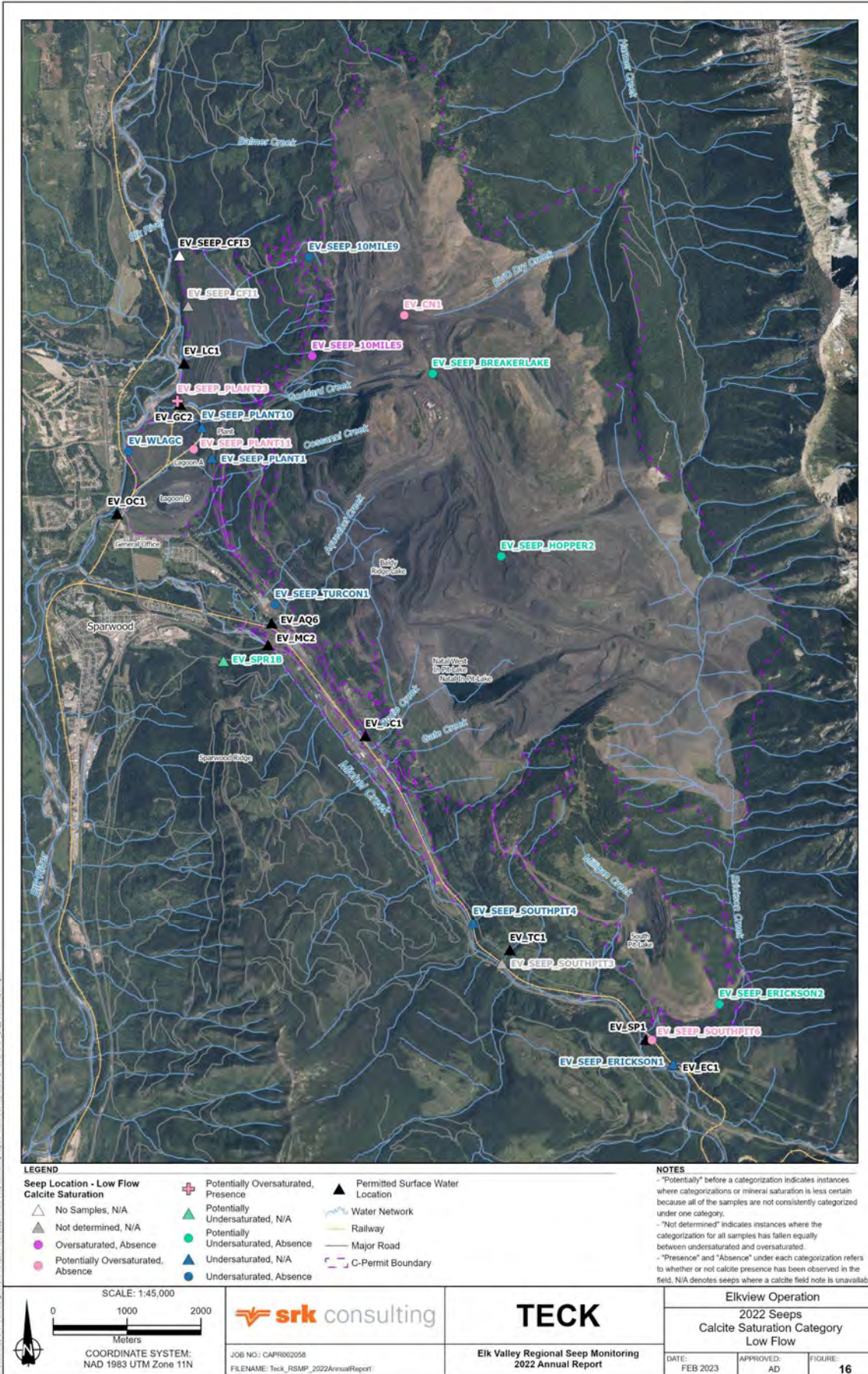


Figure 17: 2022 Seeps and Selected Surface Water Monitoring Locations - CMm

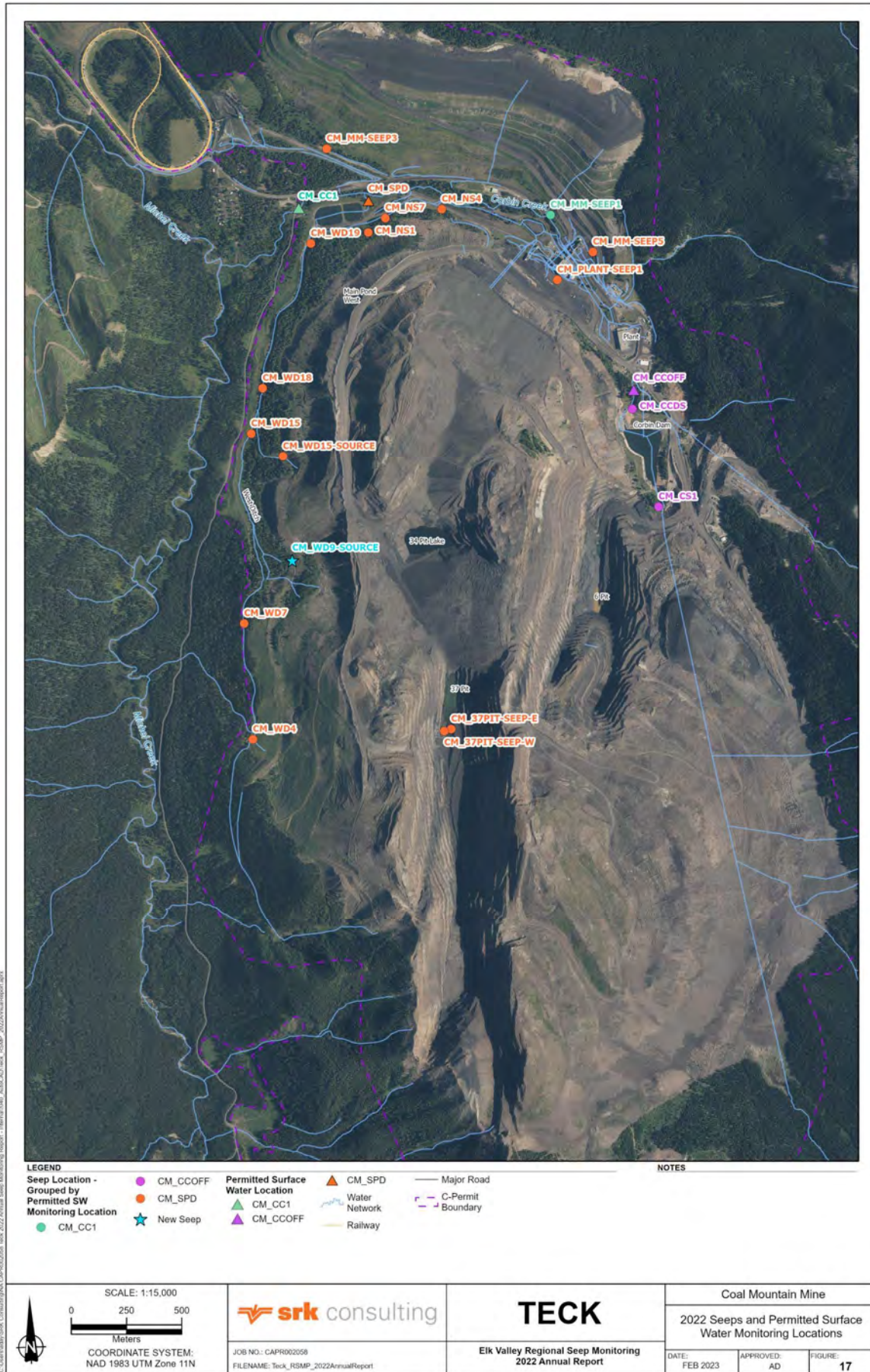


Figure 18: High Flow Calcite Saturation - CMm

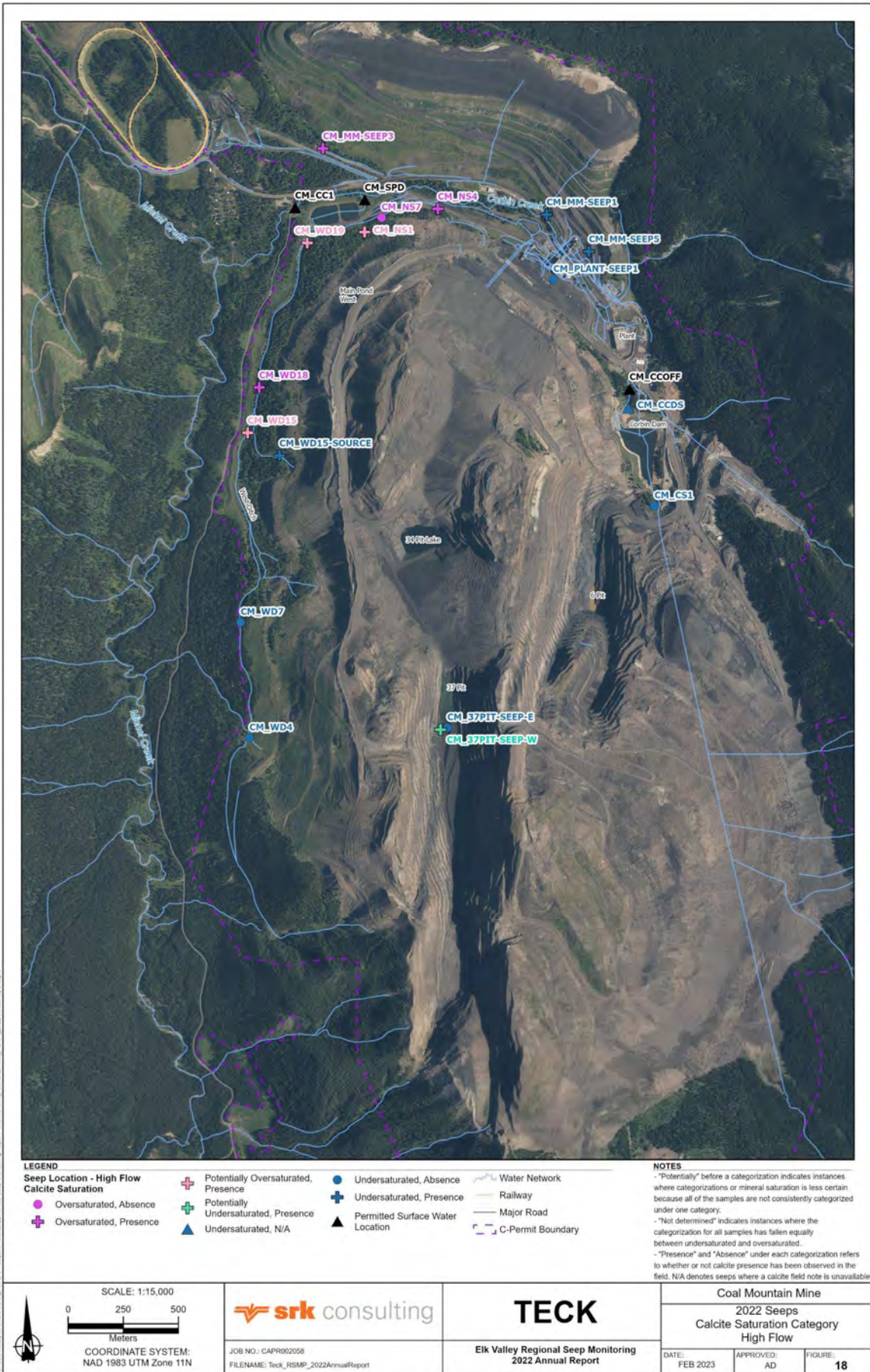
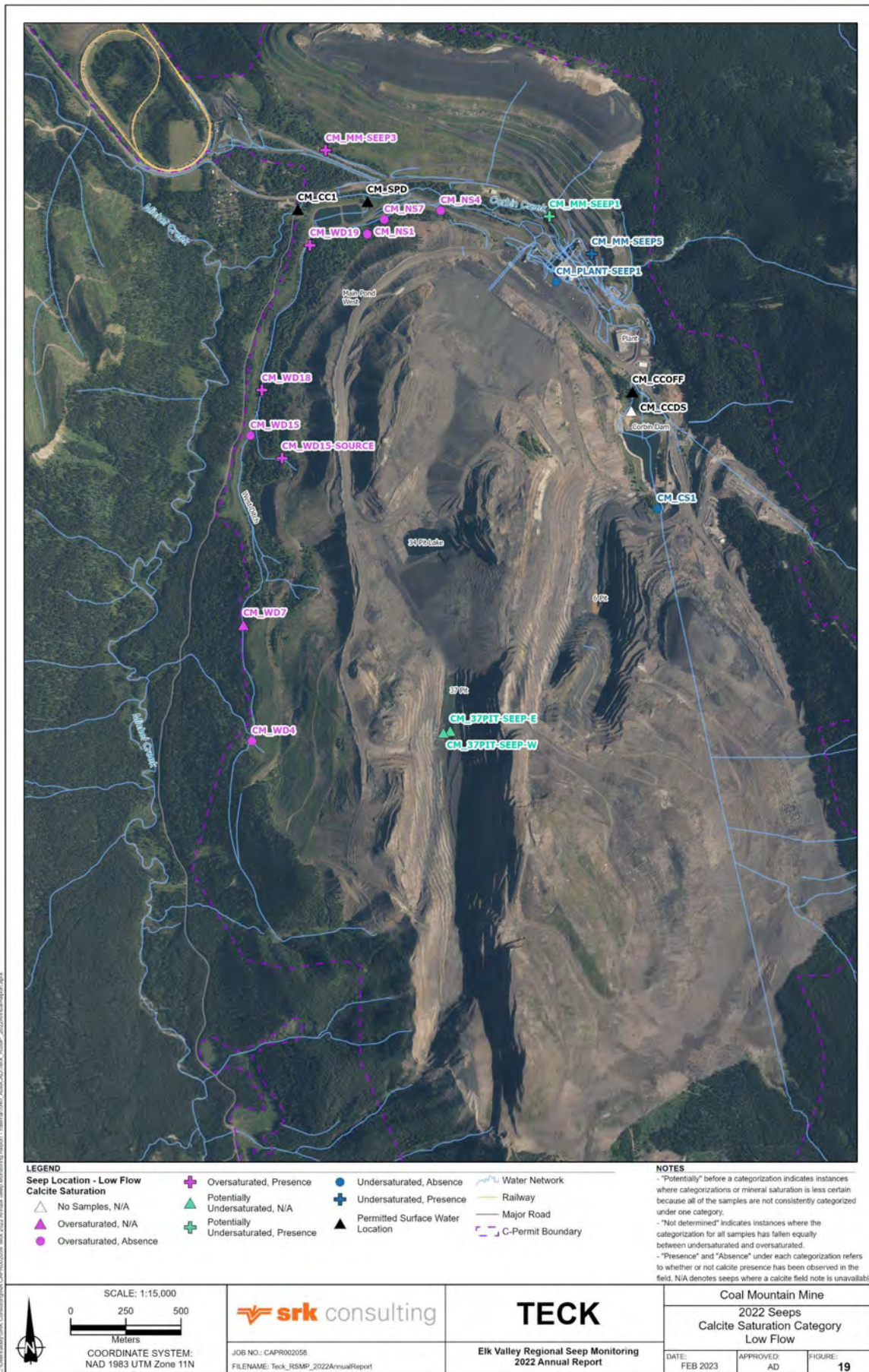
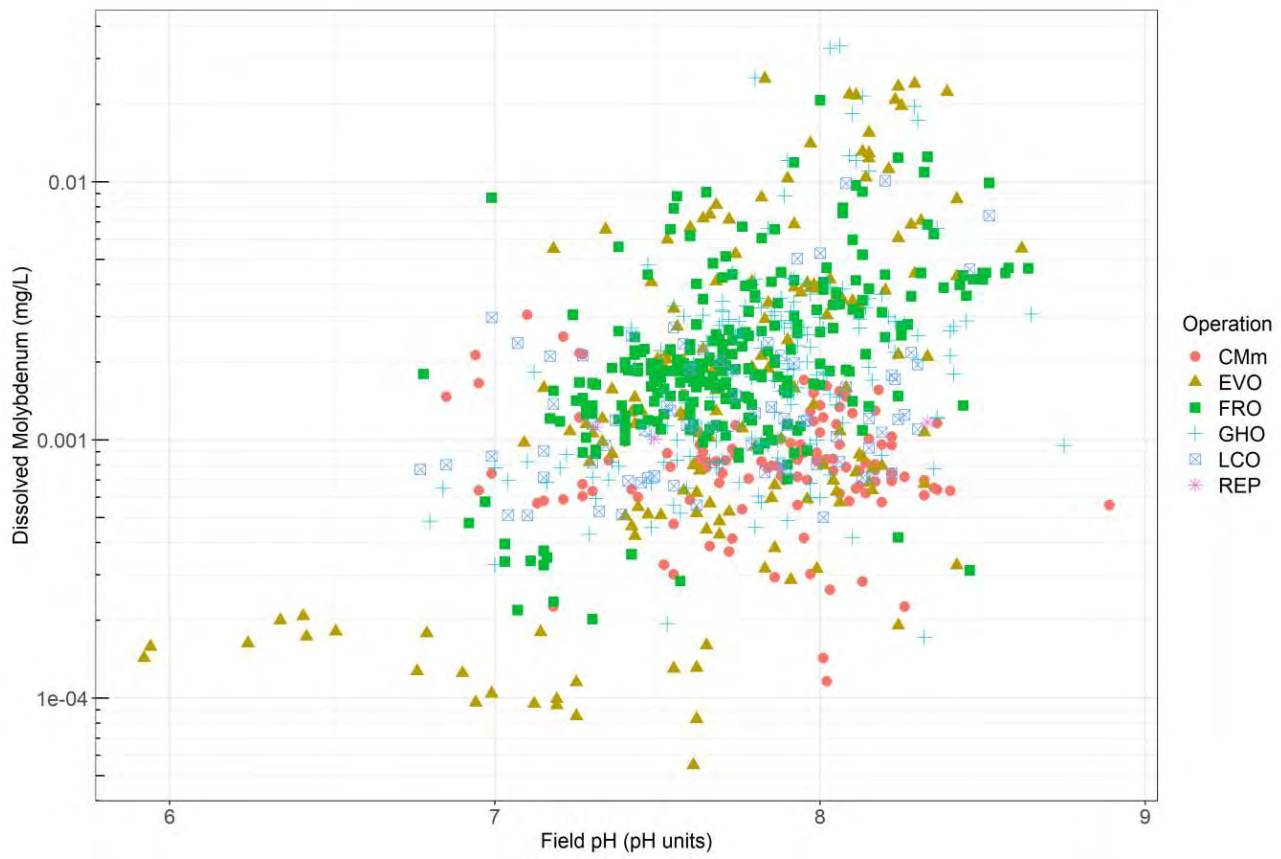


Figure 19: Low Flow Calcite Saturation - CMm

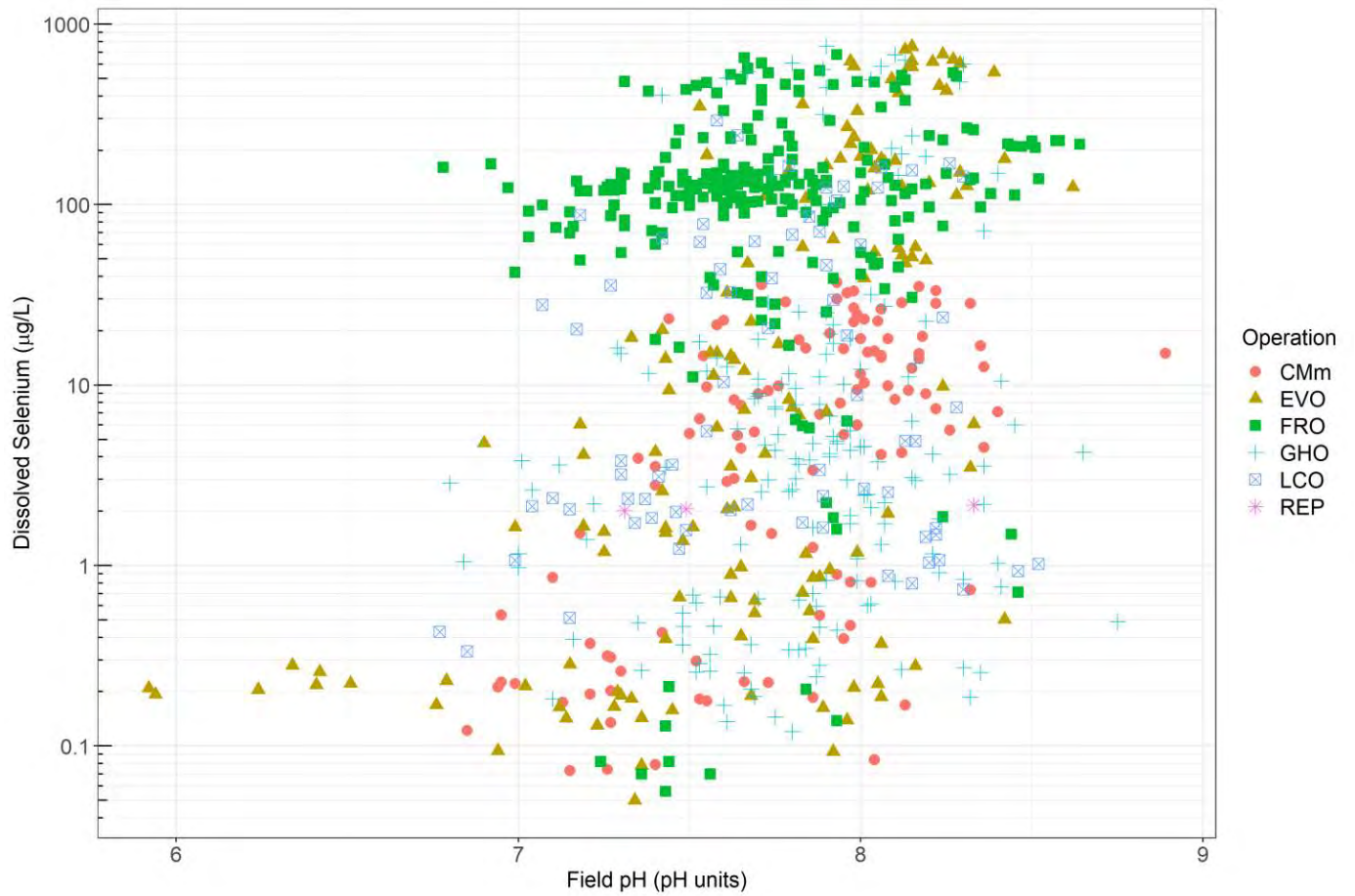


**Figure 20: Dissolved molybdenum versus field pH across the Elk Valley**

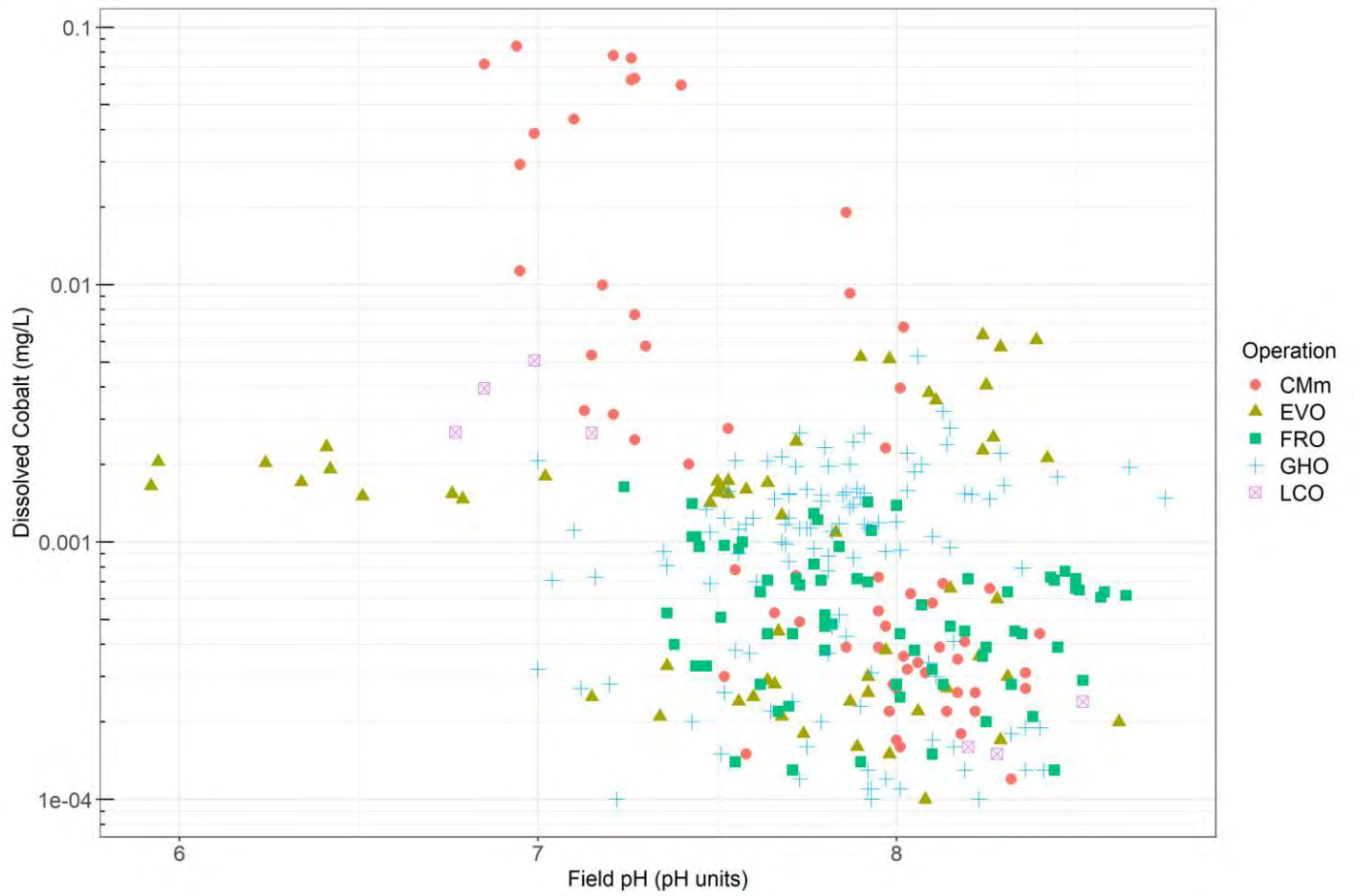




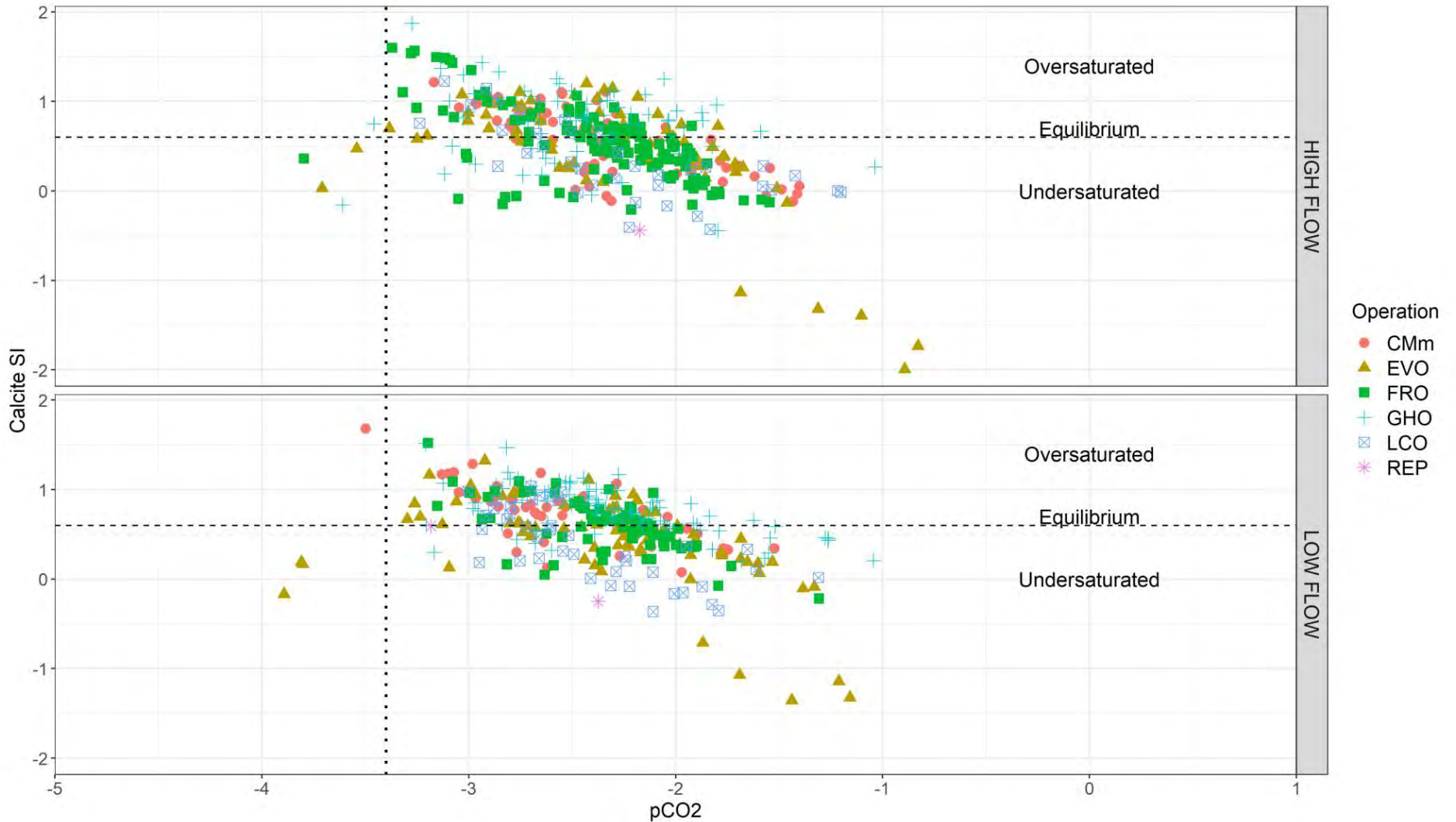
**Figure 21: Dissolved selenium versus field pH across the Elk Valley**



**Figure 22: Dissolved cobalt versus field pH across the Elk Valley**



**Figure 23: Modelled calcite SI compared to partial pressure (pCO<sub>2</sub>) of carbon dioxide across all operations in the Elk Valley**



**Notes:** The vertical dashed line indicates pCO<sub>2</sub> commonly at atmospheric pressure (10<sup>-3.4</sup> atm). The horizontal dashed line indicates calcite equilibrium.

Figure 24: Dissolved manganese concentrations versus dissolved oxygen measurements across all operations in the Elk Valley

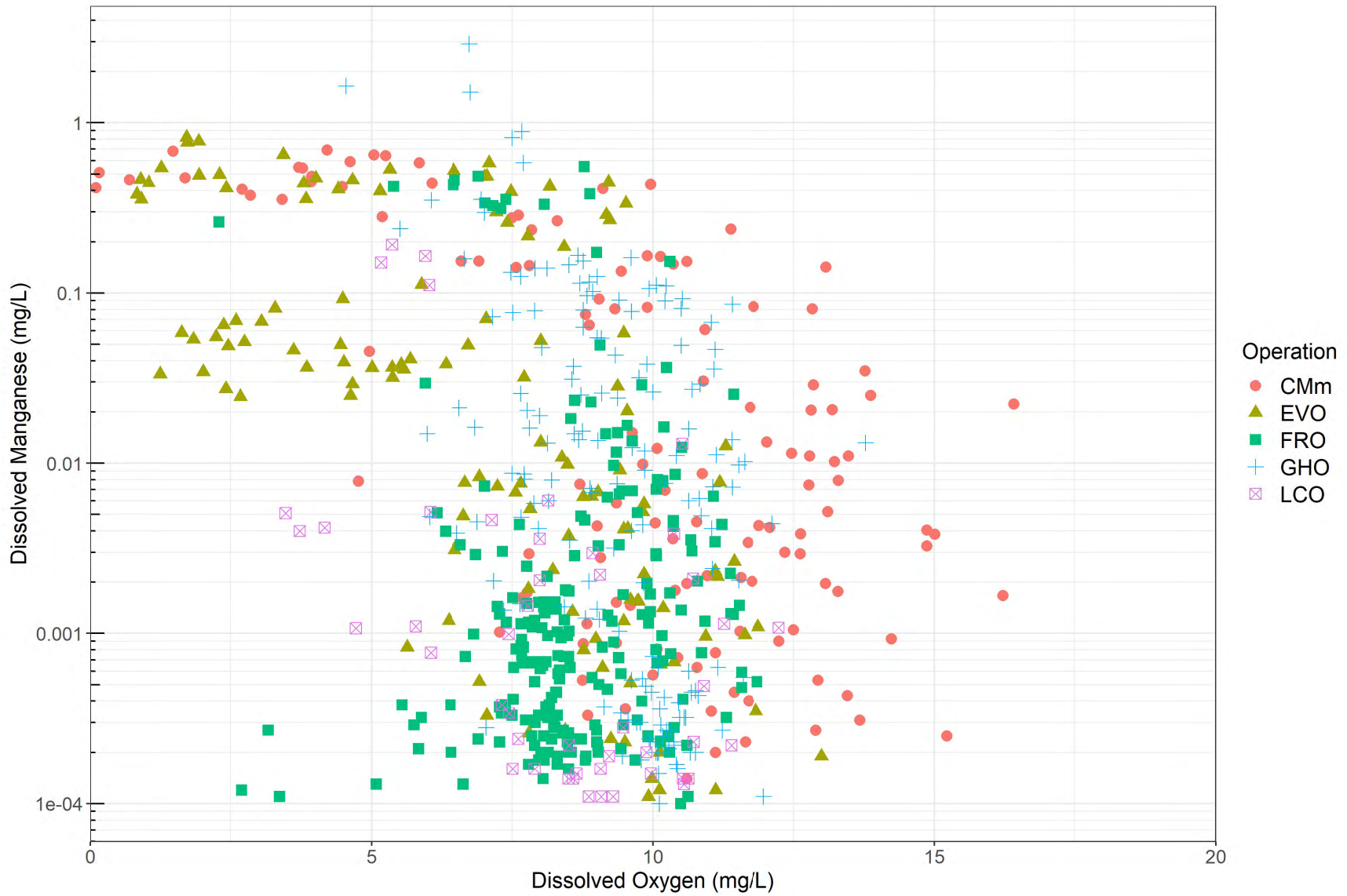


Figure 25: Dissolved iron concentrations versus dissolved oxygen measurements across all operations in the Elk Valley

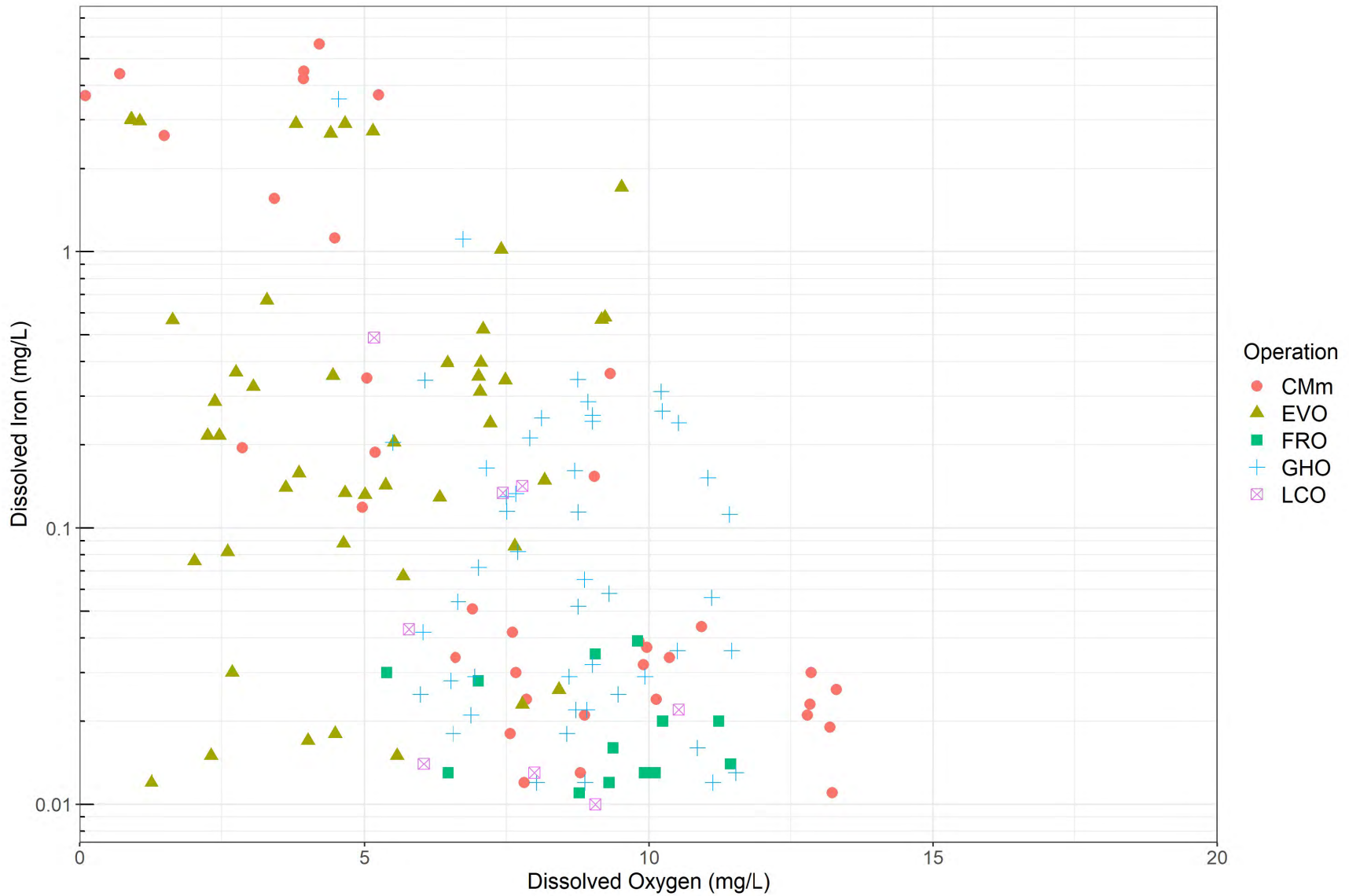
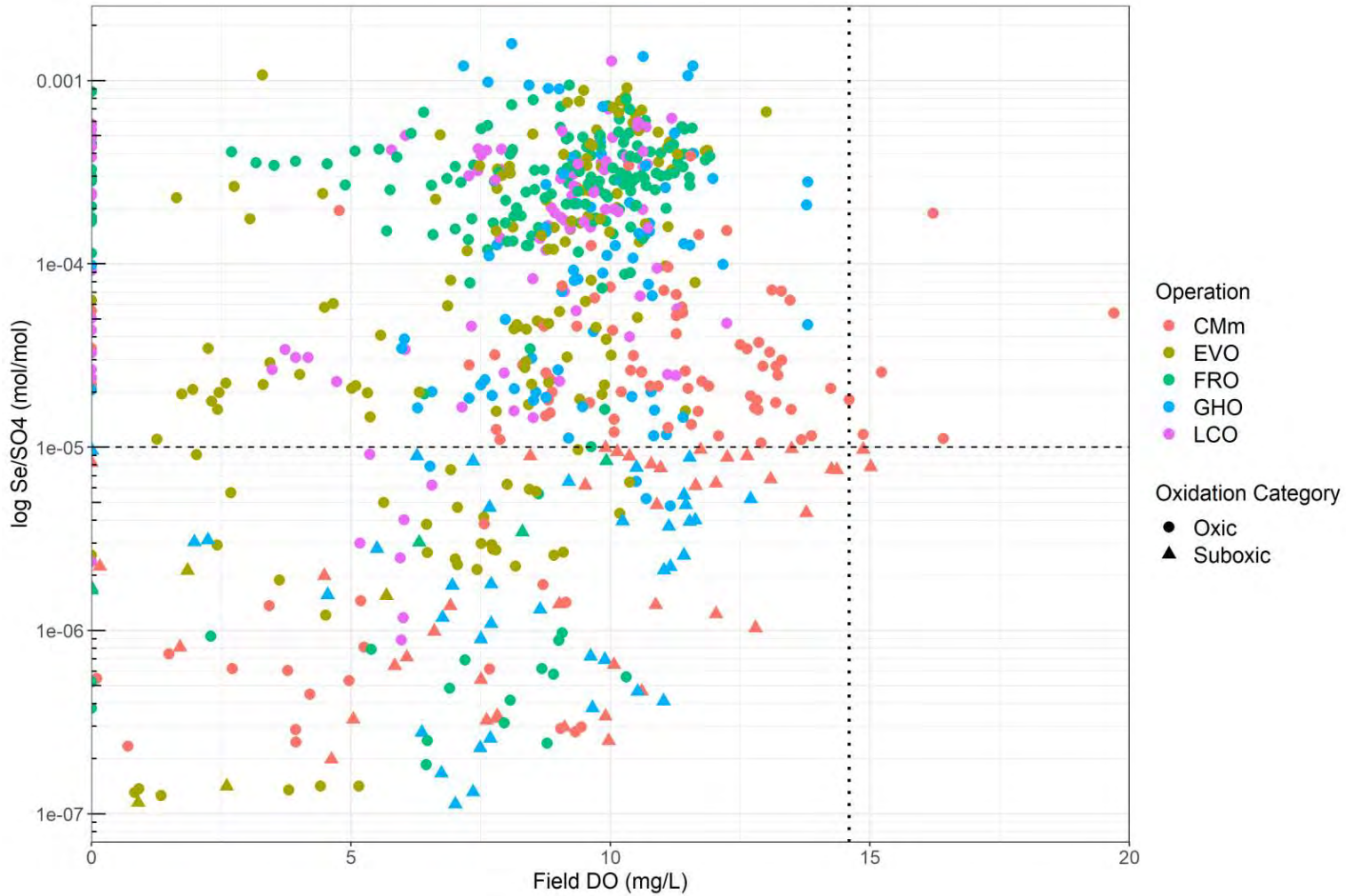


Figure 26: Se/SO<sub>4</sub> versus field dissolved oxygen measurements across all operations in the Elk Valley



Notes: The horizontal dashed line delineates the Se/SO<sub>4</sub> criterion that is applied to categorize seeps as suboxic/oxic. The vertical dashed line delimits the 14.6 mg/L limit for acceptable field DO readings.

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## **Appendix A      Seep Dataset Summary Table**

**Table 1: Regional Seep Monitoring Program – Summary of Seep Monitoring Program Locations**

Area	Seep ID	Group Name	Comparison Permitted Monitoring Location	Easting	Northing	Elevation <sup>1</sup>	Rationale for inclusion in RSMP at time of inclusion
CMO	CM_37PIT-SEEP-E	CM_37PIT	CM_SPD	669241	5485019	2,035	Selected in 2018. Potential MF influence and suboxic with high percent rank group concentrations.
CMO	CM_37PIT-SEEP-W	CM_37PIT	CM_SPD	669210	5485010	2,018	Selected in 2018. Oxidic with high percent rank group concentrations.
CMO	CM_WD4	CM_WESTWR	CM_SPD	668344	5484973	1,648	Selected in 2018. Added to provide spatial coverage.
CMO	CM_WD7	CM_WESTWR	CM_SPD	668304	5485497	1,639	Selected in 2018. Added to provide spatial coverage.
CMO	CM_WD15-SOURCE	CM_WESTWR	CM_SPD	668480	5486255	1,575	Selected in 2018. High relative nitrate loading during high flow.
CMO	CM_WD18	CM_WESTWR	CM_SPD	668388	5486564	1,536	Selected during 2018. Oxidic with high percent rank group concentrations.
CMO	CM_WD19	CM_WESTWR	CM_SPD	668606	5487220	1,528	Selected in 2018. Added to provide spatial coverage.
CMO	CM_MM-SEEP3	CM_MMCCR	CM_SPD	668677	5487649	1,547	Selected in 2018. Added to provide spatial coverage.
CMO	CM_NS1	CM_EASTWR	CM_SPD	668866	5487270	1,534	Selected in 2018. High relative sulfate loadings, oxidic with high percent rank group concentrations.
CMO	CM_NS7	CM_MMCCR	CM_SPD	668943	5487335	1,528	Selected in 2018. High relative group loadings. Oxidic with high percent rank group concentrations.
CMO	CM_NS4	CM_MMCCR	CM_SPD	669198	5487375	1,531	Selected in 2018. Suboxic with high percent rank group concentrations.
CMO	CM_MM-SEEP1	CM_MMCCR	CM_CC1	669691	5487349	1,547	Selected in 2018. High relative group nitrate loadings.
CMO	CM_MM-SEEP5	CM_MMCCR	CM_SPD	669882	5487182	1,551	Added in 2020. Suboxic and sulfate concentrations above BCWGs for FWAL.
CMO	CM_PLANT-SEEP1	CM_EASTWR	CM_SPD	669722	5487055	1,561	Selected in 2018. Potential MF influence.
CMO	CM_CCDS	CM_EASTWR	CM_CCOFF	670061	5486470	1,577	Selected in 2018. Added to provide spatial coverage.
CMO	CM_CS1	CM_EASTWR	CM_CCOFF	670180	5486025	1,598	Added in 2018. High relative nitrate loadings.
CMm	CM_WD9-SOURCE	CM_WESTWR	CM_SPD	668347	5485897	1,586	Added in 2022.
EVO	EV_SEEP_CFI3	EV_CCR	EV_LC1	653180	5516139	1,188	Selected in 2018. Oxidic with high group percent rank concentrations.
EVO	EV_SEEP_CFI2	EV_CCR	EV_LC1	653197	5516015	1,188	Added in 2022. Replacement for EV_SEEP_CFI3.
EVO	EV_SEEP_CFI1	EV_CCR	EV_LC1	653297	5515455	1,190	Selected in 2018. High relative group loadings.
EVO	EV_SEEP_10MILE9	EV_CEDARWR	EV_LC1	654933	5516114	1,647	Selected in 2018. Added to provide spatial coverage, high relative concentrations to compliance point.
EVO	EV_SEEP_10MILE5	EV_CEDARWR	EV_LC1	654977	5514775	1,581	Selected in 2018. Added to provide spatial coverage, high relative concentrations to compliance point.
EVO	EV_CN1	EV_CEDARWR	EV_LC1	656223	5515327	1,769	Selected in 2018. High group loadings and oxidic with high percent rank concentrations during high flow.
EVO	EV_SEEP_PLANT23	EV_PLANT	EV_GC2	653153	5514163	1,134	Selected in 2018. Potential MF influence, high relative group loadings.
EVO	EV_SEEP_BREAKERLAKE	EV_BALDYRIDGGEWR	EV_GC2	656609	5514535	1,752	Selected in 2018. Added to provide spatial coverage.
EVO	EV_SEEP_PLANT10	EV_PLANT	EV_GC2	653483	5513807	1,145	Selected in 2018. Potential MF influence, suboxic with high percent rank concentrations.
EVO	EV_WLAGC	EV_CCR/TP	EV_GC2	652492	5513481	1,127	Selected in 2018. High relative group loadings.
EVO	EV_SEEP_PLANT11	EV_PLANT	EV_OC1	653374	5513509	1,141	Selected in 2018. Potential MF influence.
EVO	EV_SEEP_PLANT1	EV_PLANT	EV_OC1	653620	5513384	1,189	Selected in 2018. Potential MF influence, oxidic with high percent rank group concentrations.



Area	Seep ID	Group Name	Comparison Permitted Monitoring Location	Easting	Northing	Elevation <sup>1</sup>	Rationale for inclusion in RSMP at time of inclusion
EVO	EV_SPR1B	EV_SPARWOOD_RIDGE	EV_MC2	653775	5510634	1,200	Added in 2022. Represents Sparwood Ridge area.
EVO	EV_SEEP_TURCON1	EV_BALDYRIDGEWR	EV_AQ6	654475	5511398	1,166	Selected in 2018. Potential MF influence.
EVO	EV_SEEP_HOPPER2	EV_BALDYRIDGEWR	EV_BC1	657535	5512053	1,689	Selected in 2018. Added to provide spatial coverage, concentrations above the BCWQG FWALs of selenium and nitrate.
EVO	EV_SEEP_SOUTHPI4	EV_SOUTHSLOPE	EV_TC1	657156	5507088	1,199	Selected in 2018. High relative group loadings.
EVO	EV_SEEP_SOUTHPI3	EV_SOUTHSLOPE	EV_TC1	657543	5506537	1,199	Selected in 2018. Oxidic with high percent range group concentrations.
EVO	EV_SEEP_ERICKSON2	EV_ERICKSON_WR	EV_EC1	660488	5505986	1,345	Selected in 2018. High nitrate loadings, oxidic with high percent rank nitrate concentrations.
EVO	EV_SEEP_SOUTHPI6	EV_SOUTHPI_PIT	EV_SP1	659577	5505500	1,217	Selected in 2018. Oxidic with high percent range group concentrations.
EVO	EV_SEEP_ERICKSON1	EV_ERICKSON_WR	EV_EC1	659864	5505175	1,225	Selected in 2018. Potential MF influenced. High sulfate loadings
FRO	FR_HENSEEP3	FR_HEN_WR	FR_FR1	653292	5566949	1,742	Selected in 2018. High group loadings, suboxic with high percent rank group concentrations and parameter concentrations above the BCWQGs for FWAL
FRO	FR_HENSEEP1	FR_HEN_WR	FR_FR1	651602	5566845	1,756	Selected in 2018. Added to provide spatial coverage.
FRO	FR_TURNSEEP1	FR_TURNBULLWREAST_WR	FR_FR1	652192	5566325	1,733	Selected in 2018. High relative group loadings, oxidic with high percent rank group concentrations.
FRO	FR_TBWSEEP1	FR_TURNBULLWRWEST_WR	FR_PP1	650998	5565327	1,689	Selected in 2018. High relative group loadings during high flows, oxidic with high percent rank group concentrations.
FRO	FR_TURNSEEP2	FR_TURNBULLWRWEST_WR	FR_PP1	650819	5565026	1,683	Selected in 2018. High relative group loadings during low flows, oxidic with high percent rank group concentrations.
FRO	FR_FCSEEP2	FR_TURNBULLWREAST_WR	FR_CC1	651166	5565014	1,682	Selected in 2018. High relative group loadings, elevated parameters.
FRO	FR_CCSEEP1	FR_CLODECR_WR	FR_CC1	651135	5564250	1,678	Selected in 2018. High group relative loadings.
FRO	FR_CCSEEPSE1	FR_CLODECR_WR	FR_CC1	651090	5563563	1,677	Selected in 2018. Oxidic with high percent rank group concentrations.
FRO	FR_LMCWSEEP5	FR_LAKEMTN_WR_PITS	FR_LMP1	650054	5563169	1,711	Selected in 2018. High group loadings, oxidic with high percent rank concentrations.
FRO	FR_EAGLENORTH	FR_EAGLE_WR	FR_EC1	651352	5562896	1,658	Selected in 2018. High group loadings, oxidic with high percent rank group concentrations and parameter concentrations above the BCWQGs for FWAL.
FRO	FR_ASPSEEP1	FR_A_CCR	FR_LP1	650581	5562456	1,678	Selected in 2018. Oxidic with high percent rank group concentrations and high group relative loadings.
FRO	FR_DOKASEEP1	FR_DOKA_WR	FR_NL1	652060	5562391	1,791	Selected in 2018. Added to provide spatial coverage. High percent rank concentrations and parameter concentrations above the BCWQGs for FWAL.
FRO	FR_FSEAMSEEP7	FR_DOKA_UNKNOWN	FR_NL1	652086	5562165	1,794	Selected in 2018. High group loadings, oxidic with high percent rank group concentrations and parameter concentrations above the BCWQGs for FWAL.
FRO	FR_SPRWSEEP1	FR_BLAIR_CCR	FR_NL1	651785	5561644	1,719	Selected in 2018. Different catchment (north of CCR) to other group seeps. Highest cadmium loadings in group catchment.
FRO	FR_BLAKESEEP1	FR_BLAIR_CCR	FR_FR2	652324	5561442	1,776	Selected in 2018. Spatially different from other group selection.
FRO	FR_FRVWSEEP3	FR_SMITH_WR	FR_SP1	650821	5560922	1,645	Selected in 2018. Potential MF influence. Oxidic, high loadings and group concentrations.
FRO	FR_STPNSEEP	FR_SOUTHTAILS_TAILINGS	FR_FR2	651078	5560665	1,628	Selected in 2018. High nitrate loadings, group concentrations and parameter concentrations above the BCWQGs for FWAL.
FRO	FR_BLAINESEEP1	FR_BLAIR_CCR	FR_FR2	652108	5560708	1,641	Selected in 2018. High group relative loadings.
FRO	FR_STPWSEEP	FR_SOUTHTAILS_TAILINGS	FR_FR2	651637	5560108	1,615	Selected in 2018. Located to the south of the STP. Oxidic with high percent rank and high sulfate loadings in high flow.
FRO	FR_STPSWSEEP	FR_SOUTHTAILS_TAILINGS	FR_FR2	651946	5559971	1,607	Selected in 2018. Located to the south of the STP. High sulfate loadings in low flow.
FRO	FR_BLAINESEEP5	FR_BLAIR_CCR	FR_FR2	652556	5560083	1,636	Selected in 2018. Oxidic with high percent rank group concentrations.
FRO	FR_SCRDSEEP1	FR_SWIFTWR_ROCKDRAIN_WR	FR_SCOUT	651785	5558475	1,618	Selected in 2018. Only seep in group, oxidic with elevated parameters.

Area	Seep ID	Group Name	Comparison Permitted Monitoring Location	Easting	Northing	Elevation <sup>1</sup>	Rationale for inclusion in RSMP at time of inclusion
GHO	GH_SEEP_12	GH_PORTER_CREEK	GH_PC1	653013	5556192	1,642	Selected in 2018. Oxidic with high percent rank group concentrations.
GHO	GH_SEEP_76	GH_LEASK_WR	GH_LC1	649122	5553280	1,460	Selected in 2018. Only seep in group with water quality data.
GHO	GH_SEEP_77	GH_WOLFRAM_WR	GH_WC1	649147	5552638	1,433	Selected in 2018. Added to provide spatial coverage. High relative group sulfate, nitrate, selenium, cobalt, and cadmium loadings.
GHO	GH_SEEP_79	GH_WOLFRAM_WR	GH_TC2	650369	5551888	1,601	Selected in 2018. Added to provide spatial coverage.
GHO	GH_SEEP_60	GH_THOMPSON_WR	GH_TC2	650791	5551514	1,625	Selected in 2018. Oxidic with high percent rank group concentrations.
GHO	GH_SEEP_46	GH_THOMPSON_WR	GH_TC2	652023	5550668	1,875	Selected in 2018. Added to provide spatial coverage.
GHO	GH_SEEP_5	GH_THOMPSON_WR	GH_TC2	652491	5549837	1,920	Selected in 2018. Added to provide spatial coverage. High cadmium and cobalt loadings.
GHO	GH_SEEP_50	GH_UPSTREAM_CCR	GH_TC2	652132	5548940	1,755	Selected in 2018. Added to provide spatial coverage. High relative group loadings.
GHO	GH_SEEP_15	GH_UPSTREAM_CCR	GH_FC1	652502	5548763	1,778	Selected in 2018. Suboxic with high percent rank group concentrations.
GHO	GH_SEEP_30	GH_UPSTREAM_CCR	GH_FC1	652696	5548652	1,766	Selected in 2018. Added to provide spatial coverage.
GHO	GH_WTDS	GH_CCR	GH_FC1	652307	5548078	1,721	Selected in 2018. Added to provide spatial coverage.
GHO	GH_SEEP_16	GH_CCR	GH_GH1	653542	5548705	1,743	Selected in 2018. Potential MF influence.
GHO	GH_SEEP_21	GH_CCR	GH_GH1	653676	5548447	1,734	Selected in 2018. High relative group sulfate loading.
GHO	GH_SEEP_22	GH_CCR	GH_GH1	653945	5547966	1,680	Selected in 2018. High relative group nitrate and selenium loadings. Oxidic with high percent rank group concentrations.
GHO	GH_SEEP_26	GH_CCR	GH_GH1	653749	5547262	1,673	Selected in 2018. Added to provide spatial coverage.
GHO	GH_W-SEEP	GH_CCR	GH_GH1	653772	5547268	1,670	Selected in 2018. Suboxic with high percent rank group concentrations.
GHO	GH_E1	GH_CCR	GH_GH1	653038	5546856	1,652	Selected in 2018. Potential MF influence.
GHO	GH_E3	GH_CCR	GH_GH1	652225	5547151	1,677	Selected in 2018. Potential MF influence.
GHO	GH_SEEP_98	GH_RAILLOOP	GH_FR1	653991	5545666	1,502	Added in 2021. Added to provide spatial coverage.
LCO	LC_UDHP	LC_DC_WR	LC_DCDS	658219	5541119	1,702	Added in 2019. Provides spatial coverage. Selenium and Nitrate concentrations above BCWQGs for FWAL.
LCO	LC_UDP1	LC_DC_WR	LC_DCDS	658040	5541412	1,680	Added in 2019. Provides spatial coverage. Selenium and Nitrate concentrations above BCWQGs for FWAL.
LCO	LC_SEEP8	LC_DC_WR	LC_DCDS	658065	5541627	1,675	Selected in 2018. Added to provide spatial coverage.
LCO	LC_SEEP19	LC_HSP_WR	LC_LC12	661708	5536262	1,598	Selected in 2018. High group loadings and oxidic with high percent rank concentrations.
LCO	LC_3KM	LC_MSA_WR	LC_LC9	661151	5536174	1,625	Selected in 2018. High relative group cadmium and cobalt loadings.
LCO	LC_SEEP1	LC_MSA_WR	LC_LC9	660992	5535864	1,597	Selected in 2018. Potential MF influence.
LCO	LC_WLC_LOT2	LC_WLC_WR	LC_WLC	659828	5532439	1,496	Selected in 2018. Oxidic with high percent rank group concentrations.
LCO	LC_SEEP2	LC_MAXAM	LC_LCDSSLCC	660133	5531841	1,443	Selected in 2018. Added to provide spatial coverage.
LCO	LC_SEEP15	LC_DISTURBEDWSLOPE	LC_LCDSSLCC	659898	5531949	1,464	Selected in 2018. Oxidic with high percent rank group concentrations.
LCO	LC_SEEP14	LC_DISTURBEDWSLOPE	LC_LCDSSLCC	659849	5531582	1,427	Selected in 2018. Oxidic with high percent rank group concentrations.
LCO	LC_SEEP10	LC_PLANT	EV_ER4	654861	5528350	1,303	Selected in 2018. Added to provide spatial coverage. High relative group loadings.

Appendix A: Seep Dataset Summary Table

Area	Seep ID	Group Name	Comparison Permitted Monitoring Location	Easting	Northing	Elevation <sup>1</sup>	Rationale for inclusion in RSMP at time of inclusion
LCO	LC_SEEP11	LC_PLANT	EV_ER4	653702	5527103	1,217	Selected in 2018. High relative group nitrate and selenium loadings.

Sources: [https://srk.sharepoint.com/sites/FS4639/Internal/020\\_Site-Wide\\_Data/Seep\\_WQ\\_Database/Seeps\\_WQ\\_MASTER.xlsx](https://srk.sharepoint.com/sites/FS4639/Internal/020_Site-Wide_Data/Seep_WQ_Database/Seeps_WQ_MASTER.xlsx)

<sup>1</sup> Elevations were estimated using Google Earth

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**Appendix B      2022 Seep Analytical Data Summary**





APPENDIX B - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters					Physical Parameters					Dissolved Inorganics										Nutrients																	
			°C	pH	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L													
			Minimum Maximum	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic													
BC WQOW FWAL			n/a	6.5	9	1	5	n/a	n/a	n/a	6.5	9	n/a	n/a	n/a	25	5	n/a	8	2	n/a	n/a	n/a	n/a	600	150	4	4	128-429 <sup>a</sup>	0.681-28.7 <sup>b</sup>	0.102-2.06 <sup>b</sup>	32.8	3.7	0.06-0.60 <sup>c</sup>	0.02-0.20 <sup>c</sup>	n/a	n/a	0.015	n/a	n/a
Fording River Operation			FR ASPSEEP1	FR ASPSEEP1	WS 2022-01-02 NP	2022-01-02	10.17	7.51	8.23	-	129.2	7.73	1100	1760	1.1	1290	0.22	402	<1.0	<1.0	<0.250	2.12	0.181	<b>766</b>	<0.0050	<b>21.4</b>	<0.0050	5.46	0.0086	0.011	2.71	2.6								
FR ASPSEEP1	FR ASPSEEP1	WS 2022-01-05 NP	2022-01-05	10.89	7.55	7.92	-	87.75	7.77	673	1180	<1.0	864	1.01	250	<1.0	<1.0	<0.250	1.55	0.131	407	0.0626	<b>31.7</b>	0.0065	0.483	0.107	<b>0.094</b>	0.066	0.72	2.11										
FR ASPSEEP1	FR ASPSEEP1	WS 2022-01-07 NP	2022-01-07	11.6	7.6	7.6	-	78.2	7.89	1120	1780	<b>11.2</b>	1580	<b>2.12</b>	386	<1.0	<1.0	<0.250	1.97	0.175	<b>758</b>	0.0138	<0.0050	<0.050	0.0094	0.0103	2.57	2.11												
FR ASPSEEP1	FR ASPSEEP1	WS 2022-01-12 NP	2022-01-12	12.11	7.61	7.79	-	101.9	7.59	1100	1780	<1.0	1460	0.19	392	<1.0	<1.0	<0.250	1.83	0.148	<b>835</b>	<0.0050	<b>23.1</b>	<0.0050	<0.050	0.0096	0.0094	1.63	1.93											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-01-14 NP	2022-01-14	11.5	7.39	7.81	-	157.6	8.05	1120	1830	2.4	1490	0.47	415	<1.0	<1.0	<0.250	1.61	0.145	<b>796</b>	<0.0050	<b>24.1</b>	<0.0050	<b>0.0504</b>	0.248	0.0095	0.0107	2.42	1.89										
FR ASPSEEP1	FR ASPSEEP1	WS 2022-01-19 NP	2022-01-19	10.41	7.68	8.16	-	103.2	7.69	1230	1840	<b>14</b>	1580	1.8	407	<1.0	<1.0	<0.250	1.56	0.119	<b>822</b>	0.0052	<b>25.7</b>	<0.0050	0.241	0.0091	0.0094	2.12	2.14											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-01-22 NP	2022-01-22	10.27	7.69	8.29	-	99	7.85	1170	1880	<1.0	1610	0.29	422	<1.0	<1.0	<0.250	2.37	0.188	<b>796</b>	<0.0050	<b>25.4</b>	0.0136	<0.050	0.0088	0.01	2.21	2.16											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-01-26 NP	2022-01-26	10.54	7.57	8.1	-	157	7.91	1200	1880	3.8	1520	1.11	352	<1.0	<1.0	<0.250	2.17	0.177	<b>800</b>	0.0062	<b>25.2</b>	<0.0050	<0.050	0.0084	0.0146	2.27	1.87											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-01-29 NP	2022-01-29	9.66	7.3	8.31	-	116.7	7.9	1200	1860	2.1	1490	0.99	418	<1.0	<1.0	<0.250	1.86	0.134	<b>784</b>	0.0113	<b>24.5</b>	<0.0050	<0.050	0.0106	0.0114	2.76	2.2											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-02 NP	2022-02-02	9.54	6.78	8.53	-	69.8	7.74	1240	1860	<b>93.8</b>	1400	<b>16.8</b>	435	<1.0	<1.0	<0.250	2.17	0.162	<b>813</b>	0.0226	<b>25.4</b>	<0.0050	0.464	0.0058	<b>0.0196</b>	2.93	2.14											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-03 NP	2022-02-03	9.66	7.74	8.43	-	54	7.87	1230	1930	<b>11.2</b>	1630	1.15	427	<1.0	<1.0	<0.250	2.02	0.167	<b>820</b>	<0.0050	<b>25.4</b>	<0.0050	0.294	0.0095	0.0094	2.32	2.52											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-04 NP	2022-02-04	10.06	7.63	8.31	-	119.3	7.77	1190	1920	1.2	1550	0.28	403	<1.0	<1.0	<0.250	2.61	0.163	<b>850</b>	0.0099	<b>25.6</b>	0.0087	<0.050	0.0099	0.0107	1.97	2.14											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-05 NP	2022-02-05	12.54	7.7	7.52	-	86.1	7.79	1190	1900	2.8	1520	0.16	417	<1.0	<1.0	<0.250	8.57	0.186	<b>851</b>	<0.0050	<b>25.8</b>	<0.0050	<0.050	0.0098	0.012	2.24	2.51											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-06 NP	2022-02-06	11.02	7.51	7.92	-	69.7	7.68	1200	1910	<1.0	1740	0.19	426	<1.0	<1.0	<0.250	1.69	0.132	<b>828</b>	0.0755	<b>25.3</b>	<0.0050	0.567	0.0067	<b>0.0197</b>	2.16	2.07											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-07 NP	2022-02-07	-	-	-	-	7.78	1100	1780	<b>15.5</b>	1530	<b>3.65</b>	433	<1.0	<1.0	<0.250	2.12	0.181	<b>780</b>	0.0236	<b>23</b>	<0.0050	0.381	0.008	<b>0.0159</b>	2.46	1.99												
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-08 NP	2022-02-08	-	-	-	-	7.64	1260	1830	<b>5.2</b>	1570	1.83	444	<1.0	<1.0	<0.250	2.17	0.205	<b>811</b>	<0.0050	<b>24.3</b>	0.0058	<0.050	0.008	0.0098	3.05	2.36												
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-09 NP	2022-02-09	8.75	7.62	8.89	-	77.9	7.87	984	1730	<b>136</b>	1540	<b>257</b>	392	<1.0	<1.0	<0.250	1.91	0.258	<b>728</b>	0.0094	<b>22.8</b>	0.0082	0.526	0.018	<b>0.445</b>	75.2	2.03											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-10 NP	2022-02-10	11.71	7.62	7.66	-	82.9	7.96	1250	1860	3.6	1560	<b>3.3</b>	408	<1.0	<1.0	<0.250	2.02	0.265	<b>801</b>	0.0139	<b>24.9</b>	<0.0050	0.4	0.0102	<b>0.0207</b>	3.33	3.52											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-11 NP	2022-02-11	11.27	7.62	7.79	-	119.9	7.75	1120	1840	2.7	1520	<b>4.24</b>	415	<1.0	<1.0	<0.250	2.73	0.273	<b>844</b>	<0.0050	<b>24.4</b>	<0.0050	<0.050	0.0093	<b>0.0183</b>	2.62	1.98											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-12 NP	2022-02-12	8.65	7.82	9.2	-	98.7	7.71	1120	1850	<b>9.7</b>	1640	<b>3.51</b>	414	<1.0	<1.0	<0.250	2.02	0.172	<b>796</b>	0.013	<b>24.2</b>	<0.0050	<0.050	0.0107	<b>0.0164</b>	2.21	2.1											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-13 NP	2022-02-13	10.14	7.4	8.26	-	157.4	7.71	1200	1810	<b>11.3</b>	1650	<b>5.08</b>	403	<1.0	<1.0	<0.250	2.09	0.144	<b>851</b>	<0.0050	<b>24.4</b>	<0.0050	<0.050	0.0097	<b>0.0415</b>	7.6	1.94											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-14 NP	2022-02-14	1	7.55	7.76	-	179.3	7.68	1200	1870	<b>95.2</b>	1610	<b>18.7</b>	421	<1.0	<1.0	<0.250	1.89	0.144	<b>844</b>	<0.0050	<b>24.3</b>	0.0081	<0.050	0.0097	0.013	1.96	1.99											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-15 NP	2022-02-15	11.4	7.56	7.86	-	181.6	7.7	1170	1840	<b>6</b>	1590	<b>4.47</b>	422	<1.0	<1.0	<0.250	2.19	0.166	<b>824</b>	<0.0050	<b>25.7</b>	<0.0050	0.251	0.0088	0.015	2.17	1.88											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-16 NP	2022-02-16	11.28	7.58	7.97	-	100.4	7.72	1200	1900	<b>12.1</b>	1610	<b>4.24</b>	421	<1.0	<1.0	<0.250	2.19	0.167	<b>833</b>	<0.0050	<b>26</b>	<0.0050	<0.050	0.0094	<b>0.0257</b>	2.51	2.37											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-17 NP	2022-02-17	13.6	7.41	7.24	-	114	7.87	1230	1950	2.3	1670	1.24	436	<1.0	<1.0	<0.250	2.15	0.172	<b>846</b>	<0.0050	<b>25.4</b>	<0.0050	<0.050	0.0098	0.0126	2.02	2.06											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-18 NP	2022-02-18	7.67	7.67	9.27	-	100.2	7.93	1200	1960	1.1	1600	0.82	421	<1.0	<1.0	<0.250	1.98	0.35	<b>898</b>	<0.0050	<b>26.9</b>	<0.0050	<b>0.0314</b>	<0.050	0.0097	0.0122	2.34	2.11										
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-19 NP	2022-02-19	8.87	7.73	9.1	-	117	7.87	1230	1950	2.9	1430	0.44	419	<1.0	<1.0	<0.250	1.98	0.203	<b>895</b>	<0.0050	<b>26.1</b>	<0.0050	0.245	0.0104	0.0102	2.35	2.35											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-20 NP	2022-02-20	10.3	7.6	8.13	-	105.7	7.85	1300	1970	2.9	1380	0.6	431	<1.0	<1.0	<0.250	1.84	0.147	<b>874</b>	<0.0050	<b>25.5</b>	<0.0050	<0.050	0.01	0.0096	2.02	2.4											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-21 NP	2022-02-21	11.9	7.53	7.5	-	220.4	8.07	1300	2000	4.7	1790	<b>3.43</b>	433	<1.0	<1.0	<0.250	2.29	0.177	<b>890</b>	0.014	<b>28.1</b>	<0.0050	<0.050	0.01	0.0111	2.44	2.3											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-22 NP	2022-02-22	12	7.6	7.69	-	156.4	7.81	1330	2030	2.1	1770	0.48	441	<1.0	<1.0	<0.250	2.24	0.174	<b>917</b>	<0.0050	<b>26.9</b>	<0.0050	0.417	0.009	0.012	2.81	3.82											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-23 NP	2022-02-23	10.4	7.57	7.72	-	153.2	7.81	1260	2000	2.5	1740	0.96	430	<1.0	<1.0	<0.250	2.37	0.167	<b>908</b>	<0.0050	<b>26.8</b>	<0.0050	<0.050	0.0086	<b>0.0179</b>	2.37	1.91											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-24 NP	2022-02-24	9.03	7.76	9.3	-	99.3	7.97	1320	1980	<1.0	1620	0.42	424	<1.0	<1.0	<0.250	1.96	0.154	<b>949</b>	0.0066	<b>28.3</b>	<0.0050	0.277	0.01	0.0114	2.45	2.49											
FR ASPSEEP1	FR ASPSEEP1	WS 2022-02-25 NP	2022-02-25	11.38	7.7	8.04	-	104.7	7.79	1240	1980	<b>9.6</b>	1680	<b>3.6</b>	429	<1.0	<1.0	<0.250	3.3	0.175	<b>918</b>	<0.0050	<b>27.4</b>	<0.																







APPENDIX B - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters					Physical Parameters					Dissolved Inorganics					Nutrients											
			Field Temperature	pH (field)	Dissolved Oxygen	Field Conductivity	Field ORP	Hardness	Conductivity	Total Suspended Solids	Total Dissolved Solids	Turbidity	Carbonate	Bicarbonate	Hydroxide	Iodide	Chloride	Fluoride	Sulfate	Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Nitrate+Nitrite+Nitrogen-N	Ortho-Phosphate	Total Phosphorus, Total	Total Organic Carbon	Dissolved Organic Carbon		
			Minimum Maximum	Minimum Maximum	Acute Chronic	Minimum Maximum	Minimum Maximum	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic	Acute Chronic			
<b>BC WQGFAL</b>																													
Fording River Operation																													
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-04-11 NP	2022-05-16	7.1	8.04	9.84	-	213.2	8.17	283	507	11.2	310	5.32	298	<1.0	<1.0	<0.050	0.4	0.122	56.7		0.0057	0.0174	0.0014	0.123	0.0017	0.0197	3.69	2.77
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-07-01 NP	2022-07-29	-	-	-	-	8.4	298	535	38.5	350	20.7	316	10.2	<1.0	<0.050	0.23	0.111	37.9		0.0071	0.0181	<0.0010	0.17	0.0096	0.0546	9.16	2.83	
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-09-21 NP	2022-09-21	10.3	8.46	9.89	-	241.8	8.5	260	529	19.6	362	8.95	304	12	<1.0	<0.050	0.21	0.118	56		<0.0050	<0.0010	0.133	<0.0010	0.0121	5.99	3.1	
FR EAGLENORTH	FR EAGLENORTH SEEP 2022-04-11 NP	2022-05-16	4.8	7.47	9.59	-	2159	7.86	2370	3340	3.1	2880	0.14	558	<1.0	<1.0	<0.250	15.2	0.133	1740		<0.0050	68.3	<0.0050	0.0062	1.25	1.19		
FR EAGLENORTH	FR EAGLENORTH SEEP 2022-07-01 NP	2022-07-06	-	-	-	-	8.08	2310	3210	3.4	3590	0.18	616	<1.0	<1.0	<0.250	12.1	0.108	1640		<0.0050	57.6	<0.0050	<0.0050	0.0018	0.0064	0.96	0.92	
FR EAGLENORTH	FR EAGLE NORTH SEEP 2022-09-22 NP	2022-09-22	7.2	7.42	9.58	-	176.3	7.85	2340	3290	79.6	1680	10.1	655	<1.0	<1.0	<0.250	10.8	0.144	1850		0.0224	47.9	<0.0050	0.722	0.0196	0.063	11.8	1.76
FR FCSEEP2	FR FCSEEP2 SEEP 2022-04-11 NP	2022-06-10	4.4	7.87	9.52	-	101.5	7.77	159	304	<1.0	160	0.3	156	<1.0	<1.0	<0.050	0.12	0.193	32.8		<0.0050	0.707	0.0011	0.159	0.0015	0.0027	1.45	1.35
FR FCSEEP2	FR FCSEEP2 SEEP 2022-09-22 NP	2022-09-22	10.7	7.75	7.98	-	190.9	8.06	241	474	<1.0	288	0.11	172	<1.0	<1.0	<0.050	0.21	0.21	120		<0.0050	2.38	<0.0010	0.186	0.0018	<0.0020	0.55	1.46
FR FRVWSEEP3	FR FRVWSEEP3 SEEP 2022-04-11 NP	2022-06-16	10.2	7.8	9.4	-	114	8.33	765	1200	1.1	927	0.56	451	9.2	<1.0	<0.250	1.52	0.194	380		0.0118	0.888	<0.0050	0.17	0.002	0.004	0.98	0.94
FR FRVWSEEP3	FR FRVWSEEP3 SEEP 2022-09-08 NP	2022-09-08	9.8	7.79	9.37	-	99.4	8.19	1010	1460	3.6	1170	1.09	557	<1.0	<1.0	<0.250	2.18	0.177	523		<0.0050	0.987	<0.0050	0.148	<0.0010	0.0039	1.26	1.16
FR FSEAMSEEP7	FR FSEAMSEEP7 SEEP 2022-04-11 NP	2022-05-16	8.9	8.36	9.15	-	217.6	8.45	441	801	106	566	41.8	230	8.5	<1.0	<0.050	1.56	0.335	234		0.0053	6.3	<0.0050	0.424	<0.0010	0.007	2.54	2.76
FR FSEAMSEEP7	FR FSEAMSEEP7 SEEP 2022-07-01 NP	2022-07-20	-	-	-	-	8.26	368	776	190	634	50.7	255	<1.0	<1.0	<0.050	0.84	0.28	235		0.0091	4.56	0.004	0.457	<0.0010	0.0294	5.24	3.69	
FR FSEAMSEEP4	FR FSEAMSEEP4 SEEP 2022-04-11 NP	2022-06-16	9.14	8	10.17	-	95.8	8.03	505	903	37.6	664	<0.10	227	<1.0	<1.0	<0.250	<0.50	0.379	209		0.0204	31.6	0.0325	0.441	<0.0010	0.037	6.81	<0.50
FR HENSEEP3	FR HENSEEP3 SEEP 2022-04-11 NP	2022-04-11	4.26	8.28	9.81	-	103.6	8.01	1710	2490	5.2	2070	1.23	288	<1.0	<1.0	<0.250	0.82	0.238	1310		0.0062	60.6	0.0063	<0.0050	0.0085	0.0163	1.57	1.47
FR HENSEEP3	FR HENSEEP3 SEEP 2022-05-16 NP	2022-05-16	-	-	-	-	8.08	1860	2700	4	2330	0.48	317	<1.0	<1.0	<0.250	0.84	0.171	1440		<0.0050	71	0.0106	0.429	<0.0010	0.0037	1.33	1.32	
FR HENSEEP3	FR HENSEEP3 SEEP 2022-07-01 NP	2022-07-14	-	-	-	-	7.71	1580	2320	4.4	2400	0.81	320	<1.0	<1.0	<0.250	0.77	0.166	1210		0.0055	55.9	0.0063	0.4	0.0049	0.008	1.14	1.02	
FR HENSEEP3	FR HENSEEP3 SEEP 2022-09-21 NP	2022-09-21	4.7	7.52	8.11	-	162.9	8.11	1590	2660	4.6	2540	0.43	313	<1.0	<1.0	<0.250	0.91	0.17	1320		0.006	80.7	0.0143	<0.0050	<0.0010	0.0181	2.17	1.67
FR HENSEEP3	FR HENSEEP3 SEEP 2022-04-11 NP	2022-04-11	3.04	7.9	9.92	-	117.2	7.71	1030	1590	27.4	1410	15.2	251	<1.0	<1.0	<0.250	0.62	<0.100	830		0.0113	2.34	<0.0050	0.523	<0.0029	0.0286	4.34	3.81
FR HENSEEP1	FR HENSEEP1 SEEP 2022-07-01 NP	2022-07-14	-	-	-	-	7.92	1360	1930	4.8	1810	0.93	407	<1.0	<1.0	<0.250	<0.50	<0.100	1100		<0.0050	1.64	<0.0050	0.15	<0.0010	0.0032	2.83	2.33	
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-04-11 NP	2022-06-16	7.2	8	9.8	-	94.6	8.21	271	492	51.1	328	23	211	<1.0	<1.0	<0.050	0.18	0.12	93.3		<0.0050	5.36	<0.0010	0.363	0.0094	0.0324	7.13	1.91
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-07-01 NP	2022-07-06	-	-	-	-	8.36	316	586	5.4	474	4.9	208	3.8	<1.0	<0.050	0.3	0.104	133		<0.0050	8.6	0.0016	0.311	0.0074	0.0147	3	<0.50	
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-09-22 NP	2022-09-22	5.3	7.6	10.16	-	173	8.15	664	1160	1.7	894	1.18	286	<1.0	<1.0	<0.250	0.66	0.125	387		<0.0050	29.5	<0.0050	0.409	0.0091	0.0094	1.87	1.76
FR SCRDSEEP1	FR SCRDSEEP1 SEEP 2022-04-11 NP	2022-05-19	2.3	7.78	9.21	-	148.8	8	1430	2530	66.9	2020	4.77	359	<1.0	<1.0	<0.250	2.82	0.182	570		0.175	172	0.147	<0.0050	0.014	0.0158	3.6	4.02
FR SCRDSEEP1	FR SCRDSEEP1 SEEP 2022-09-21 NP	2022-09-21	5.9	7.5	10.7	-	221.1	8.14	1820	2730	6.6	2670	1.34	484	<1.0	<1.0	<0.250	1.37	0.164	1490		0.0065	35.6	0.0093	<0.0050	0.0072	0.0357	2.68	2.1
FR SPRWSEEP1	FR SPRWSEEP1 WS 2022	2022-04-27	10.07	7.98	8.38	-	130.9	8.2	636	1110	32.6	874	21	434	<1.0	<1.0	<0.250	2.63	0.124	383		0.0086	8.34	<0.0050	0.322	0.022	0.0289	12	1.23
FR SPRWSEEP1	FR SPRWSEEP1 SEEP 2022-07-01 NP	2022-07-14	-	-	-	-	8.08	642	1085	57.9	836.5	35.93	397	<1.0	<1.0	<0.250	2.435	0.121	345		<0.0050	7.45	<0.0050	0.4155	<0.0010	0.02685	16.385	0.96	
FR STPNSEEP	FR STPNSEEP SEEP 2022-04-11 NP	2022-05-19	3.5	7.55	9.38	-	160.8	7.89	493	892	<1.0	641	0.18	248	<1.0	<1.0	<0.250	9.01	0.136	239		<0.0050	16.8	<0.0050	0.156	<0.0010	0.0028	0.81	2.12
FR STPNSEEP	FR STPNSEEP SEEP 2022-07-01 NP	2022-07-15	-	-	-	-	7.91	279	523	2.2	376	0.24	231	<1.0	<1.0	<0.050	7.74	0.172	95.3		<0.0050	5.12	0.0034	0.433	<0.0010	0.0034	1.04	1.07	
FR STPNSEEP	FR STPNSEEP WS 2022	2022-01-25	-	-	-	-	8.13	617	1120	<1.0	729	0.16	379	<1.0	<1.0	<0.450	7.9	0.25	394		<0.0050	0.344	<0.0090	-	0.0012	<0.0020	-	0.58	
FR STPNSEEP	FR STPNSEEP WS 2022	2022-02-22	-	-	-	-	8.04	822.5	1080	2	788.5	0.315	482	<1.0	<1.0	<0.250	8.12	0.2885	313.5		<0.0050	0.07795	<0.0050	0.0653	<0.0010	<0.0020	0.78	<0.50	
FR STPNSEEP	FR STPNSEEP SEEP 2022-04-11 NP	2022-05-19	9	7.54	7.2	-	141.8	7.98	610	1060	8.1	764	0.34	432	<1.0	<1.0	<0.250	7.89	0.267	294		<0.0050	0.296	<0.0050	0.091	<0.0010	<0.0020	1.01	0.83
FR STPNSEEP	FR STPNSEEP SEEP 2022-07-01 NP	2022-07-15	-	-	-	-	7.74	597	1040	1.7	759	0.36	501	<1.0	<1.0	<0.250	7.65	0.321	274		<0.0050	0.134	0.0079	0.162	<0.0010	0.0029	1.47	0.96	
FR STPNSEEP	FR STPNSEEP SEEP 2022-09-23 NP	2022-09-23	9.4	7.44	8.07	-	193	8.2	628	988	<1.0	723	0.11	459	<1.0	<1.0	<0.250	7.79	0.349	287		<0.0050	0.361	<0.0050	0.056	<0.0010	<0.0020	<0.50	<0.50
FR STPNSEEP	FR STPNSEEP SEEP 2022-04-11 NP	2022-05-19	8.2	7.85	9.07	-	145.6	8.12	566	1040	6.4	703	0.35	501	<1.0	<1.0	<0.250	5.64	0.282	237		<0.0050	0.118	<0.0050	<0.0010	<0.0020	0.77	0.7	
FR STPNSEEP	FR STPNSEEP SEEP 2022-07-01 NP	2022-07-15	-	-	-	-	8.01	575	997	6.2	715	0.99	503	<1.0	<1.0	<0.250	8.53	0.343	232		0.009	0.0912	0.0072	0.106	<0.0010	0.0024	1.51	1.15	
FR STPNSEEP	FR STPNSEEP SEEP 2022-09-12 NP	2022-09-12	9.4	7.44	8.07	-	0.193	8.07	637	1030	2.8	697	0.5	457	<1.0	<1.0	<0.250												





APPENDIX B - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper			
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
				Acute	Chronic	n/a	na	na	na	na	na	na	Acute	Chronic	n/a	n/a	n/a	Acute	Chronic	
				0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	na	na	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>f</sup>		
<b>BC WQG FWAL</b>				n/a																
<b>Coal Mountain Mine</b>																				
CM 37PIT-SEEP-E	CM 37PIT-SEEP-E WS 2022-07-07 NP	2022-07-07	709		0.0018	0.00012	0.00018	0.0215	< 0.020	< 0.000050	0.232		0.0000939		191	< 0.00010	0.0191	< 0.00020		
CM 37PIT-SEEP-E	CM 37PIT-SEEP-E WS 2022-09-02 NP	2022-09-02	476		< 0.0010	< 0.00010	0.00019	0.0207	< 0.020	< 0.000050	0.307		< 0.0050		114	< 0.00010	0.00063	0.00028		
CM 37PIT-SEEP-W	CM 37PIT-SEEP-W WS 2022-07-07 NP	2022-07-07	458		< 0.0010	< 0.00010	0.00025	0.0318	0.000025	< 0.000050	0.327		0.0000086		128	< 0.00010	0.00397	< 0.00020		
CM 37PIT-SEEP-W	CM 37PIT-SEEP-W WS 2022-09-02 NP	2022-09-02	180		< 0.0010	< 0.00010	0.00016	0.0334	< 0.020	< 0.000050	0.295		< 0.0050		33.9	< 0.00010	0.00066	0.0002		
CM CCDS	CM CCDS WS 2022-07-20 NP	2022-06-16	300		0.0012	< 0.00010	0.00031	0.0401	< 0.020	< 0.000050	0.012		0.0000315		72.5	0.0003	< 0.10	< 0.00020		
CM CS1	CM CS1 WS 2022-07-20 NP	2022-06-16	365		0.0011	< 0.00010	0.0004	0.0397	< 0.020	< 0.000050	0.011		0.0000162		90.9	0.00027	< 0.10	< 0.00020		
CM CS1	CM CS1 WS 2022-09-02 NP	2022-09-15	314		0.0017	< 0.00010	0.00029	0.0527	< 0.020	< 0.000050	< 0.010		0.0000182		82.4	0.00019	< 0.10	< 0.00020		
CM MM-SEEP1	CM MM-SEEP1 WS 2022-07-20 NP	2022-06-16	614		0.0018	0.00022	< 0.00010	0.0604	< 0.020	< 0.000050	0.086		0.0000407		120	< 0.00010	< 0.10	0.00022		
CM MM-SEEP1	CM MM-SEEP1 WS 2022-09-02 NP	2022-09-15	490		< 0.0010	0.00021	< 0.00010	0.0817	< 0.020	< 0.000050	0.084		0.0000286		106	< 0.00010	< 0.10	0.00036		
CM MM-SEEP3	CM MM-SEEP3 WS 2022-07-20 NP	2022-06-16	1020		0.0019	< 0.00010	0.00044	0.0596	< 0.020	< 0.000050	0.073		< 0.0050		252	< 0.00010	0.00032	0.00029		
CM MM-SEEP3	CM MM-SEEP3 WS 2022-09-02 NP	2022-09-15	976		0.0011	< 0.00010	0.00063	0.0586	< 0.020	< 0.000050	0.082		< 0.0050		231	< 0.00010	0.00039	< 0.00020		
CM MM-SEEP5	CM MM-SEEP5 WS 2022-07-20 NP	2022-06-16	791		0.0153	< 0.00010	< 0.00010	0.0314	0.000093	< 0.000050	0.061		0.0000844		184	< 0.00010	0.00995	0.00119		
CM MM-SEEP5	CM MM-SEEP5 WS 2022-09-02 NP	2022-09-15	581		0.0049	< 0.00010	< 0.00010	0.0349	0.000024	< 0.000050	0.06		0.000143		137	< 0.00010	0.0003	0.00042		
CM NS1	CM NS1 WS 2022-07-20 NP	2022-06-16	1380		0.0016	0.00022	< 0.00010	0.0287	< 0.020	< 0.000050	0.026		0.000152		247	< 0.00010	0.00016	0.00033		
CM NS1	CM NS1 WS 2022-09-02 NP	2022-09-14	1650		< 0.0020	0.00024	< 0.00020	0.0163	< 0.040	< 0.000100	0.029		0.000157		293	< 0.00020	0.00026	0.00059		
CM NS4	CM NS4 WS 2022-07-20 NP	2022-06-16	768		< 0.0010	0.00028	< 0.00010	0.0297	< 0.020	< 0.000050	0.058		0.00014		169	< 0.00010	< 0.10	0.00024		
CM NS4	CM NS4 WS 2022-09-02 NP	2022-09-14	1100		0.0011	< 0.00010	0.00016	0.0326	< 0.020	< 0.000050	0.101		0.000151		268	< 0.00010	0.00102	0.00024		
CM NS7	CM NS7 WS 2022-07-20 NP	2022-06-16	1020		0.0036	0.00029	0.00022	0.0293	< 0.020	< 0.000050	0.04		0.000103		198	< 0.00010	0.00022	0.00025		
CM NS7	CM NS7 WS 2022-09-02 NP	2022-09-14	11.4		0.002	0.00019	0.00032	0.0345	< 0.020	< 0.000050	0.049		0.0000206		218	< 0.00010	0.00058	0.00026		
CM PLANT-SEEP1	CM PLANT-SEEP1 WS 2022-07-20 NP	2022-06-16	-		< 0.0010	< 0.00010	< 0.00010	0.0502	< 0.020	< 0.000050	0.065		0.0000094		169	< 0.00010	0.00201	< 0.00020		
CM PLANT-SEEP1	CM PLANT-SEEP1 WS 2022-09-02 NP	2022-09-15	5.6		0.0013	< 0.00010	0.00026	0.0423	< 0.020	< 0.000050	0.068		< 0.0050		194	< 0.00010	0.00533	< 0.00020		
CM WD15	CM WD15 WS 2022-07-20 NP	2022-06-15	6.5		0.0013	0.00021	0.00013	0.0196	< 0.020	< 0.000050	0.051		0.0000363		245	< 0.00010	< 0.10	< 0.00020		
CM WD15	CM WD15 WS 2022-09-02 NP	2022-09-14	4.9		0.0078	< 0.00020	< 0.00020	0.0192	< 0.040	< 0.000100	0.053		0.0000025		290	< 0.00020	< 0.20	< 0.00040		
CM WD15	CM WD15 WS 2022-09-19 NP	2022-09-19	7.6		0.0022	< 0.00020	< 0.00020	0.0175	< 0.040	< 0.000100	0.05		0.0000204		293	< 0.00020	< 0.20	< 0.00040		
CM WD15-SOURCE	CM WD15-SOURCE WS 2022-07-20 NP	2022-06-15	7.3		0.0122	0.0002	0.00014	0.0142	< 0.020	< 0.000050	0.046		0.0000422		269	< 0.00010	0.00041	0.00023		
CM WD15-SOURCE	CM WD15-SOURCE WS 2022-09-02 NP	2022-09-14	10.8		0.0168	< 0.00020	< 0.00020	0.0129	< 0.040	< 0.000100	0.058		0.0000234		321	< 0.00020	0.00031	< 0.00040		
CM WD15-SOURCE	CM WD15-SOURCE WS 2022-09-19 NP	2022-09-19	-		0.0199	< 0.00020	< 0.00020	0.013	< 0.040	< 0.000100	0.05		0.0000455		328	< 0.00020	0.00045	< 0.00040		
CM WD18	CM WD18 WS 2022-07-20 NP	2022-06-15	6		0.0022	0.00019	0.00011	0.0171	< 0.020	< 0.000050	0.016		0.00014		253	< 0.00010	< 0.10	< 0.00020		
CM WD18	CM WD18 WS 2022-09-02 NP	2022-09-14	8.5		0.0086	< 0.00020	< 0.00020	0.0191	< 0.040	< 0.000100	0.02		0.0000916		326	< 0.00020	0.00022	< 0.00040		
CM WD19	CM WD19 WS 2022-07-20 NP	2022-06-15	9.6		0.0012	0.00015	0.00014	0.0168	< 0.020	< 0.000050	0.032		0.0000386		224	< 0.00010	0.00026	< 0.00020		
CM WD19	CM WD19 WS 2022-09-02 NP	2022-09-14	9.9		0.009	< 0.00020	< 0.00020	0.0234	< 0.040	< 0.000100	0.044		0.0000172		270	< 0.00020	0.00039	< 0.00040		
CM WD4	CM WD4 WS 2022-07-20 NP	2022-06-15	8		0.0039	0.00021	0.00014	0.0321	< 0.020	< 0.000050	0.016		0.000108		105	< 0.00010	< 0.10	0.00023		
CM WD4	CM WD4 WS 2022-09-02 NP	2022-09-14	10.6		<b>0.0657</b>	0.00015	0.00013	0.0508	< 0.020	< 0.000050	0.025		0.000117		157	< 0.00010	< 0.10	0.0002		
CM WD7	CM WD7 WS 2022-07-20 NP	2022-06-15	5.4		0.0012	0.00034	0.00012	0.044	< 0.020	< 0.000050	0.011		0.000135		72	< 0.00010	< 0.10	0.00054		
CM WD7	CM WD7 WS 2022-09-02 NP	2022-09-14	9		0.0079	0.00016	0.00011	0.0484	< 0.020	< 0.000050	0.018		0.0000974		104	< 0.00010	< 0.10	0.00027		

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX B - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L
			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>BC WQG FWAL</b>																			
<b>Coal Mountain Mine</b>																			
CM 37PIT-SEEP-E	CM 37PIT-SEEP-E WS 2022-07-07 NP	2022-07-07	709	< 0.010	< 0.000050	0.0859	56.3	0.265	0.0682	3.36	1.26	< 0.000010	70.1	1.76	0.000066	< 0.00010	< 0.00030	0.00285	0.0118
CM 37PIT-SEEP-E	CM 37PIT-SEEP-E WS 2022-09-02 NP	2022-09-02	476	0.039	< 0.000050	0.0984	46.4	0.00986	0.00614	3.61	0.084	< 0.000010	88.1	1.67	0.000012	< 0.00010	< 0.00030	0.00556	< 0.0010
CM 37PIT-SEEP-W	CM 37PIT-SEEP-W WS 2022-07-07 NP	2022-07-07	458	0.362	< 0.000050	0.146	33.5	0.0808	0.0141	3.3	< 0.050	< 0.000010	128	2.62	0.000014	< 0.00010	< 0.00030	0.000411	0.0068
CM 37PIT-SEEP-W	CM 37PIT-SEEP-W WS 2022-09-02 NP	2022-09-02	180	0.03	< 0.000050	0.175	23.1	0.00162	0.00648	3.59	< 0.050	< 0.000010	157	1.61	0.000014	< 0.00010	< 0.00030	0.000713	< 0.0010
CM CCDS	CM CCDS WS 2022-07-20 NP	2022-06-16	300	< 0.010	< 0.000050	0.005	28.9	< 0.00010	0.001	0.793	6.49	< 0.000010	6.58	0.178	0.000016	< 0.00010	< 0.00030	0.000942	0.0017
CM CS1	CM CS1 WS 2022-07-20 NP	2022-06-16	365	< 0.010	< 0.000050	0.0029	33.5	0.00035	0.00099	0.788	8.95	< 0.000010	10.7	0.171	0.000016	< 0.00010	< 0.00030	0.000539	0.0015
CM CS1	CM CS1 WS 2022-09-02 NP	2022-09-15	314	< 0.010	< 0.000050	0.005	26.2	0.00066	0.00096	0.692	7.73	< 0.000010	6.49	0.16	0.000018	< 0.00010	< 0.00030	0.000506	0.0018
CM MM-SEEP1	CM MM-SEEP1 WS 2022-07-20 NP	2022-06-16	614	< 0.010	< 0.000050	0.0269	76.4	0.00045	0.00307	3.23	5.25	< 0.000010	27.8	0.894	< 0.000010	< 0.00010	< 0.00030	0.00286	0.0025
CM MM-SEEP1	CM MM-SEEP1 WS 2022-09-02 NP	2022-09-15	490	< 0.010	< 0.000050	0.0206	54.7	0.00146	0.00212	3.03	2.49	< 0.000010	22.2	0.769	< 0.000010	< 0.00010	< 0.00030	0.00182	0.0022
CM MM-SEEP3	CM MM-SEEP3 WS 2022-07-20 NP	2022-06-16	1020	0.051	< 0.000050	0.0053	95.4	0.154	0.00082	1.34	0.806	< 0.000010	47.2	0.902	< 0.000010	< 0.00010	< 0.00030	0.00141	< 0.0010
CM MM-SEEP3	CM MM-SEEP3 WS 2022-09-02 NP	2022-09-15	976	0.042	< 0.000050	0.0058	97	0.286	0.00104	1.51	0.186	< 0.000010	63.1	0.844	< 0.000010	< 0.00010	< 0.00030	0.000983	< 0.0010
CM MM-SEEP5	CM MM-SEEP5 WS 2022-07-20 NP	2022-06-16	791	0.018	< 0.000050	0.0167	80.6	0.141	0.0623	2.31	1.51	< 0.000010	15.5	1.04	0.000038	< 0.00010	< 0.00030	0.00182	0.14
CM MM-SEEP5	CM MM-SEEP5 WS 2022-09-02 NP	2022-09-15	581	< 0.010	< 0.000050	0.0131	58	0.00751	0.0114	2.15	0.295	< 0.000010	13.6	0.685	0.000017	< 0.00010	< 0.00030	0.00133	0.0318
CM NS1	CM NS1 WS 2022-07-20 NP	2022-06-16	1380	0.011	< 0.000050	0.0138	185	0.0102	0.00733	3.91	23.2	< 0.000010	13.6	0.475	0.000013	< 0.00010	< 0.00030	0.00474	0.0134
CM NS1	CM NS1 WS 2022-09-02 NP	2022-09-14	1650	< 0.020	< 0.000100	0.0191	223	0.0223	0.00969	3.93	14.9	< 0.000020	20	0.617	< 0.000020	< 0.00020	< 0.00060	0.00617	0.0141
CM NS4	CM NS4 WS 2022-07-20 NP	2022-06-16	768	< 0.010	< 0.000050	0.0222	84.1	0.0122	0.00487	3.61	17.3	< 0.000010	24.2	0.533	0.000012	< 0.00010	< 0.00030	0.00278	0.0056
CM NS4	CM NS4 WS 2022-09-02 NP	2022-09-14	1100	< 0.010	< 0.000050	0.0325	105	0.0718	0.0101	3.94	0.529	< 0.000010	37.7	1.05	0.000035	< 0.00010	< 0.00030	0.00249	0.0068
CM NS7	CM NS7 WS 2022-07-20 NP	2022-06-16	1020	0.03	< 0.000050	0.0176	129	0.0289	0.00845	3.75	22.4	< 0.000010	26.6	0.452	< 0.000010	< 0.00010	< 0.00030	0.00377	0.01
CM NS7	CM NS7 WS 2022-09-02 NP	2022-09-14	11.4	0.032	< 0.000050	0.0185	129	0.165	0.00817	3.44	8.33	< 0.000010	28	0.554	0.000012	< 0.00010	< 0.00030	0.00384	0.0051
CM PLANT-SEEP1	CM PLANT-SEEP1 WS 2022-07-20 NP	2022-06-16	-	0.188	< 0.000050	0.025	81	0.281	0.00599	2.98	0.425	< 0.000010	16.4	0.74	0.000025	< 0.00010	< 0.00030	0.0024	0.0101
CM PLANT-SEEP1	CM PLANT-SEEP1 WS 2022-09-02 NP	2022-09-15	5.6	4.5	< 0.000050	0.0274	76.6	0.483	0.00998	2.9	0.073	< 0.000010	18.7	0.752	< 0.000010	< 0.00010	< 0.00030	0.00218	0.006
CM WD15	CM WD15 WS 2022-07-20 NP	2022-06-15	6.5	< 0.010	< 0.000050	0.0291	155	0.0002	0.0078	3.87	12.3	< 0.000010	17.4	0.699	< 0.000010	< 0.00010	< 0.00030	0.00492	0.0012
CM WD15	CM WD15 WS 2022-09-02 NP	2022-09-14	4.9	< 0.020	< 0.000100	0.0298	206	0.0023	0.0108	4.07	7.04	< 0.000020	19.8	0.902	< 0.000020	< 0.00020	< 0.00060	0.00652	< 0.0020
CM WD15	CM WD15 WS 2022-09-19 NP	2022-09-19	7.6	< 0.020	< 0.000100	0.0355	194	< 0.00020	0.00982	4.24	7.92	< 0.000020	18.8	0.83	< 0.000020	< 0.00020	< 0.00060	0.00602	< 0.0020
CM WD15-SOURCE	CM WD15-SOURCE WS 2022-07-20 NP	2022-06-15	7.3	< 0.010	< 0.000050	0.0288	159	0.00293	0.0171	3.85	16.2	< 0.000010	16.4	0.735	0.000012	< 0.00010	< 0.00030	0.00532	0.0061
CM WD15-SOURCE	CM WD15-SOURCE WS 2022-09-02 NP	2022-09-14	10.8	< 0.020	< 0.000100	0.0325	213	0.00382	0.0191	4.05	9.91	< 0.000020	18.2	0.877	< 0.000020	< 0.00020	< 0.00060	0.00724	0.0041
CM WD15-SOURCE	CM WD15-SOURCE WS 2022-09-19 NP	2022-09-19	-	< 0.020	< 0.000100	0.0353	200	0.00684	0.0185	4.03	10.1	< 0.000020	18	0.813	< 0.000020	< 0.00020	< 0.00060	0.00655	0.0078
CM WD18	CM WD18 WS 2022-07-20 NP	2022-06-15	6	< 0.010	< 0.000050	0.0097	154	0.00105	0.00597	3.09	33.4	< 0.000010	5.07	0.418	0.000013	< 0.00010	< 0.00030	0.00487	0.0056
CM WD18	CM WD18 WS 2022-09-02 NP	2022-09-14	8.5	< 0.020	< 0.000100	0.0122	212	0.00653	0.00798	3.53	28.3	< 0.000020	6.87	0.62	0.00002	< 0.00020	< 0.00060	0.00788	0.0049
CM WD19	CM WD19 WS 2022-07-20 NP	2022-06-15	9.6	< 0.010	< 0.000050	0.0221	107	0.0114	0.00677	3.06	19.2	< 0.000010	16.2	0.595	< 0.000010	< 0.00010	< 0.00030	0.00233	0.0058
CM WD19	CM WD19 WS 2022-09-02 NP	2022-09-14	9.9	< 0.020	< 0.000100	0.0331	129	0.0348	0.00711	2.97	4.22	< 0.000020	23.2	0.836	< 0.000020	< 0.00020	< 0.00060	0.00201	0.0027
CM WD4	CM WD4 WS 2022-07-20 NP	2022-06-15	8	< 0.010	< 0.000050	0.0047	58.4	0.003	0.0029	1.68	19.3	< 0.000010	1.81	0.278	< 0.000010	< 0.00010	< 0.00030	0.002	0.0066
CM WD4	CM WD4 WS 2022-09-02 NP	2022-09-14	10.6	< 0.010	< 0.000050	0.0077	79.1	0.00365	0.00272	1.95	8.25	< 0.000010	3.61	0.475	< 0.000010	< 0.00010	< 0.00030	0.00215	0.0109
CM WD7	CM WD7 WS 2022-07-20 NP	2022-06-15	5.4	< 0.010	< 0.000050	0.0058	42.3	0.00103	0.00336	1.56	33.2	< 0.000010	1.59	0.232	< 0.000010	< 0.00010	< 0.00030	0.00278	0.0095
CM WD7	CM WD7 WS 2022-09-02 NP	2022-09-14	9	< 0.010	< 0.000050	0.0082	53.5	0.00279	0.00344	0.625	9.9	< 0.000010	3.06	0.393	< 0.000010	< 0.00010	< 0.00030	0.00216	0.008

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX B - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness (mg/L)	Dissolved Metals														
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper	
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Acute	Chronic	n/a	na	na	na	na	na	na	na	Acute	Chronic	n/a	n/a	n/a	Acute	Chronic	
	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>									0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>					BLM <sup>e</sup>	
<b>BC WQG FWAL</b>																		
<b>Elkview Operation</b>																		
EV CN1	EV CN1 WS 2022-05-18 NP	2022-05-18	8.5	0.008	0.00555	< 0.00010	0.0166	< 0.020	< 0.000050	< 0.010	0.000117	80.9	0.00014	< 0.10	0.00022			
EV CN1	EV CN1 WS 2022-06-29 NP	2022-06-29	11.8	0.0014	0.00053	0.0001	0.0168	< 0.020	< 0.000050	< 0.010	0.000123	82.3	0.00011	< 0.10	< 0.00020			
EV CN1	EV CN1 WS 2022-07-14 NP	2022-07-14	-	< 0.0010	0.0006	0.00013	0.0201	< 0.020	< 0.000050	< 0.010	0.000184	94.6	0.00012	< 0.10	< 0.00026			
EV CN1	EV CN1 WS 2022-07-20 NP	2022-07-20	15.6	< 0.0010	0.00069	0.00013	0.0233	< 0.020	< 0.000050	< 0.010	0.000209	106	0.00014	< 0.10	< 0.00020			
EV CN1	EV CN1 WS 2022-08-25 NP	2022-08-25	9.2	0.0016	0.00057	0.00011	0.0225	< 0.020	< 0.000050	< 0.010	0.000189	113	0.00013	< 0.10	0.0003			
EV CN1	EV CN1 WS 2022-09 SA NP	2022-09-27	18.1	< 0.0010	0.00059	0.00011	0.02	< 0.020	< 0.000050	< 0.010	0.0002	101	0.00012	< 0.10	< 0.00020			
EV CN1	EV CN1 WS 2022-10-20 NP	2022-10-20	14.1	0.001	0.00057	0.0001	0.022	< 0.020	< 0.000050	< 0.010	0.00019	123	0.0001	< 0.10	0.00023			
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-05-18 NP	2022-05-18	15.2	< 0.0010	< 0.00010	0.0404	< 0.020	< 0.000050	0.011	0.000105	137	< 0.00010	< 0.10	< 0.00020				
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-06-29 NP	2022-06-29	594	0.0012	< 0.00010	0.0396	< 0.020	< 0.000050	0.012	0.000193	134	< 0.00010	< 0.10	< 0.00020				
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-07-14 NP	2022-07-14	6.9	< 0.0010	< 0.00010	0.0444	< 0.020	< 0.000050	0.014	0.000262	140	< 0.00010	< 0.10	0.00044				
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-07-20 NP	2022-07-20	-	< 0.0010	< 0.00010	0.048	< 0.020	< 0.000050	0.013	0.000203	150	< 0.00010	< 0.10	< 0.00020				
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-08-24 NP	2022-08-24	10.2	< 0.0010	< 0.00010	0.0439	< 0.020	< 0.000050	0.012	0.00002	145	< 0.00010	< 0.10	< 0.00020				
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-09 SA NP	2022-09-28	10.9	< 0.0010	< 0.00010	0.0467	< 0.020	< 0.000050	0.012	0.000194	156	< 0.00010	< 0.10	< 0.00020				
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-05-19 NP	2022-05-19	11.6	0.0014	< 0.00010	0.00013	0.446	< 0.020	< 0.000050	< 0.010	0.000907	65.9	< 0.00010	0.00203	< 0.00020			
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-06-29 NP	2022-06-29	12.1	0.0018	< 0.00010	0.00015	0.45	< 0.020	< 0.000050	< 0.010	0.000926	63.1	< 0.00010	0.00216	< 0.00020			
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-07-20 NP	2022-07-20	11.5	< 0.0010	< 0.00010	0.00014	0.507	< 0.020	< 0.000050	0.010	0.00105	66.3	< 0.00010	0.00234	< 0.00020			
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-08-24 NP	2022-08-24	10.4	< 0.0010	< 0.00010	0.00015	0.438	< 0.020	< 0.000050	< 0.010	0.000892	58.2	< 0.00010	0.00205	0.00023			
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-09 SA NP	2022-09-28	10.3	0.0015	< 0.00010	0.00013	0.39	< 0.020	< 0.000050	< 0.010	0.000748	52.9	< 0.00010	0.00187	< 0.00020			
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-10-20 NP	2022-10-20	10.5	0.0013	< 0.00010	0.00016	0.366	< 0.020	< 0.000050	< 0.010	0.000703	51	< 0.00010	0.00171	< 0.00020			
EV SEEP BREAKERLAKE	EV SEEP BREAKERLAKE WS 2022-06 SA NP	2022-07-14	9.66	< 0.0010	< 0.00010	0.00014	0.472	< 0.020	< 0.000050	< 0.010	0.000994	63.9	< 0.00010	0.00227	< 0.00020			
EV SEEP BREAKERLAKE	EV SEEP BREAKERLAKE WS 2022-09 SA NP	2022-09-27	9.54	< 0.0010	0.00069	0.00017	0.0267	< 0.020	< 0.000050	0.017	0.00031	96.8	< 0.00010	0.00127	0.0005			
EV SEEP CF11	EV SEEP CF11 WS 2022-06 SA NP	2022-07-07	9.66	< 0.0010	< 0.00010	< 0.00010	2.67	< 0.020	< 0.000050	0.051	0.000054	94	< 0.00010	0.0003	0.0002			
EV SEEP CF11	EV SEEP CF11 WS 2022-09 SA NP	2022-09-26	10.1	< 0.0010	< 0.00010	0.00011	2.78	< 0.020	< 0.000050	0.045	< 0.0050	108	< 0.00010	0.00024	< 0.00020			
EV SEEP CF12	EV SEEP CF12 WS 2022-06 SA NP	2022-07-08	12.5	0.0013	< 0.00010	0.00012	0.478	< 0.020	< 0.000050	0.051	< 0.0050	97.2	< 0.00010	< 0.10	0.00041			
EV SEEP CF12	EV SEEP CF12 WS 2022-09 SA NP	2022-09-26	11	< 0.0010	< 0.00010	0.00012	0.415	< 0.020	< 0.000050	0.052	< 0.0050	89.4	< 0.00010	< 0.10	< 0.00020			
EV SEEP ERICKSON1	EV SEEP ERICKSON1 WS 2022-06 SA NP	2022-07-13	-	< 0.0010	< 0.00010	0.00167	0.0258	< 0.020	< 0.000050	0.01	0.0000112	160	< 0.00010	0.00172	< 0.00020			
EV SEEP ERICKSON1	EV SEEP ERICKSON1 WS 2022-09 SA NP	2022-10-05	-	0.002	< 0.00010	0.00164	0.0254	< 0.020	< 0.000050	0.01	0.000089	176	< 0.00010	0.00183	< 0.00020			
EV SEEP ERICKSON2	EV SEEP ERICKSON2 WS 2022-06 SA NP	2022-07-07	8.75	0.0042	0.00061	0.00095	0.186	< 0.020	< 0.000050	0.012	0.0000764	92.8	< 0.00010	< 0.10	0.00107			
EV SEEP ERICKSON2	EV SEEP ERICKSON2 WS 2022-09 SA NP	2022-09-28	11.7	< 0.0020	0.0014	0.00054	0.0211	< 0.040	< 0.000100	0.03	0.000388	391	< 0.00020	0.00066	0.00095			
EV SEEP HOPPER2	EV SEEP HOPPER2 WS 2022-06 SA NP	2022-07-14	11.3	0.0028	0.00145	< 0.00020	0.00582	< 0.040	< 0.000100	0.08	0.000795	333	0.00211	0.00255	0.0008			
EV SEEP HOPPER2	EV SEEP HOPPER2 WS 2022-09 SA NP	2022-09-27	8.65	< 0.0020	0.00158	< 0.00020	0.0101	< 0.040	< 0.000100	0.145	0.000534	325	0.0012	0.00514	0.00118			
EV SEEP PLANT1	EV SEEP PLANT1 WS 2022-06 SA NP	2022-07-08	10.1	0.0031	0.00024	0.00029	0.106	< 0.020	< 0.000050	0.204	0.000584	110	< 0.00010	0.0001	0.00118			
EV SEEP PLANT10	EV SEEP PLANT10 WS 2022-06 SA NP	2022-07-08	1	0.0045	< 0.00020	0.00021	0.0254	< 0.040	< 0.000100	0.506	< 0.0100	162	< 0.00020	< 0.20	< 0.00040			
EV SEEP PLANT11	EV SEEP PLANT11 WS 2022-06 SA NP	2022-07-07	11.4	< 0.0010	< 0.00010	0.00026	0.166	< 0.020	< 0.000050	0.249	0.000081	116	< 0.00010	< 0.10	0.00023			
EV SEEP PLANT11	EV SEEP PLANT11 WS 2022-09 SA NP	2022-09-26	11.3	< 0.0010	< 0.00010	0.0003	0.148	< 0.020	< 0.000050	0.211	0.000186	123	< 0.00010	< 0.10	0.00035			
EV SEEP PLANT23	EV SEEP PLANT23 WS 2022-06 SA NP	2022-07-07	10.9	< 0.0010	0.00036	0.00024	0.0328	< 0.020	< 0.000050	0.079	0.000178	156	< 0.00010	< 0.10	0.00051			
EV SEEP PLANT23	EV SEEP PLANT23 WS 2022-09 SA NP	2022-09-26	7.67	< 0.0010	0.00038	0.00024	0.0288	< 0.020	< 0.000050	0.092	0.000067	183	< 0.00010	< 0.10	0.00035			
EV SEEP SOUTHPT13	EV SEEP SOUTHPT13 WS 2022-06 SA NP	2022-07-13	-	0.0052	0.00035	0.00037	0.0885	< 0.020	< 0.000050	< 0.010	0.000518	59.3	< 0.00010	< 0.10	0.00052			
EV SEEP SOUTHPT13	EV SEEP SOUTHPT13 WS 2022-09 SA NP	2022-09-30	3.6	< 0.0010	0.0004	0.00039	0.144	< 0.020	< 0.000050	0.013	0.000105	102	< 0.00010	< 0.10	0.00053			
EV SEEP SOUTHPT14	EV SEEP SOUTHPT14 WS 2022-06 SA NP	2022-07-13	2	0.001	< 0.00010	0.00017	3.27	< 0.020	< 0.000050	0.101	< 0.0050	89	< 0.00010	< 0.10	< 0.00020			
EV SEEP SOUTHPT14	EV SEEP SOUTHPT14 WS 2022-09 SA NP	2022-09-30	0.9	0.0063	< 0.00010	0.00014	3.8	< 0.020	< 0.000050	0.101	< 0.0050	93.5	< 0.00010	< 0.10	< 0.00020			
EV SEEP SOUTHPT16	EV SEEP SOUTHPT16 WS 2022-06 SA NP	2022-07-13	3.4	< 0.0050	< 0.00050	0.0389	< 0.100	< 0.000250	< 0.050	0.000086	378	< 0.00050	< 0.50	0.00111				
EV SEEP SOUTHPT16	EV SEEP SOUTHPT16 WS 2022-09 SA NP	2022-10-04	14.9	0.0027	0.0005	0.00031	0.0324	< 0.040	< 0.000100	0.027	0.000134	477	< 0.00020	< 0.20	0.00086			
EV SEEP TURCON1	EV SEEP TURCON1 WS 2022-06 SA NP	2022-07-08	15.9	0.0021	< 0.00010	0.00017	0.135	< 0.020	< 0.000050	0.053	< 0.0050	126	< 0.00010	< 0.10	< 0.00020			
EV SEEP TURCON1	EV SEEP TURCON1 WS 2022-09 SA NP	2022-09-27	19.8	< 0.0010	< 0.00010	0.0012	< 0.020	< 0.000050	0.077	< 0.0050	109	< 0.00010	< 0.10	< 0.00020				
EV SPR1B	EV SPR1B WS 2022-04 QRT NP	2022-06-01	14.8	< 0.0010	0.00023	< 0.00010	0.0607	< 0.020	< 0.000050	0.031	0.000181	89.5	< 0.00010	< 0.10	0.00024			
EV SPR1B	EV SPR1B WS 2022-07 QRT NP	2022-09-01	9.2	0.003	0.0002	0.00012	0.0752	< 0.020	< 0.000050	0.035	0.000017	113	< 0.00010	< 0.10	0.00023			
EV WLAGC	EV WLAGC WS 2022-06 SA NP	2022-07-08	10.7	< 0.0010	< 0.00010	0.00078	0.342	< 0.020	< 0.000050	0.036	< 0.0050	75.5	< 0.00010	0.00018	0.00021			
EV WLAGC	EV WLAGC WS 2022-09 SA NP	2022-09-26	7.7	< 0.0010	< 0.00010	0.00087	0.322	< 0.020	< 0.000050	0.03	< 0.0050	80.3	< 0.00010	0.00029	< 0.00020			

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

APPENDIX B - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness (mg/L)	Dissolved Metals																
				Iron (mg/L)	Lead (mg/L)	Lithium (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Nickel (mg/L)	Potassium (mg/L)	Selenium (µg/L)	Silver (mg/L)	Sodium (mg/L)	Strontium (mg/L)	Thallium (mg/L)	Tin (mg/L)	Titanium (mg/L)	Uranium (mg/L)	Zinc (mg/L)	
BC WQG FWAL				n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Elkview Operation																				
EV CN1	EV CN1 WS 2022-05-18 NP	2022-05-18	8.5	< 0.010	< 0.000050	0.0153	62.8	< 0.00010	0.00364	1.88	126	< 0.000010	2.18	0.0682	0.000016	< 0.00010	< 0.00030	0.00415	0.0048	
EV CN1	EV CN1 WS 2022-06-29 NP	2022-06-29	11.8	< 0.010	< 0.000050	0.0168	71.6	< 0.00010	0.00428	1.86	131	< 0.000010	2.54	0.07	0.000016	< 0.00010	< 0.00030	0.00449	0.0058	
EV CN1	EV CN1 WS 2022-07-14 NP	2022-07-14	-	< 0.010	< 0.000050	0.0179	76.2	< 0.00010	0.00502	2.08	180	< 0.000010	2.68	0.083	0.000019	< 0.00010	< 0.00030	0.00558	0.0068	
EV CN1	EV CN1 WS 2022-07-20 NP	2022-07-20	15.6	< 0.010	< 0.000050	0.0209	93.3	< 0.00010	0.00557	2.31	201	< 0.000010	3.05	0.0953	0.00002	< 0.00010	< 0.00030	0.00627	0.0074	
EV CN1	EV CN1 WS 2022-08-25 NP	2022-08-25	9.2	< 0.010	< 0.000050	0.0204	102	< 0.00010	0.00558	2.07	217	< 0.000010	3.5	0.0918	0.000016	< 0.00010	< 0.00030	0.0065	0.0074	
EV CN1	EV CN1 WS 2022-09 SA NP	2022-09-27	18.1	< 0.010	< 0.000050	0.0196	97	< 0.00010	0.00564	1.88	237	< 0.000010	2.51	0.107	0.000017	< 0.00010	< 0.00030	0.00659	0.0082	
EV CN1	EV CN1 WS 2022-10 NP	2022-10-20	14.1	< 0.010	< 0.000050	0.0209	101	< 0.00010	0.00581	2.06	224	< 0.000010	2.99	0.0966	0.000017	< 0.00010	< 0.00030	0.0065	0.0065	
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-05-18 NP	2022-05-18	15.2	< 0.010	< 0.000050	0.0179	60	< 0.00010	0.00055	1.54	39.2	< 0.000010	5.95	0.291	< 0.000010	< 0.00010	< 0.00030	0.00192	< 0.0010	
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-06-29 NP	2022-06-29	594	< 0.010	< 0.000050	0.0184	63.1	< 0.00010	0.00055	1.45	43.5	< 0.000010	6.32	0.284	< 0.000010	< 0.00010	< 0.00030	0.00176	< 0.0010	
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-07-14 NP	2022-07-14	6.9	< 0.010	< 0.000050	0.0191	61	< 0.00010	0.00071	1.51	47.5	< 0.000010	6.19	0.316	< 0.000010	< 0.00010	< 0.00030	0.00189	< 0.0010	
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-07-20 NP	2022-07-20	-	< 0.010	< 0.000050	0.0213	70	< 0.00010	0.00064	1.69	52.3	< 0.000010	6.67	0.342	< 0.000010	< 0.00010	< 0.00030	0.00196	0.0035	
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-08-24 NP	2022-08-24	10.2	< 0.010	< 0.000050	0.0186	69.4	< 0.00010	0.00058	1.46	52.8	< 0.000010	6.18	0.311	< 0.000010	< 0.00010	< 0.00030	0.00183	< 0.0010	
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-09 SA NP	2022-09-28	10.9	< 0.010	< 0.000050	0.0173	71.8	0.00038	0.00052	1.55	59.4	< 0.000010	6.51	0.33	< 0.000010	< 0.00010	< 0.00030	0.00196	0.0019	
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-05-19 NP	2022-05-19	11.6	< 0.010	< 0.000050	0.0023	20.1	0.778	0.00395	0.864	0.205	< 0.000010	3.24	0.118	0.000011	< 0.00010	< 0.00030	0.000162	0.0076	
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-06-29 NP	2022-06-29	12.1	0.018	< 0.000050	0.0026	21.8	0.806	0.0042	0.892	0.254	< 0.000010	3.73	0.119	0.000012	< 0.00010	< 0.00030	0.000194	0.0078	
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-07-20 NP	2022-07-20	11.5	< 0.010	< 0.000050	0.0028	22.5	0.821	0.00456	0.971	0.218	< 0.000010	3.81	0.134	0.000014	< 0.00010	< 0.00030	0.000194	0.0075	
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-08-24 NP	2022-08-24	10.4	< 0.010	< 0.000050	0.0025	19.6	0.685	0.00399	0.885	0.181	< 0.000010	3.59	0.114	0.000014	< 0.00010	< 0.00030	0.000161	0.0056	
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-09 SA NP	2022-09-28	10.3	< 0.010	< 0.000050	0.0023	17.3	0.621	0.00341	0.884	0.202	< 0.000010	3.45	0.101	0.000013	< 0.00010	< 0.00030	0.000116	0.0064	
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-10 NP	2022-10-20	10.5	< 0.010	< 0.000050	0.0023	15.6	0.544	0.0035	0.807	0.28	< 0.000010	3.21	0.0954	0.000014	< 0.00010	< 0.00030	0.000095	0.0054	
EV SEEP BREAKERLAKE	EV SEEP BREAKERLAKE WS 2022-06 SA NP	2022-07-14	9.66	< 0.010	< 0.000050	0.0026	20	0.789	0.00449	0.958	0.23	< 0.000010	3.6	0.126	0.000014	< 0.00010	< 0.00030	0.000186	0.0071	
EV SEEP BREAKERLAKE	EV SEEP BREAKERLAKE WS 2022-09 SA NP	2022-09-27	9.54	< 0.010	< 0.000050	0.00251	71.3	0.112	0.0092	2.4	33.8	< 0.000010	6.42	0.154	0.000048	< 0.00010	< 0.00030	0.0052	0.0067	
EV SEEP CF11	EV SEEP CF11 WS 2022-06 SA NP	2022-07-07	9.66	0.343	< 0.000050	0.0488	61.7	0.394	0.00085	4.5	0.093	< 0.000010	5.77	0.449	< 0.000010	< 0.00010	< 0.00030	0.000201	0.0034	
EV SEEP CF11	EV SEEP CF11 WS 2022-09 SA NP	2022-09-26	10.1	1.09	< 0.000050	0.0526	63.2	0.29	0.00072	4.82	0.084	< 0.000010	6.02	0.468	< 0.000010	< 0.00010	< 0.00030	0.00015	0.0068	
EV SEEP CF12	EV SEEP CF12 WS 2022-06 SA NP	2022-07-08	12.5	< 0.010	< 0.000050	0.0538	91.4	0.00134	0.00064	4.18	0.369	< 0.000010	5.16	0.514	< 0.000010	< 0.00010	< 0.00030	0.000356	0.0024	
EV SEEP CF12	EV SEEP CF12 WS 2022-09 SA NP	2022-09-26	11	< 0.010	< 0.000050	0.052	90.6	0.00015	< 0.00050	4.94	0.14	< 0.000010	5.29	0.485	< 0.000010	< 0.00010	< 0.00030	0.000284	0.0029	
EV SEEP ERICKSON1	EV SEEP ERICKSON1 WS 2022-06 SA NP	2022-07-13	-	3.01	< 0.000050	0.0105	48.6	0.464	0.00244	1.17	< 0.050	< 0.000010	2.24	0.324	0.000015	< 0.00010	< 0.00030	0.000153	0.0016	
EV SEEP ERICKSON1	EV SEEP ERICKSON1 WS 2022-09 SA NP	2022-10-05	-	2.91	< 0.000050	0.0104	54.3	0.529	0.00269	1.18	< 0.050	< 0.000010	2.3	0.324	0.000013	< 0.00010	< 0.00030	0.000146	0.0022	
EV SEEP ERICKSON2	EV SEEP ERICKSON2 WS 2022-06 SA NP	2022-07-07	8.75	< 0.010	< 0.000050	0.0075	28.5	0.00093	0.00327	1.96	5.17	< 0.000010	3.4	0.159	0.00003	< 0.00010	< 0.00030	0.000245	0.0024	
EV SEEP ERICKSON2	EV SEEP ERICKSON2 WS 2022-09 SA NP	2022-09-26	11.7	< 0.020	< 0.000100	0.0653	333	0.0394	0.00408	6.09	750	< 0.000020	2.91	0.235	0.000052	< 0.00020	< 0.00060	0.00269	0.00721	
EV SEEP HOPPER2	EV SEEP HOPPER2 WS 2022-06 SA NP	2022-07-14	11.3	< 0.020	< 0.000100	0.363	459	0.00115	0.037	21.2	538	< 0.000020	50.5	0.657	0.000043	< 0.00020	< 0.00060	0.012	0.0281	
EV SEEP HOPPER2	EV SEEP HOPPER2 WS 2022-09 SA NP	2022-09-27	8.65	< 0.020	< 0.000100	0.388	291	0.00063	0.031	18.4	585	< 0.000020	22.2	0.911	0.000047	< 0.00020	< 0.00060	0.0116	0.0328	
EV SEEP PLANT1	EV SEEP PLANT1 WS 2022-06 SA NP	2022-07-08	10.1	< 0.010	< 0.000050	0.127	46.1	0.00981	0.00199	3.4	1.94	< 0.000010	69.1	2.15	0.000011	< 0.00010	< 0.00030	0.00085	0.0087	
EV SEEP PLANT10	EV SEEP PLANT10 WS 2022-06 SA NP	2022-07-08	1	0.082	< 0.000100	0.443	88	0.0687	< 0.00100	3.4	< 0.100	< 0.000020	350	9.01	< 0.000020	< 0.00020	< 0.00060	0.00007	< 0.0020	
EV SEEP PLANT11	EV SEEP PLANT11 WS 2022-06 SA NP	2022-07-07	11.4	< 0.010	< 0.000050	0.138	47.3	0.00833	0.00081	2.59	1.18	< 0.000010	74.3	2.28	< 0.000010	< 0.00010	< 0.00030	0.000327	< 0.0010	
EV SEEP PLANT11	EV SEEP PLANT11 WS 2022-09 SA NP	2022-09-26	11.3	< 0.010	< 0.000050	0.168	57.6	0.0541	0.00125	3.02	0.435	< 0.000010	87.8	2.32	< 0.000010	< 0.00010	< 0.00030	0.000131	0.0016	
EV SEEP PLANT23	EV SEEP PLANT23 WS 2022-06 SA NP	2022-07-07	10.9	< 0.010	< 0.000050	0.0631	93.8	0.00021	0.00024	2.8	20.2	< 0.000010	23.8	1.68	< 0.000010	< 0.00010	< 0.00030	0.000227	0.114	
EV SEEP PLANT23	EV SEEP PLANT23 WS 2022-09 SA NP	2022-09-26	7.67	< 0.010	< 0.000050	0.071	99.9	< 0.00010	0.00211	2.87	16.9	< 0.000010	25.5	1.92	< 0.000010	< 0.00010	< 0.00030	0.000199	0.0222	
EV SEEP SOUTHPT13	EV SEEP SOUTHPT13 WS 2022-06 SA NP	2022-07-13	-	< 0.010	< 0.000050	0.0018	28.2	< 0.00010	0.00096	0.893	6.1	< 0.000010	0.913	0.0622	0.000011	< 0.00010	< 0.00030	0.00035	0.0013	
EV SEEP SOUTHPT13	EV SEEP SOUTHPT13 WS 2022-09 SA NP	2022-09-30	3.6	< 0.010	< 0.000050	0.0028	44.5	< 0.00010	0.00101	0.875	1.82	< 0.000010	1.26	0.101	0.000016	< 0.00010	< 0.00030	0.000884	< 0.0010	
EV SEEP SOUTHPT14	EV SEEP SOUTHPT14 WS 2022-06 SA NP	2022-07-13	2	0.216	< 0.000050	0.106	37.6	0.0552	< 0.00050	6.17	0.199	< 0.000010	4.82	0.323	< 0.000010	< 0.00010	< 0.00030	0.0004	0.0014	
EV SEEP SOUTHPT14	EV SEEP SOUTHPT14 WS 2022-09 SA NP	2022-09-30	0.9	0.324	< 0.000050	0.116	37.3	0.0537	< 0.00050	7.06	0.458	< 0.000010	5.1	0.348	< 0.000010	< 0.00010	< 0.00030	0.000241	0.0016	
EV SEEP SOUTHPT16	EV SEEP SOUTHPT16 WS 2022-06 SA NP	2022-07-13	3.4	< 0.050	< 0.000250	0.0284	217	0.108	< 0.00250	3.51	64.4	< 0.000050	4.05	0.452	< 0.000050	< 0.00050	< 0.00150	0.00581	0.0057	
EV SEEP SOUTHPT16	EV SEEP SOUTHPT16 WS 2022-09 SA NP	2022-10-04	14.9	0.028	< 0.000100	0.0293	231	0.00459	0.00202	3.97	93									



APPENDIX B - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness (mg/L)	Dissolved Metals															
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper		
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
				Acute	Chronic	n/a	na	na	na	na	na	na	Acute	Chronic	n/a	n/a	n/a	Acute	Chronic
				0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>b</sup>	n/a	na	na	na	na	na	na	0.00004-0.0028 <sup>c</sup>	0.00002-0.00173 <sup>d</sup>	n/a	n/a	n/a	BLM <sup>e</sup>	BLM <sup>e</sup>
<b>BC WQG FWAL</b>																			
<b>Fording River Operation</b>																			
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-02 NP	2022-01-02	5	< 0.0010	0.00029	0.00017	0.0423	< 0.020	< 0.000050	0.025	0.00023	192	< 0.00010	< 0.10	0.0008				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-05 NP	2022-01-05	14.2	< 0.0010	0.00024	< 0.00010	0.0908	< 0.020			0.000014	158	0.00011	-	< 0.00020				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-07 NP	2022-01-07	13.6	< 0.0010	0.00032	0.00018	0.0444	< 0.020	< 0.000050	0.028	0.000243	197	< 0.00010	< 0.10	0.00083				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-12 NP	2022-01-12	21	< 0.0010	0.00029	0.00016	0.0455	< 0.020	< 0.000050	0.027	0.00024	195	< 0.00010	< 0.00010	0.00074				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-14 NP	2022-01-14	17.9	0.0011	0.00031	0.00017	0.0469	< 0.020	< 0.000050	0.028	0.000236	199	< 0.00010	< 0.00010	0.00079				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-19 NP	2022-01-19	14.1	0.0012	0.00031	0.00016	0.0468	< 0.020	< 0.000050	0.031	0.000247	224	< 0.00010	< 0.00010	0.00081				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-22 NP	2022-01-22	9.3	0.0021	0.00032	0.00017	0.0476	< 0.020	< 0.000050	0.03	0.000245	207	< 0.00010	< 0.00010	0.0008				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-26 NP	2022-01-26	8	0.0021	0.00034	0.00015	0.0502	< 0.020	< 0.000050	0.028	0.000238	207	0.00014	< 0.00010	0.00078				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-29 NP	2022-01-29	6.7	< 0.0010	0.00032	0.00016	0.0507	< 0.020	< 0.000050	0.031	0.000245	218	< 0.00010	< 0.00010	0.00091				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-02 NP	2022-02-02	13.2	< 0.0014	0.00031	0.00016	0.0475	< 0.020	< 0.000050	0.032	0.000245	217	0.00013	< 0.00010	0.0008				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-03 NP	2022-02-03	9.4	0.0232	0.00031	0.00014	0.0486	< 0.020	< 0.000050	0.03	0.000236	225	0.00091	< 0.00010	0.00094				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-04 NP	2022-02-04	12.4	0.0013	0.00031	0.00016	0.0478	< 0.020	< 0.000050	0.026	0.000248	200	< 0.00010	< 0.00010	0.00078				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-05 NP	2022-02-05	15.3	0.0014	0.0003	0.00015	0.0457	< 0.020	< 0.000050	0.03	0.000235	207	< 0.00010	< 0.00010	0.00073				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-06 NP	2022-02-06	12.2	0.0051	0.00031	0.00015	0.047	< 0.020	< 0.000050	0.028	0.000243	210	< 0.00010	< 0.00010	0.00092				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-07 NP	2022-02-07	3.1	0.0012	0.00045	0.00022	0.043	< 0.020	< 0.000050	0.029	0.00023	194	< 0.00010	< 0.00010	0.00084				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-08 NP	2022-02-08	7.5	0.0016	0.00038	0.00018	0.0519	< 0.020	< 0.000050	0.03	0.000232	220	< 0.00010	0.00019	0.00082				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-09 NP	2022-02-09	6.8	0.0041	0.00031	0.00024	0.0704	< 0.020	< 0.000050	0.022	0.000243	173	< 0.00010	0.00012	0.00079				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-10 NP	2022-02-10	18.1	0.0033	0.00031	0.00018	0.05	< 0.020	< 0.000050	0.03	0.000234	223	0.0001	< 0.00010	0.0008				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-11 NP	2022-02-11	8.6	0.0026	0.00033	0.00015	0.0448	< 0.020	< 0.000050	0.029	0.000225	203	< 0.00010	< 0.00010	0.00077				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-12 NP	2022-02-12	10.6	0.0012	0.0003	0.00016	0.0447	< 0.020	< 0.000050	0.029	0.000226	200	< 0.00010	< 0.00010	0.00087				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-13 NP	2022-02-13	12.8	0.0029	0.00033	0.00017	0.0485	< 0.020	< 0.000050	0.03	0.000237	210	0.00012	< 0.00010	0.00094				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-14 NP	2022-02-14	7.3	0.0016	0.00032	0.00019	0.0492	< 0.020	< 0.000050	0.031	0.000222	206	0.00013	< 0.00010	0.00091				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-15 NP	2022-02-15	10.1	0.0013	0.00031	0.00018	0.0491	< 0.020	< 0.000050	0.03	0.000239	211	< 0.00010	< 0.00010	0.00077				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-16 NP	2022-02-16	19.1	0.0023	0.00034	0.00018	0.0491	< 0.020	< 0.000050	0.032	0.000243	208	< 0.00010	< 0.00010	0.00077				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-17 NP	2022-02-17	13.2	0.0076	0.00034	0.00018	0.0514	< 0.020	< 0.000050	0.032	0.000259	219	0.00013	< 0.00010	0.00121				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-18 NP	2022-02-18	14.4	0.0042	0.00031	0.00014	0.0486	< 0.020	< 0.000050	0.032	0.000236	212	< 0.00010	< 0.00010	0.00076				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-19 NP	2022-02-19	11.2	0.0029	0.00033	0.00014	0.0508	< 0.020	< 0.000050	0.033	0.00026	216	< 0.00010	< 0.00010	0.00076				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-20 NP	2022-02-20	9.2	0.0107	0.00033	< 0.00020	0.0502	< 0.040	< 0.000100	0.032	0.000246	225	< 0.00020	< 0.00020	0.00086				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-21 NP	2022-02-21	10.1	0.0014	0.00031	0.00016	0.0481	< 0.020	< 0.000050	0.031	0.000234	240	0.00011	< 0.00010	0.00075				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-22 NP	2022-02-22	9.6	0.0012	0.00031	0.00019	0.0504	< 0.020	< 0.000050	0.031	0.000248	229	< 0.00010	< 0.00010	0.0012				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-23 NP	2022-02-23	8.2	0.0016	0.00033	0.00017	0.0485	< 0.020	< 0.000050	0.031	0.000256	226	< 0.00010	< 0.00010	0.00078				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-24 NP	2022-02-24	7.1	0.0038	0.00033	< 0.00020	0.0523	< 0.040	< 0.000100	0.034	0.000244	226	< 0.00020	< 0.00020	0.00078				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-25 NP	2022-02-25	11.2	0.0015	0.00034	0.00014	0.0501	< 0.020	< 0.000050	0.032	0.00024	220	< 0.00010	< 0.00010	0.00079				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-26 NP	2022-02-26	13.5	0.0033	0.00034	0.00018	0.0505	< 0.020	< 0.000050	0.031	0.000252	220	< 0.00010	< 0.00010	0.00093				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-27 NP	2022-02-27	10.2	0.0071	0.00035	0.00019	0.0522	< 0.020	< 0.000050	0.033	0.00025	220	< 0.00010	< 0.00010	0.0008				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-28 NP	2022-02-28	7.88	0.0011	0.00031	0.00015	0.0493	< 0.020	< 0.000050	0.033	0.000231	233	< 0.00010	< 0.00010	0.00087				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-02 NP	2022-03-02	10.6	0.0012	0.00032	0.00018	0.0503	< 0.020	< 0.000050	0.032	0.000249	224	< 0.00010	< 0.10	0.00082				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-03 NP	2022-03-03	11.9	0.0012	0.00031	0.00015	0.0477	< 0.020	< 0.000050	0.032	0.000243	228	0.00013	< 0.00010	0.00078				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-04 NP	2022-03-04	11.6	0.0012	0.00034	0.00015	0.0493	< 0.020	< 0.000050	0.031	0.000242	230	< 0.00010	< 0.10	0.00078				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-05 NP	2022-03-05	12.1	0.003	0.00033	0.00017	0.0507	< 0.020	< 0.000050	0.031	0.000245	233	< 0.00010	< 0.00010	0.00079				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-06 NP	2022-03-06	10.3	0.0016	0.00031	0.0002	0.0519	< 0.020	< 0.000050	0.032	0.000242	226	< 0.00010	< 0.10	0.00075				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-07 NP	2022-03-07	13.1	0.0018	0.00034	0.00019	0.0567	< 0.020	< 0.000050	0.033	0.000239	230	< 0.00010	< 0.10	0.001				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-08 NP	2022-03-08	12	0.0014	0.00028	0.00017	0.0504	< 0.020	< 0.000050	0.028	0.000219	231	< 0.00010	< 0.00010	0.00062				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-09 NP	2022-03-09	14.2	0.0012	0.00032	0.0002	0.055	< 0.020	< 0.000050	0.03	0.000249	229	0.00013	< 0.10	0.00077				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-10 NP	2022-03-10	13.4	0.0018	0.00034	0.00017	0.0517	< 0.020	< 0.000050	0.029	0.000253	231	< 0.00010	< 0.10	0.00076				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-12 NP	2022-03-12	12.7	0.0019	0.00028	0.00017	0.0491	< 0.020	< 0.000050	0.028	0.000214	194	< 0.00010	< 0.00010	0.00072				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-13 NP	2022-03-13	13.8	0.0037	0.00032	0.00019	0.0523	< 0.020	< 0.000050	0.029	0.000239	215	< 0.00010	< 0.10	0.00072				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-																		

APPENDIX B - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness (mg/L)	Dissolved Metals															
				Iron (mg/L)	Lead (mg/L)	Lithium (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Nickel (mg/L)	Potassium (mg/L)	Selenium (µg/L)	Silver (mg/L)	Sodium (mg/L)	Strontium (mg/L)	Thallium (mg/L)	Tin (mg/L)	Titanium (mg/L)	Uranium (mg/L)	Zinc (mg/L)
BC WQG FWAL				n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Forcing River Operation</b>																			
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-02 NP	2022-01-02	5	< 0.010	< 0.000050	0.0501	150	< 0.00010	0.00083	3.82	135	< 0.000010	4.4	0.193	< 0.000010	< 0.00010	< 0.00030	0.0039	0.0082
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-05 NP	2022-01-05	14.2	< 0.010		0.0851	67.6	0.00243	0.00774	2.13	92.9	< 0.000010	3.22	0.217	< 0.000010	-	< 0.00030	0.00414	0.005
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-07 NP	2022-01-07	13.6	< 0.010	< 0.000050	0.0503	152	0.0001	0.0012	3.95	154	< 0.000010	4.36	0.189	< 0.000010	< 0.00010	< 0.00030	0.00406	0.0085
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-12 NP	2022-01-12	21	< 0.010	< 0.000050	0.0527	150	0.00017	0.00108	3.75	134	< 0.000010	4.6	0.195	< 0.000010	< 0.00010	< 0.00030	0.00392	0.0082
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-14 NP	2022-01-14	17.9	< 0.010	< 0.000050	0.048	152	0.00019	0.00105	3.85	137	< 0.000010	4.57	0.195	0.00001	< 0.00010	< 0.00030	0.00425	0.0079
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-19 NP	2022-01-19	14.1	< 0.010	< 0.000050	0.0596	164	0.00038	0.00113	4.15	134	< 0.000010	4.89	0.204	0.000012	< 0.00010	< 0.00030	0.00424	0.009
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-22 NP	2022-01-22	9.3	< 0.010	< 0.000050	0.054	159	0.00045	0.00111	3.95	139	< 0.000010	4.89	0.207	< 0.000010	< 0.00010	< 0.00030	0.00431	0.0131
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-26 NP	2022-01-26	8	< 0.010	< 0.000050	0.054	167	0.00068	0.00119	3.86	124	< 0.000010	4.82	0.202	0.000012	< 0.00010	< 0.00030	0.004	0.0094
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-29 NP	2022-01-29	6.7	< 0.010	< 0.000050	0.0571	160	0.00074	0.00114	3.96	136	< 0.000010	4.92	0.204	0.000011	< 0.00010	< 0.00030	0.00399	0.0074
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-02 NP	2022-02-02	13.2	< 0.010	< 0.000050	0.0559	169	0.00063	0.00115	4.08	161	< 0.000010	5.06	0.209	0.000011	< 0.00010	< 0.00030	0.00423	0.008
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-03 NP	2022-02-03	9.4	0.04	< 0.000050	0.0582	163	0.0012	0.00107	4.02	135	< 0.000010	4.74	0.203	< 0.000010	0.00011	< 0.00030	0.00375	0.0122
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-04 NP	2022-02-04	12.4	< 0.010	< 0.000050	0.0481	167	0.00058	0.00108	4.02	132	< 0.000010	4.73	0.204	< 0.000010	< 0.00010	< 0.00030	0.00402	0.0083
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-05 NP	2022-02-05	15.3	< 0.010	< 0.000050	0.056	163	0.00041	0.00108	3.77	126	< 0.000010	4.7	0.198	< 0.000010	< 0.00010	< 0.00030	0.0041	0.0083
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-06 NP	2022-02-06	12.2	< 0.010	< 0.000050	0.0562	165	0.00068	0.00113	3.95	128	< 0.000010	4.88	0.208	< 0.000010	< 0.00010	< 0.00030	0.00414	0.0075
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-07 NP	2022-02-07	3.1	< 0.010	< 0.000050	0.0544	149	0.0122	0.00422	4.25	118	< 0.000010	4.6	0.216	0.000014	< 0.00010	< 0.00030	0.00401	0.0112
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-08 NP	2022-02-08	7.8	< 0.010	< 0.000050	0.0638	174	0.00742	0.00242	4.15	143	< 0.000010	5.2	0.216	0.000014	< 0.00010	< 0.00030	0.00439	0.0118
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-09 NP	2022-02-09	6.8	0.011	< 0.000050	0.0439	134	0.00302	0.00102	3.32	109	< 0.000010	4.01	0.166	< 0.000010	< 0.00010	< 0.00030	0.00343	0.0058
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-10 NP	2022-02-10	18.1	< 0.010	< 0.000050	0.0592	169	0.00114	0.00111	3.98	143	< 0.000010	4.79	0.212	0.000011	< 0.00010	< 0.00030	0.00437	0.0073
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-11 NP	2022-02-11	8.6	< 0.010	< 0.000050	0.0527	149	0.00116	0.00105	3.75	125	< 0.000010	4.6	0.202	0.000011	< 0.00010	< 0.00030	0.00386	0.0073
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-12 NP	2022-02-12	10.6	< 0.010	< 0.000050	0.0528	151	0.00128	0.0011	3.78	130	< 0.000010	4.55	0.194	0.000011	< 0.00010	< 0.00030	0.00391	0.0068
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-13 NP	2022-02-13	12.8	< 0.010	< 0.000050	0.0594	163	0.00153	0.0011	4.1	144	< 0.000010	4.67	0.2	0.000011	0.00094	< 0.00030	0.00404	0.0091
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-14 NP	2022-02-14	7.3	< 0.010	< 0.000050	0.059	166	0.0015	0.00113	4.16	148	< 0.000010	4.84	0.198	0.000011	< 0.00010	< 0.00030	0.00404	0.0072
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-15 NP	2022-02-15	10.7	< 0.010	< 0.000050	0.0571	167	0.00149	0.00113	3.88	144	< 0.000010	4.8	0.203	0.000011	< 0.00010	< 0.00030	0.0041	0.0073
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-16 NP	2022-02-16	19.1	< 0.010	0.000082	0.0592	164	0.00152	0.00118	4.03	150	< 0.000010	5.09	0.213	0.000012	< 0.00010	< 0.00030	0.00431	0.0105
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-17 NP	2022-02-17	13.2	0.012	< 0.000050	0.0594	166	0.00144	0.00122	4.06	152	< 0.000010	5.07	0.222	0.000012	< 0.00010	< 0.00030	0.00442	0.0102
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-18 NP	2022-02-18	14.4	< 0.010	< 0.000050	0.056	162	0.00118	0.00115	3.95	151	< 0.000010	5.1	0.213	0.000012	< 0.00010	< 0.00030	0.00419	0.0074
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-19 NP	2022-02-19	11.2	< 0.010	< 0.000050	0.056	167	0.00083	0.00115	4.08	154	< 0.000010	5.23	0.215	0.000012	< 0.00010	< 0.00030	0.00426	0.009
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-20 NP	2022-02-20	9.2	< 0.020	< 0.000100	0.0636	180	0.00097	< 0.00100	3.98	129	< 0.000020	5.11	0.211	< 0.000020	< 0.00020	< 0.00060	0.00413	0.0083
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-21 NP	2022-02-21	10.1	< 0.010	< 0.000050	0.0646	171	0.00061	0.0011	4.18	155	< 0.000010	5.1	0.219	0.000011	< 0.00010	< 0.00030	0.00357	0.0073
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-22 NP	2022-02-22	9.6	< 0.010	< 0.000050	0.0632	185	0.00067	0.00113	4.33	160	< 0.000010	5.18	0.223	0.000011	< 0.00010	< 0.00030	0.00416	0.0084
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-23 NP	2022-02-23	8.2	< 0.010	< 0.000050	0.0644	170	0.00068	0.00109	4.03	143	< 0.000010	4.94	0.214	0.000012	< 0.00010	< 0.00030	0.00432	0.0082
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-24 NP	2022-02-24	7.1	< 0.020	< 0.000100	0.0641	183	0.00089	0.0013	4.24	127	< 0.000020	5.2	0.226	< 0.000020	< 0.00020	< 0.00060	0.00452	0.0083
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-25 NP	2022-02-25	11.2	< 0.010	< 0.000050	0.0679	169	0.00085	0.00113	4.23	134	< 0.000010	5.09	0.211	0.000012	< 0.00010	< 0.00030	0.00458	0.0074
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-26 NP	2022-02-26	13.5	< 0.010	< 0.000050	0.0632	170	0.00137	0.00123	4.26	134	< 0.000010	5.3	0.217	0.000012	< 0.00010	< 0.00030	0.0046	0.0086
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-27 NP	2022-02-27	10.2	< 0.010	< 0.000050	0.0647	171	0.00072	0.00121	4.36	136	< 0.000010	5.35	0.224	0.000013	< 0.00010	< 0.00030	0.0046	0.0105
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-28 NP	2022-02-28	7.88	< 0.010	< 0.000050	0.0666	180	0.00061	0.00109	4.17	138	< 0.000010	5.13	0.205	0.00001	< 0.00010	< 0.00030	0.00434	0.0072
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-02 NP	2022-03-02	10.6	< 0.010	< 0.000050	0.0634	174	0.00063	0.00117	4.47	161	< 0.000010	5.24	0.22	0.000011	< 0.00010	< 0.00030	0.00441	0.0071
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-03 NP	2022-03-03	11.9	< 0.010	< 0.000050	0.0648	188	0.00067	0.00108	3.95	137	< 0.000010	4.73	0.22	< 0.000010	< 0.00010	< 0.00030	0.00408	0.0084
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-04 NP	2022-03-04	11.6	< 0.010	< 0.000050	0.0655	180	0.00089	0.00104	4.03	141	< 0.000010	5.16	0.213	0.000011	< 0.00010	< 0.00030	0.00383	0.0079
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-05 NP	2022-03-05	12.1	< 0.010	< 0.000050	0.0646	187	0.00074	0.00107	4.22	145	< 0.000010	5.35	0.216	0.000011	< 0.00010	< 0.00030	0.00394	0.0085
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-06 NP	2022-03-06	10.3	< 0.010	< 0.000050	0.0674	178	0.00073	0.00107	4.81	147	< 0.000010	5.16	0.216	< 0.000010	< 0.00010	< 0.00030	0.00424	0.0077
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-07 NP	2022-03-07	13.1	< 0.010	< 0.000050	0.0672	179	0.00124	0.00119	4.62	163	< 0.000010	5.31	0.222	0.000014	< 0.00010	< 0.00030	0.0042	0.0071
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-08 NP	2022-03-08	12	< 0.010	< 0.000050	0.0602	179	0.00143	0.00104	4.17	146	< 0.000010	4.87	0.22	< 0.000010	< 0.00010	< 0.00030	0.00374	0.0066
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-09 NP	2022-03-09	14.2	< 0.010	< 0.000050	0.0657	181	0.00153	0.00111	4.5									

APPENDIX B - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness (mg/L)	Dissolved Metals																
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper			
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
Acute		Chronic		n/a	na	na	na	na	na	na	Acute		Chronic		na	na	na	Acute	Chronic	
0.020-0.10 <sup>a</sup>		0.005-0.05 <sup>a</sup>		n/a	na	na	na	na	na	na	na	0.00004-0.0028 <sup>a</sup>		0.00002-0.00173 <sup>a</sup>		na	na	na	na	BLM <sup>d</sup>
<b>BC WQG FWAL</b>																				
<b>Fording River Operation</b>																				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-28 NP	2022-03-28	10.6	0.0017	0.00039	0.00018	0.0464	< 0.020	< 0.000050	0.044	0.000242	174	< 0.00010	< 0.10	0.00109					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-29 NP	2022-03-29	10.6	0.0016	0.00038	0.00018	0.0452	< 0.020	< 0.000050	0.041	0.000236	166	< 0.00010	< 0.00010	0.00104					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-30 NP	2022-03-30	10.2	0.0025	0.0004	0.0002	0.0427	< 0.020	< 0.000050	0.043	0.000214	177	< 0.00010	< 0.00010	0.00131					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-31 NP	2022-03-31	9.9	0.0032	0.00035	0.00022	0.0429	< 0.020	< 0.000050	0.041	0.000228	163	< 0.00010	< 0.00010	0.00105					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-01 NP	2022-04-01	10.7	0.0163	0.00036	0.00018	0.0431	< 0.020	< 0.000050	0.038	0.000227	162	< 0.00010	< 0.10	0.00126					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-02 NP	2022-04-02	9.7	< 0.0050	< 0.00050	< 0.00050	0.0426	< 0.100	< 0.000250	< 0.050	0.000281	177	< 0.00050	< 0.00050	0.00113					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-08 NP	2022-04-08	10.4	< 0.0050	< 0.00050	< 0.00050	0.0361	< 0.100	< 0.000250	< 0.050	0.000242	180	< 0.00050	< 0.00050	< 0.00100					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-13 NP	2022-04-13	9.32	0.0012	0.00035	0.00014	0.0401	< 0.020	< 0.000050	0.038	0.000212	184	< 0.00010	< 0.00010	0.00089					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-14 NP	2022-04-14	9.1	< 0.0010	0.00031	0.00015	0.0394	< 0.020	< 0.000050	0.035	0.000229	172	< 0.00010	< 0.00010	0.00092					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-21 NP	2022-04-21	9.4	0.001	0.00047	0.00016	0.0376	< 0.020	< 0.000050	0.031	0.000213	157	< 0.00010	0.00011	0.00092					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-02 NP	2022-05-02	10.2	0.0047	0.00042	0.00013	0.0388	< 0.020	< 0.000050	0.029	0.000221	164	< 0.00010	< 0.10	0.00086					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-03 NP	2022-05-03	-	0.0011	0.00042	0.00013	0.0382	< 0.020	< 0.000050	0.03	0.000225	169	< 0.00010	< 0.10	0.00079					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-05 NP	2022-05-05	9.5	0.005	0.00051	0.00018	0.0517	< 0.020	< 0.000050	0.034	0.000285	195	0.0001	< 0.10	0.0011					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-06 NP	2022-05-06	9.5	0.0012	0.00039	0.00015	0.0365	< 0.020	< 0.000050	0.028	0.000215	159	< 0.00010	< 0.10	0.00077					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-07 NP	2022-05-07	11.1	0.001	0.00038	0.00012	0.0366	< 0.020	< 0.000050	0.027	0.000218	161	< 0.00010	< 0.10	0.00069					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-08 NP	2022-05-08	9.7	< 0.0010	0.00037	0.00016	0.0354	< 0.020	< 0.000050	0.026	0.000211	152	< 0.00010	< 0.10	0.00072					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-09 NP	2022-05-09	9.8	0.0011	0.00042	0.00015	0.0354	< 0.020	< 0.000050	0.026	0.000224	142	< 0.00010	< 0.10	0.00079					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-10 NP	2022-05-10	9.6	0.0017	0.0004	0.00012	0.036	< 0.020	< 0.000050	0.026	0.000217	149	< 0.00020	< 0.10	< 0.00100					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-11 NP	2022-05-11	9.7	0.0016	0.0004	0.00015	0.036	< 0.020	< 0.000050	0.026	0.000195	150	< 0.00030	< 0.10	0.0012					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-12 NP	2022-05-12	9.8	0.0016	0.0004	0.00012	0.0326	< 0.020	< 0.000050	0.026	0.000202	142	< 0.00010	< 0.10	0.00077					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-13 NP	2022-05-13	9.2	< 0.0010	0.00039	0.00013	0.0308	< 0.020	< 0.000050	0.026	0.000223	150	< 0.00010	< 0.10	0.00072					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-14 NP	2022-05-14	12.6	0.0016	0.00036	0.00013	0.03	< 0.020	< 0.000050	0.025	0.000207	144	< 0.00010	< 0.10	0.00071					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-15 NP	2022-05-15	12.6	0.0012	0.0004	< 0.0010	0.0305	< 0.020	< 0.000050	0.024	0.000219	156	< 0.00010	< 0.10	0.00076					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-16 NP	2022-05-16	9.4	0.0027	0.0004	0.0001	0.0311	< 0.020	< 0.000050	0.023	0.000193	155	< 0.00010	< 0.10	0.00077					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-17 NP	2022-05-17	9.3	0.001	0.00038	0.00015	0.0342	< 0.020	< 0.000050	0.026	0.000234	147	< 0.00030	< 0.10	0.00089					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-19 NP	2022-05-19	12.6	0.0016	0.0004	0.00013	0.0359	< 0.020	< 0.000050	0.027	0.000217	152	< 0.00010	< 0.10	0.00089					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-20 NP	2022-05-20	9.7	< 0.0010	0.00036	0.00013	0.0345	< 0.020	< 0.000050	0.024	0.000213	151	< 0.00010	< 0.10	0.00085					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-21 NP	2022-05-21	11.6	0.001	0.00036	0.00015	0.0339	< 0.020	< 0.000050	0.024	0.00022	150	< 0.00010	< 0.10	0.00075					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-23 NP	2022-05-23	11.7	< 0.0010	0.00039	0.00014	0.0338	< 0.020	< 0.000050	0.025	0.000231	158	< 0.00010	< 0.10	0.00082					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-24 NP	2022-05-24	11.5	0.0015	0.00038	0.00013	0.0362	< 0.020	< 0.000050	0.027	0.00022	159	< 0.00010	< 0.10	0.00077					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-25 NP	2022-05-25	9.3	< 0.0010	0.00037	0.00014	0.0333	< 0.020	< 0.000050	0.024	0.000224	140	< 0.00010	< 0.10	0.00078					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-26 NP	2022-05-26	9.1	< 0.0010	0.00038	0.00014	0.0332	< 0.020	< 0.000050	0.024	0.000224	152	< 0.00010	< 0.10	0.00077					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-27 NP	2022-05-27	10.6	0.0017	0.00034	0.00013	0.0358	< 0.020	< 0.000050	0.026	0.000243	152	< 0.00010	< 0.10	0.00077					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-28 NP	2022-05-28	10.4	0.0042	0.00033	0.00014	0.0353	< 0.020	< 0.000050	0.025	0.000209	150	< 0.00010	< 0.10	0.00079					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-29 NP	2022-05-29	12.5	< 0.0010	0.00035	0.00014	0.0324	< 0.020	< 0.000050	0.027	0.000236	147	< 0.00010	< 0.10	0.00079					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-30 NP	2022-05-30	15	< 0.0010	0.00035	0.00013	0.034	< 0.020	< 0.000050	0.026	0.000217	142	< 0.00010	< 0.10	0.00076					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-01 NP	2022-06-01	12.9	0.0024	0.00036	0.00012	0.0323	< 0.020	< 0.000050	0.025	0.000201	136	< 0.00010	< 0.10	0.00072					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-02 NP	2022-06-02	19.3	< 0.0010	0.00038	0.00013	0.0364	< 0.020	< 0.000050	0.024	0.000208	140	< 0.00010	< 0.10	0.00078					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-03 NP	2022-06-03	-	< 0.0050	< 0.00050	< 0.00050	0.0307	< 0.100	< 0.000250	< 0.050	0.000208	133	< 0.00010	< 0.50	0.00078					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-04 NP	2022-06-04	15.5	< 0.0050	0.0005	0.00021	0.0619	< 0.020	< 0.000050	0.016	0.000201	86	< 0.00010	< 0.00010	0.0008					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-05 NP	2022-06-05	13.1	0.001	0.00034	0.00011	0.0284	< 0.020	< 0.000050	0.024	0.000213	131	< 0.00010	< 0.10	0.00078					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-06 NP	2022-06-06	13.5	0.0013	0.00036	0.00012	0.0296	< 0.020	< 0.000050	0.023	0.000194	131	< 0.00010	< 0.10	0.00076					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-07 NP	2022-06-07	13.2	< 0.0010	0.00035	0.00012	0.0358	< 0.020	< 0.000050	0.024	0.000202	138	< 0.00010	< 0.10	0.00081					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-08 NP	2022-06-08	17	0.0022	0.00033	0.0001	0.0308	< 0.020	< 0.000050	0.023	0.000198	132	< 0.00010	< 0.10	0.00077					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-09 NP	2022-06-09	9.07	0.0011	0.00037	0.00013	0.0351	< 0.020	< 0.000050	0.024	0.000225	139	< 0.00010	< 0.10	0.00075					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-10 NP	2022-06-10	10.9	< 0.0010	0.00034	0.0001	0.0313	< 0.020	< 0.000050	0.022	0.000178	128	< 0.00010	< 0.10	0.00084					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-11 NP	2022-06-11	10.9	0.0012	0.00033	0.00013	0.0317	< 0.020	< 0.000050	0.021	0.000185	127	< 0.00010	< 0.10	0.00086					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-12 NP	2022-06-12	20.4	0.0018	0.00032	0.00011	0.0308	< 0.020	< 0.000050	0.021	0.000185	130	< 0.00010	< 0.10	0.00086					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-13 NP	2022-06-13	20.3	0.0013	0.00035	0.00012	0.0323	< 0.020	< 0.000050	0.024	0.000194	127	< 0.00010	< 0.10	0.0008					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-20 NP	2022-06-20	6	0.0012	0.00034	0.00012	0.0265	< 0.020	< 0.000050	0.024	0.000194	112	< 0.00010	< 0.10	0.00088					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-07-04 NP	2022-07-04	8.3	< 0.0020	0.00035	0.00014	0.0307	< 0.020	< 0.000050	0.027	0.000195	137	< 0.00010	< 0.10	0.00085					
FR ASPSEEP1	FR ASPSEEP1 WS 2022-07-11 NP	2022-07-11	5.6																	

APPENDIX B - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L
			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>BC WQG FWAL</b>																			
<b>Fording River Operation</b>																			
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-28 NP	2022-03-28	10.6	< 0.010	< 0.000050	0.0693	151	0.00031	0.00126	4.11	110	< 0.000010	4.66	0.165	0.000012	< 0.000010	< 0.000030	0.00403	0.0072
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-29 NP	2022-03-29	10.6	< 0.010	< 0.000050	0.0643	148	0.00023	0.00115	4.11	112	< 0.000010	4.56	0.153	0.000011	< 0.000010	< 0.000030	0.00383	0.0079
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-30 NP	2022-03-30	10.2	< 0.010	< 0.000050	0.0729	146	0.00038	0.00126	4	95.6	< 0.000010	4.36	0.154	0.000017	< 0.000010	< 0.000030	0.00362	0.0081
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-31 NP	2022-03-31	9.9	< 0.010	< 0.000050	0.0646	151	0.00025	0.00121	4.21	137	< 0.000010	4.73	0.16	0.000012	< 0.000010	< 0.000030	0.00357	0.0078
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-01 NP	2022-04-01	10.7	0.011	< 0.000050	0.0617	148	0.00055	0.00125	3.97	105	< 0.000010	4.48	0.153	0.000012	0.00011	< 0.000030	0.0038	0.0136
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-02 NP	2022-04-02	9.7	< 0.050	< 0.000250	0.0588	158	< 0.00050	< 0.00250	3.85	111	< 0.000050	4.65	0.161	< 0.000050	< 0.00050	< 0.00150	0.00365	0.0084
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-08 NP	2022-04-08	10.4	< 0.050	< 0.000250	0.058	152	< 0.00050	< 0.00250	3.24	114	< 0.000050	3.81	0.177	< 0.000050	< 0.00050	< 0.00150	0.00374	0.0098
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-13 NP	2022-04-13	9.32	< 0.010	< 0.000050	0.0582	135	0.00029	0.00119	3.62	135	< 0.000010	3.79	0.175	< 0.000010	< 0.000010	< 0.000030	0.0039	0.0093
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-14 NP	2022-04-14	9.1	< 0.010	< 0.000050	0.0549	135	0.00029	0.00125	3.65	136	< 0.000010	3.94	0.165	< 0.000010	< 0.000010	< 0.000030	0.00357	0.0088
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-21 NP	2022-04-21	9.4	< 0.010	< 0.000050	0.059	127	0.00058	0.0011	3.87	114	< 0.000010	4.1	0.165	0.000011	< 0.000010	< 0.000030	0.00361	0.0083
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-02 NP	2022-05-02	10.2	< 0.010	< 0.000050	0.0509	127	0.00052	0.00131	4.22	128	< 0.000010	3.89	0.179	0.000012	< 0.000010	< 0.000030	0.00372	0.0096
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-03 NP	2022-05-03	-	< 0.010	< 0.000050	0.0508	120	0.00032	0.00117	3.82	134	< 0.000010	3.42	0.19	0.000011	< 0.000010	< 0.000030	0.0035	0.0096
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-05 NP	2022-05-05	9.5	0.017	< 0.000050	0.0599	156	0.00108	0.00152	4.7	182	< 0.000010	4.42	0.229	0.000014	< 0.000010	< 0.000030	0.00421	0.0124
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-06 NP	2022-05-06	9.5	< 0.010	< 0.000050	0.0469	116	0.00025	0.00116	3.57	146	< 0.000010	3.36	0.174	< 0.000010	< 0.000010	< 0.000030	0.00327	0.0091
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-07 NP	2022-05-07	11.1	< 0.010	< 0.000050	0.0473	118	0.00014	0.00087	3.52	150	< 0.000010	3.4	0.171	< 0.000010	< 0.000010	< 0.000030	0.00323	0.0081
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-08 NP	2022-05-08	9.1	< 0.010	< 0.000050	0.0448	116	0.0002	0.0011	3.55	147	< 0.000010	3.31	0.163	< 0.000010	< 0.000010	< 0.000030	0.00312	0.0083
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-09 NP	2022-05-09	9.8	< 0.010	< 0.000050	0.0425	112	0.0003	0.00113	3.59	123	< 0.000010	3.19	0.161	0.000011	< 0.000010	< 0.000030	0.00324	0.0106
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-10 NP	2022-05-10	9.6	< 0.010	< 0.000050	0.0418	121	0.00033	0.00127	3.49	133	< 0.000010	3.37	0.166	< 0.000010	< 0.000010	< 0.000030	0.00307	0.0096
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-11 NP	2022-05-11	9.7	< 0.010	< 0.000050	0.0401	116	0.00054	0.0014	3.46	129	< 0.000010	3.22	0.166	< 0.000010	< 0.000010	< 0.000030	0.00287	0.0102
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-12 NP	2022-05-12	9.8	< 0.010	< 0.000050	0.0414	106	0.00027	0.00129	3.39	122	< 0.000010	3.27	0.157	< 0.000010	< 0.000010	< 0.000030	0.00307	0.0085
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-13 NP	2022-05-13	9.2	< 0.010	< 0.000050	0.042	105	0.0002	0.00113	3.43	131	< 0.000010	3.08	0.155	0.00001	< 0.000010	< 0.000030	0.00301	0.009
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-14 NP	2022-05-14	12.6	< 0.010	< 0.000050	0.0407	100	0.00019	0.00113	3.37	132	< 0.000010	3.01	0.145	< 0.000010	< 0.000010	< 0.000030	0.00295	0.0122
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-15 NP	2022-05-15	12.6	< 0.010	< 0.000050	0.0398	109	0.0002	0.00112	3.17	129	< 0.000010	2.84	0.16	< 0.000010	< 0.000010	< 0.000030	0.00316	0.0099
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-16 NP	2022-05-16	9.4	< 0.010	< 0.000050	0.0403	111	0.00026	0.0011	3.16	124	< 0.000020	2.76	0.159	< 0.000010	< 0.000010	< 0.000030	0.00323	0.0099
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-17 NP	2022-05-17	9.3	< 0.010	< 0.000050	0.0438	118	0.00062	0.00153	3.53	133	< 0.000010	3.33	0.159	< 0.000010	< 0.000010	< 0.000030	0.00327	0.0101
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-19 NP	2022-05-19	12.6	< 0.010	< 0.000050	0.0433	107	0.00027	0.0012	3.59	133	< 0.000010	3.38	0.18	< 0.000010	< 0.000010	< 0.000030	0.00334	0.009
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-20 NP	2022-05-20	9.7	< 0.010	< 0.000050	0.043	113	0.00045	0.00098	3.45	134	< 0.000020	3.26	0.165	< 0.000010	< 0.000010	< 0.000030	0.00332	0.0102
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-21 NP	2022-05-21	11.6	< 0.010	< 0.000050	0.0435	113	0.00017	0.00086	3.47	129	< 0.000010	3.24	0.161	< 0.000010	< 0.000010	< 0.000030	0.00319	0.0103
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-23 NP	2022-05-23	11.7	< 0.010	< 0.000050	0.0408	115	0.00023	0.00122	3.41	125	< 0.000010	3.21	0.157	< 0.000010	< 0.000010	< 0.000030	0.00324	0.0097
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-24 NP	2022-05-24	11.5	< 0.010	< 0.000050	0.0461	110	0.00024	0.00124	3.49	128	< 0.000010	3.36	0.161	< 0.000010	< 0.000010	< 0.000030	0.00319	0.0098
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-25 NP	2022-05-25	9.3	< 0.010	< 0.000050	0.0394	116	0.00024	0.0014	3.35	122	< 0.000010	3.24	0.159	< 0.000010	< 0.000010	< 0.000030	0.00306	0.0093
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-26 NP	2022-05-26	9.1	< 0.010	< 0.000050	0.041	116	0.0002	0.00132	3.28	120	< 0.000010	3.23	0.163	< 0.000010	< 0.000010	< 0.000030	0.00314	0.0092
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-27 NP	2022-05-27	10.6	< 0.010	< 0.000050	0.0428	111	0.00022	0.00099	3.44	120	< 0.000010	3.26	0.161	< 0.000010	< 0.000010	< 0.000030	0.003	0.0103
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-28 NP	2022-05-28	10.4	< 0.010	< 0.000050	0.0422	109	0.00026	0.00074	3.38	119	< 0.000010	3.23	0.158	< 0.000010	< 0.000010	< 0.000030	0.00306	0.0097
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-29 NP	2022-05-29	12.5	< 0.010	< 0.000050	0.0436	110	0.0002	0.00121	3.4	135	< 0.000010	3.28	0.152	< 0.000010	< 0.000010	< 0.000030	0.00298	0.0101
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-30 NP	2022-05-30	15	< 0.010	< 0.000050	0.0422	110	0.00024	0.00114	3.44	131	< 0.000010	3.32	0.153	< 0.000010	< 0.000010	< 0.000030	0.00293	0.0092
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-01 NP	2022-06-01	12.9	< 0.010	< 0.000050	0.0397	102	0.00018	0.00107	3.36	119	< 0.000010	3.08	0.145	< 0.000010	< 0.000010	< 0.000030	0.00294	0.0084
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-02 NP	2022-06-02	19.3	< 0.010	< 0.000050	0.0402	105	0.00036	0.00112	3.33	107	< 0.000010	3.1	0.15	< 0.000010	< 0.000010	< 0.000030	0.00281	0.0089
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-03 NP	2022-06-03	-	< 0.050	< 0.000250	0.0384	105	< 0.00050	< 0.00250	3.16	90.7	0.000062	2.8	0.14	< 0.000050	< 0.00050	< 0.00150	0.00258	0.0089
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-04 NP	2022-06-04	15.5	< 0.010	< 0.000050	0.0241	62.1	0.00104	0.00223	2.49	58.6	< 0.000010	1.86	0.097	0.000012	< 0.000010	< 0.000030	0.00178	0.0054
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-05 NP	2022-06-05	13.1	< 0.010	< 0.000050	0.0371	97.8	0.00021	0.00114	3.03	102	< 0.000020	2.84	0.139	< 0.000010	< 0.000010	< 0.000030	0.00266	0.009
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-06 NP	2022-06-06	13.5	< 0.010	< 0.000050	0.0359	96.5	0.00022	0.00106	3.13	104	< 0.000010	2.89	0.142	< 0.000010	< 0.000010	< 0.000030	0.00267	0.0099
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-07 NP	2022-06-07	13.2	< 0.010	< 0.000050	0.0387	106	0.00023	0.00133	3.16	99.7	< 0.000020	3.09	0.146	< 0.000010	< 0.000010	< 0.000		

APPENDIX B - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness (mg/L)	Dissolved Metals															
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper		
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Acute		Chronic		n/a	na	na	na	na	na	na	Acute		Chronic		na	na	na	Acute	Chronic
0.020-0.10 <sup>a</sup>		0.005-0.05 <sup>a</sup>		n/a	na	na	na	na	na	na	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>		na	na	na	na	na	BLM <sup>a</sup>
<b>BC WQG FWAL</b>																			
<b>Forcing River Operation</b>																			
FR ASPSEEP1	FR ASPSEEP1 WS 2022-09-01 NP	2022-09-01	2.8	< 0.0010	0.00032	0.00014	0.0507	< 0.020	< 0.000050	0.029	0.000267	194	< 0.00010	< 0.10	0.00077				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-09-05 NP	2022-09-05	19.7	< 0.0020	0.00034	< 0.00020	0.0501	< 0.040	< 0.000100	0.034	0.000322	214	< 0.00020	< 0.20	0.00063				
FR BLAINESEEP1	FR BLAINESEEP1 WS 2022-04-27 NP	2022-04-27	7.1	0.0023	0.00053	< 0.00020	0.015	< 0.040	< 0.000100	0.037	0.000121	318	< 0.00020	< 0.20	0.00054				
FR BLAINESEEP1	FR BLAINESEEP1 SEEP 2022-07-01 NP	2022-07-01	-	0.0028	0.0006	< 0.00020	0.0142	< 0.040	< 0.000100	0.033	0.000935	287	< 0.00020	< 0.20	0.00076				
FR BLAINESEEP1	FR BLAINESEEP1 SEEP 2022-09-01 NP	2022-09-15	10.3	< 0.0020	0.00054	< 0.00020	0.0251	< 0.040	< 0.000100	0.041	0.000753	348	< 0.00020	< 0.20	0.00074				
FR BLAINESEEP5	FR BLAINESEEP5 SEEP 2022-04-11 NP	2022-06-10	4.8	0.007	0.00066	< 0.00050	0.0254	< 0.100	< 0.000250	0.08	0.000164	383	< 0.00050	< 0.50	< 0.00100				
FR BLAINESEEP5	FR BLAINESEEP5 SEEP 2022-09-26 NP	2022-09-26	-	0.0027	0.00059	0.00045	0.0292	< 0.040	< 0.000100	0.062	0.000153	391	< 0.00020	0.00022	0.00062				
FR BLAKESEEP1	FR BLAKESEEP1 SEEP 2022-05-16 NP	2022-05-16	7.2	0.0024	0.00035	0.0002	0.0438	< 0.020	< 0.000050	0.024	0.0000814	171	< 0.00010	0.00027	0.00026				
FR BLAKESEEP1	FR BLAKESEEP1 SEEP 2022-09-22 NP	2022-09-22	4.4	0.0027	0.00037	0.00016	0.0416	< 0.020	< 0.000050	0.028	0.0000984	167	< 0.00010	0.0002	0.00036				
FR CCSEEP1	FR CCSEEP1 SEEP 2022-04-11 NP	2022-06-10	10.2	< 0.0010	0.00091	< 0.00010	0.013	< 0.020	< 0.000050	0.034	0.001	247	< 0.00010	0.00043	0.00042				
FR CCSEEP1	FR CCSEEP1 2022-06-17 N	2022-06-17	9.8	0.0031	0.00092	< 0.00010	0.0138	< 0.020	< 0.000050	0.035	0.00103	263	< 0.00010	0.00047	0.00053				
FR CCSEEP1	FR CCSEEP1 SEEP 2022-07-01 NP	2022-08-22	-	< 0.0020	0.00085	< 0.00020	0.0129	< 0.040	< 0.000100	0.041	0.00118	297	< 0.00020	0.00047	0.0008				
FR CCSEEPSE1	FR CCSEEPSE1 2022-03-28 N	2022-03-28	4.26	< 0.0020	0.00097	< 0.00020	0.0142	< 0.040	< 0.000100	0.043	0.00101	444	< 0.00020	0.00064	0.00042				
FR CCSEEPSE1	FR CCSEEPSE1 SEEP 2022-04-11 NP	2022-06-10	-	0.0028	0.00081	0.00035	0.016	< 0.040	< 0.000100	0.022	0.00095	302	< 0.00020	0.0002	0.00065				
FR CCSEEPSE1	FR CCSEEPSE1 SEEP 2022-07-01 NP	2022-08-22	-	0.0028	0.00083	0.00024	0.0138	< 0.040	< 0.000100	0.032	0.00125	359	< 0.00020	0.00023	0.00082				
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-04-11 NP	2022-05-16	4.7	< 0.0040	0.00012	0.00013	0.051	< 0.020	< 0.000050	0.026	0.0000061	78.4	< 0.00010	< 0.10	0.00042				
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-07-01 NP	2022-07-29	3.04	0.0054	0.00012	0.00022	0.101	< 0.020	< 0.000050	0.038	< 0.00050	81.5	< 0.00010	< 0.10	0.00022				
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-09-21 NP	2022-09-21	-	0.0043	< 0.00010	0.00018	0.0839	< 0.020	< 0.000050	0.024	< 0.00050	68.9	< 0.00010	< 0.10	0.00026				
FR EAGLENORTH	FR EAGLENORTH SEEP 2022-04-11 NP	2022-05-16	7.2	0.0051	< 0.00055	< 0.00050	0.0134	< 0.100	< 0.000250	< 0.050	0.000546	399	< 0.00050	< 0.50	< 0.00100				
FR EAGLENORTH	FR EAGLENORTH SEEP 2022-07-01 NP	2022-07-06	-	< 0.0050	< 0.00050	< 0.00050	0.0152	< 0.100	< 0.000250	< 0.050	0.000905	382	< 0.00050	< 0.50	< 0.00100				
FR EAGLENORTH	FR EAGLE NORTH SEEP 2022-09-22 NP	2022-09-22	5.3	< 0.0020	0.00048	< 0.00020	0.0143	< 0.040	< 0.000100	0.025	0.000898	363	< 0.00020	< 0.20	0.00054				
FR FCSEEP2	FR FCSEEP2 SEEP 2022-04-11 NP	2022-06-10	2.3	0.0017	0.0001	< 0.00010	0.0395	< 0.020	< 0.000050	< 0.010	0.0000078	39	< 0.00010	< 0.10	0.00022				
FR FCSEEP2	FR FCSEEP2 SEEP 2022-08-22 NP	2022-08-22	3.9	< 0.0010	0.00010	< 0.00010	0.0222	< 0.020	< 0.000050	< 0.010	0.000090	58	< 0.00010	< 0.10	< 0.00020				
FR FRWSEEP3	FR FRWSEEP3 SEEP 2022-04-11 NP	2022-06-16	10.1	0.0014	0.00049	< 0.00010	0.0222	< 0.020	< 0.000050	< 0.010	0.0000168	39	< 0.00010	< 0.10	0.00022				
FR FRWSEEP3	FR FRWSEEP3 SEEP 2022-09-08 NP	2022-09-08	-	0.0036	0.00029	< 0.00010	0.0208	< 0.020	< 0.000050	0.015	0.0000514	125	< 0.00010	0.00038	0.00053				
FR FSEAMSEEP7	FR FSEAMSEEP7 SEEP 2022-04-11 NP	2022-05-16	3.5	0.008	0.0008	0.00024	0.0627	< 0.020	< 0.000050	0.015	0.0000216	95.5	< 0.00010	0.00011	0.00081				
FR FSEAMSEEP7	FR FSEAMSEEP7 SEEP 2022-07-01 NP	2022-07-20	-	0.0385	0.000123	0.00052	0.113	< 0.020	< 0.000050	0.043	< 0.0100	75	< 0.00010	0.00013	0.00161				
FR FSEAMWSEEP4	FR FSEAMWSEEP4 SEEP 2022-04-11 NP	2022-06-16	-	0.0034	0.00136	0.00012	0.0651	< 0.020	< 0.000050	0.026	0.00016	121	< 0.00010	0.00139	0.00034				
FR HENSEEP3	FR HENSEEP3 SEEP 2022-04-11 NP	2022-04-11	-	0.0033	0.00029	< 0.00020	0.0353	< 0.040	< 0.000100	< 0.020	0.00013	319	< 0.00020	< 0.20	0.0004				
FR HENSEEP3	FR HENSEEP3 SEEP 2022-05-16 NP	2022-05-16	9	0.0021	< 0.00020	< 0.00020	0.0459	< 0.040	< 0.000100	0.032	0.0000948	350	< 0.00020	< 0.20	< 0.00040				
FR HENSEEP3	FR HENSEEP3 SEEP 2022-07-01 NP	2022-07-14	-	0.0022	0.00022	< 0.00020	0.0319	< 0.040	< 0.000100	< 0.020	0.000147	319	< 0.00020	< 0.20	< 0.00040				
FR HENSEEP3	FR HENSEEP3 SEEP 2022-09-21 NP	2022-09-21	9.4	< 0.0020	< 0.00020	< 0.00020	0.0291	< 0.040	< 0.000100	< 0.020	0.000125	325	< 0.00020	< 0.20	< 0.00040				
FR HENSEEP1	FR HENSEEP1 SEEP 2022-04-11 NP	2022-04-11	8.2	0.0054	0.00022	0.00016	0.0741	< 0.020	< 0.000050	< 0.010	0.000211	252	< 0.00010	< 0.10	0.0007				
FR HENSEEP1	FR HENSEEP1 SEEP 2022-07-01 NP	2022-07-14	-	< 0.0020	0.00026	< 0.00020	0.0493	< 0.040	< 0.000100	< 0.020	0.000238	335	< 0.00020	< 0.20	0.00076				
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-04-11 NP	2022-06-16	9.4	0.0026	0.00024	0.00016	0.0242	< 0.020	< 0.000050	< 0.010	0.000063	52.5	< 0.00010	< 0.10	0.00068				
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-07-01 NP	2022-07-06	19.5	0.0039	0.00025	0.00016	0.0262	< 0.020	< 0.000050	< 0.010	0.0000848	62.6	< 0.00010	< 0.10	0.00064				
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-09-22 NP	2022-09-22	3.12	< 0.0010	0.00029	0.00017	0.0564	< 0.020	< 0.000050	< 0.010	0.000187	128	< 0.00010	< 0.10	0.00056				
FR SCRDSEEP1	FR SCRDSEEP1 SEEP 2022-04-11 NP	2022-05-16	-	0.0045	0.00022	0.00038	0.0926	< 0.040	< 0.000100	0.032	0.00034	328	< 0.00020	0.00055	0.00172				
FR SCRDSEEP1	FR SCRDSEEP1 SEEP 2022-09-21 NP	2022-09-21	4.3	0.0016	0.00014	0.00017	0.0218	< 0.020	< 0.000050	< 0.010	0.00034	318	< 0.00010	0.00063	0.00172				
FR SPRWSEEP1	FR SPRWSEEP1 WS 2022-04-27 NP	2022-04-27	-	0.0054	0.00121	0.00014	0.0382	< 0.020	< 0.000050	0.038	0.000426	147	< 0.00010	< 0.10	0.00058				
FR SPRWSEEP1	FR SPRWSEEP1 SEEP 2022-07-01 NP	2022-07-14	6.9	0.0025	0.000455	0.000145	0.04455	< 0.020	< 0.000050	0.075	0.000462	144.5	< 0.00010	< 0.10	0.00067				
FR STPNSEEP	FR STPNSEEP SEEP 2022-04-11 NP	2022-05-19	4.69	< 0.0010	0.00016	< 0.00010	0.106	< 0.020	< 0.000050	0.012	0.0000595	117	< 0.00010	< 0.10	< 0.00020				
FR STPNSEEP	FR STPNSEEP SEEP 2022-07-01 NP	2022-07-15	-	< 0.0010	0.0002	< 0.00010	0.0599	< 0.020	< 0.000050	0.012	0.0000332	66.1	< 0.00010	< 0.10	0.00026				
FR STPWSWEEP	FR STPWSWEEP WS 2022	2022-01-25	-	< 0.0010	< 0.00010	< 0.00010	0.0717	< 0.020	< 0.000050	0.031	0.0002	124	< 0.00010	0.0004	< 0.00020				
FR STPWSWEEP	FR STPWSWEEP WS 2022	2022-02-22	3.8	< 0.0010	< 0.00010	< 0.00010	0.0735	< 0.020	< 0.000050	0.0295	0.0002125	126.5	< 0.00010	0.00041	< 0.00020				
FR STPWSWEEP	FR STPWSWEEP SEEP 2022-04-11 NP	2022-05-19	2	< 0.0010	< 0.00010	< 0.00010	0.0604	< 0.020	< 0.000050	0.033	0.0000859	120	< 0.00010	0.00033	< 0.00020				
FR STPWSWEEP	FR STPWSWEEP SEEP 2022-07-01 NP	2022-07-15	0.9	< 0.0010	< 0.00010	< 0.00010	0.0613	< 0.020	< 0.000050	0.032	0.0000859	120	< 0.00010	0.0003	< 0.00020				
FR STPWSWEEP	FR STPWSWEEP SEEP 2022-09-23 NP	2022-09-23	3.4	0.0037	< 0.00010	< 0.00010	0.066	< 0.020	< 0.000050	0.029	0.000295	124	< 0.00010	0.00033	< 0.00020				
FR STPWSWEEP	FR STPWSWEEP SEEP 2022-04-11 NP	2022-05-19	14.9	< 0.0010	< 0.00010	< 0.00010	0.0553	< 0.020	< 0.000050	0.027	0.000338	105	< 0.00010	0.0006	< 0.00020				
FR STPWSWEEP	FR STPWSWEEP SEEP 2022-07-01 NP	2022-07-15	15.9	< 0.0010	< 0.00010	< 0.00010	0.0643	< 0.020	< 0.000050	0.031	0.000141	112	< 0.00010	0.00054	< 0.00020				
FR STPWSWEEP	FR STPWSWEEP SEEP 2022-09-12 NP																		

APPENDIX B - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness (mg/L)	Dissolved Metals															
				Iron	Lead	Lithium	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin	Titanium	Uranium	Zinc
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL				n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Fording River Operation</b>																			
FR ASPSEEP1	FR ASPSEEP1 WS 2022-09-01 NP	2022-09-01	2.8	< 0.010	< 0.000050	0.0528	165	0.00061	0.00144	3.79	123	< 0.000010	4.36	0.174	0.000011	< 0.000010	< 0.000030	0.0032	0.0104
FR ASPSEEP1	FR ASPSEEP1 WS 2022-09-05 NP	2022-09-05	19.7	< 0.020	< 0.000100	0.0659	161	0.00021	0.00134	3.74	134	< 0.000020	4.85	0.2	< 0.000020	< 0.000020	< 0.000060	0.00415	0.0112
FR BLAINESEEP1	FR BLAINESEEP1 WS 2022-04-27 NP	2022-04-27	7.1	< 0.020	< 0.000100	0.12	316	0.0115	0.0539	6.18	479	< 0.000020	3.85	0.25	< 0.000030	< 0.000020	< 0.000060	0.0236	0.0067
FR BLAINESEEP1	FR BLAINESEEP1 SEEP 2022-07-01 NP	2022-07-01	-	< 0.020	< 0.000100	0.096	260	0.0128	0.0457	5.06	427	< 0.000020	2.88	0.229	0.00004	< 0.000020	< 0.000060	0.0216	0.0326
FR BLAINESEEP1	FR BLAINESEEP1 SEEP 2022-09-01 NP	2022-09-15	10.3	< 0.020	< 0.000100	0.112	333	0.0149	0.0563	6.09	478	< 0.000020	3.53	0.27	0.000037	< 0.000020	< 0.000060	0.0276	0.0288
FR BLAINESEEP5	FR BLAINESEEP5 SEEP 2022-04-11 NP	2022-06-10	4.8	< 0.050	< 0.000250	0.172	336	0.00734	0.0908	6.33	200	< 0.000050	3.06	0.229	< 0.000050	< 0.000050	< 0.00150	0.0212	0.0084
FR BLAINESEEP5	FR BLAINESEEP5 SEEP 2022-09-26 NP	2022-09-26	-	< 0.020	< 0.000100	0.152	334	0.00303	0.0328	6.84	264	< 0.000020	2.96	0.251	0.000026	< 0.000020	< 0.000060	0.0235	0.005
FR BLAKESEEP1	FR BLAKESEEP1 SEEP 2022-05-11 NP	2022-05-16	7.2	< 0.010	< 0.000050	0.0304	73.4	< 0.00318	0.00544	2.32	114	< 0.000010	5.64	0.668	< 0.000010	< 0.000010	< 0.000030	0.0024	0.003
FR BLAKESEEP1	FR BLAKESEEP1 SEEP 2022-09-22 NP	2022-09-22	4.4	< 0.010	< 0.000050	0.0363	75.5	< 0.00293	0.00557	2.34	149	< 0.000010	6.87	0.839	< 0.000010	< 0.000010	< 0.000030	0.00222	0.0038
FR CCSEEP1	FR CCSEEP1 SEEP 2022-04-11 NP	2022-06-10	10.2	< 0.010	< 0.000050	0.375	137	0.00011	0.0425	7.53	176	< 0.000010	11.3	0.37	0.000049	< 0.000010	< 0.000030	0.013	0.0553
FR CCSEEP1	FR CCSEEP1 SEEP 2022-06-17 NP	2022-06-17	9.8	< 0.010	< 0.000050	0.411	143	0.00023	0.043	7.23	157	< 0.000010	12	0.406	0.000051	< 0.000010	< 0.000030	0.0141	0.0559
FR CCSEEP1	FR CCSEEP1 SEEP 2022-07-01 NP	2022-08-22	-	< 0.020	< 0.000100	0.522	163	0.00025	0.0598	7.4	178	< 0.000020	15.3	0.46	0.000056	< 0.000020	< 0.000060	0.0181	0.0633
FR CCSEEPSE1	FR CCSEEPSE1 2022-03-28 N	2022-03-28	4.26	< 0.020	< 0.000100	0.609	241	0.00033	0.0856	9.85	239	< 0.000020	14.8	0.715	0.000066	< 0.000020	< 0.000060	0.0203	0.0686
FR CCSEEPSE1	FR CCSEEPSE1 SEEP 2022-04-11 NP	2022-06-10	-	< 0.020	< 0.000100	0.241	203	0.00244	0.0388	6.25	277	< 0.000020	13.8	0.301	0.000043	< 0.000020	< 0.000060	0.0139	0.0566
FR CCSEEPSE1	FR CCSEEPSE1 SEEP 2022-07-01 NP	2022-08-22	-	< 0.020	< 0.000100	0.162	210	0.00414	0.0519	5	312	< 0.000020	11.5	0.289	0.000052	< 0.000020	< 0.000060	0.0162	0.101
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-04-11 NP	2022-05-16	4.7	< 0.010	< 0.000050	0.0084	23	0.00026	0.00052	1.21	3.44	< 0.000010	3.46	0.36	< 0.000010	< 0.000010	< 0.000030	0.000427	< 0.0010
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-07-01 NP	2022-07-29	3.04	0.02	< 0.000050	0.011	23	0.00272	< 0.000050	1.26	0.74	< 0.000064	3.77	0.428	< 0.000010	< 0.000010	< 0.000030	0.000384	< 0.0010
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-09-21 NP	2022-09-21	-	< 0.010	< 0.000050	0.0096	21.3	0.00196	< 0.000050	1.06	3.71	< 0.000010	3.5	0.341	< 0.000010	< 0.000010	< 0.000030	0.000247	< 0.0010
FR EAGLENORTH	FR EAGLENORTH SEEP 2022-04-11 NP	2022-05-16	7.2	< 0.050	< 0.000250	0.174	334	< 0.00050	0.0207	5.33	783	< 0.000050	15	0.29	< 0.000050	< 0.000050	< 0.00150	0.021	0.0242
FR EAGLENORTH	FR EAGLENORTH SEEP 2022-07-01 NP	2022-07-06	-	< 0.050	< 0.000250	0.171	329	0.00071	0.0252	5.54	376	< 0.000050	16.1	0.281	< 0.000050	< 0.000050	< 0.00150	0.0237	0.0393
FR EAGLENORTH	FR EAGLE NORTH SEEP 2022-09-22 NP	2022-09-22	5.3	< 0.020	< 0.000100	0.151	349	< 0.00020	0.0265	5.94	418	< 0.000020	15.3	0.262	0.000042	< 0.000020	< 0.000060	0.027	0.0386
FR FCSEEP2	FR FCSEEP2 SEEP 2022-04-11 NP	2022-06-10	2.3	< 0.010	< 0.000050	0.0071	14.9	< 0.00010	< 0.00050	0.617	5.7	< 0.000010	0.524	0.0652	< 0.000010	< 0.000010	< 0.000030	0.000694	< 0.0010
FR FCSEEP2	FR FCSEEP2 SEEP 2022-08-22 NP	2022-08-22	3.9	< 0.020	< 0.000100	0.0162	210	< 0.00010	< 0.00050	0.928	9.9	< 0.000010	0.74	0.119	< 0.000010	< 0.000010	< 0.000060	0.00062	0.0031
FR FRWSEEP3	FR FRWSEEP3 SEEP 2022-04-11 NP	2022-06-16	10.1	< 0.010	< 0.000050	0.0274	110	0.00332	0.00481	2.97	100	< 0.000010	4.14	0.11	< 0.000010	< 0.000010	< 0.000030	0.00517	0.0032
FR FRWSEEP3	FR FRWSEEP3 SEEP 2022-09-08 NP	2022-09-08	-	0.016	< 0.000050	0.0328	147	0.0151	0.00261	3.26	107	< 0.000010	5.43	0.14	< 0.000010	< 0.000010	< 0.000030	0.00574	0.0126
FR FSEAMSEEP7	FR FSEAMSEEP7 SEEP 2022-04-11 NP	2022-05-16	3.5	0.016	< 0.000050	0.0296	49.2	0.00155	0.00197	2.83	92.4	< 0.000010	3.5	0.275	< 0.000010	< 0.000010	< 0.000030	0.00369	< 0.0010
FR FSEAMSEEP7	FR FSEAMSEEP7 SEEP 2022-07-01 NP	2022-07-20	-	0.021	< 0.000050	0.0457	44	0.00127	0.00287	4.46	33.1	< 0.000010	6.65	0.314	< 0.000010	< 0.000010	0.0004	0.00315	< 0.0010
FR FSEAMWSEEP4	FR FSEAMWSEEP4 SEEP 2022-04-11 NP	2022-06-16	-	< 0.010	< 0.000050	0.066	49.2	0.00775	0.0228	5.77	106	< 0.000010	1.08	0.109	0.000037	< 0.000010	< 0.000030	0.00519	0.0108
FR HENSEEP3	FR HENSEEP3 SEEP 2022-04-11 NP	2022-04-11	-	< 0.020	< 0.000100	0.0586	222	0.00129	0.00318	3.54	516	< 0.000020	1.74	0.209	< 0.000020	< 0.000020	< 0.000060	0.00551	0.0066
FR HENSEEP3	FR HENSEEP3 SEEP 2022-05-16 NP	2022-05-16	9	< 0.020	< 0.000100	0.0629	216	0.00119	0.00292	3.3	517	< 0.000020	2.46	0.276	< 0.000020	< 0.000020	< 0.000060	0.00431	0.005
FR HENSEEP3	FR HENSEEP3 SEEP 2022-07-01 NP	2022-07-14	-	< 0.000100	0.00501	191	0.00189	0.003	3.02	437	< 0.000020	1.83	0.234	< 0.000020	< 0.000020	< 0.000060	0.00436	0.0064	
FR HENSEEP3	FR HENSEEP3 SEEP 2022-09-21 NP	2022-09-21	9.4	< 0.020	< 0.000100	0.0554	190	0.00037	0.00234	2.85	457	< 0.000020	2.38	0.234	< 0.000020	< 0.000020	< 0.000060	0.00343	0.0063
FR HENSEEP1	FR HENSEEP1 SEEP 2022-04-11 NP	2022-04-11	8.2	0.013	< 0.000050	0.008	98	0.00115	0.00232	2.32	53.3	< 0.000010	1.37	0.177	0.000013	< 0.000010	< 0.000030	0.00313	0.0206
FR HENSEEP1	FR HENSEEP1 SEEP 2022-07-01 NP	2022-07-14	-	< 0.020	< 0.000100	0.0115	126	0.0181	0.00435	3.02	7.62	< 0.000020	1.62	0.226	0.000024	< 0.000020	< 0.000060	0.00458	0.0158
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-04-11 NP	2022-06-16	9.4	< 0.010	< 0.000050	0.0074	34	0.0004	0.00215	1.53	41.1	< 0.000010	0.516	0.0407	0.000014	< 0.000010	< 0.000030	0.00127	0.0077
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-07-01 NP	2022-07-06	19.5	< 0.010	< 0.000050	0.0085	38.7	0.00037	0.0025	1.6	55.1	< 0.000010	0.542	0.0544	0.000012	< 0.000010	< 0.000030	0.00162	0.0041
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-09-22 NP	2022-09-22	3.12	< 0.010	< 0.000050	0.0161	83.7	0.00097	0.00502	2.33	167	< 0.000010	0.798	0.108	0.000017	< 0.000010	< 0.000030	0.00372	0.0085
FR SCRDSEEP1	FR SCRDSEEP1 SEEP 2022-04-11 NP	2022-05-19	-	< 0.020	< 0.000100	0.0628	148	0.0128	0.0093	7.78	443	< 0.000020	2.5	0.342	0.000053	< 0.000020	< 0.000060	0.00794	0.0388
FR SCRDSEEP1	FR SCRDSEEP1 SEEP 2022-09-21 NP	2022-09-21	4.3	< 0.010	< 0.000050	0.0784	248	0.00337	0.0032	4.38	239	< 0.000010	1.95	0.202	0.000036	< 0.000010	< 0.000030	0.0144	0.0703
FR SPRWSEEP1	FR SPRWSEEP1 WS 2022-04-27 NP	2022-04-27	-	0.011	< 0.000050	0.0381	65.2	0.00268	0.00822	2.64	35.5	< 0.000010	9.43	0.258	0.000095	< 0.000010	< 0.000030	0.00412	0.0178
FR SPRWSEEP1	FR SPRWSEEP1 SEEP 2022-07-01 NP	2022-07-14	6.9	< 0.010	< 0.000050	0.0379	68.25	0.00462	0.00922	2.63	38.5	< 0.000010	10.5	0.5675	0.0001565	< 0.000010	< 0.000030	0.00223	0.02455
FR STPNSEEP1	FR STPNSEEP1 SEEP 2022-04-11 NP	2022-05-19	4.69	< 0.010	< 0.000050	0.0519	48.8	0.00036	< 0.00050	1.96	61.7	< 0.000010	4.78	0.196	< 0.000010	< 0.000010	< 0.000030	0.00283	0.0012
FR STPNSEEP1	FR STPNSEEP1 SEEP 2022-07-01 NP	2022-07-15																	

APPENDIX B - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness (mg/L)	Dissolved Metals															
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper			
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
				Acute	Chronic	n/a	na	na	na	na	na	na	Acute	Chronic	n/a	n/a	n/a	Acute	Chronic
				0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	na	na	0.00004-0.0028 <sup>b</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>c</sup>	BLM <sup>c</sup>
<b>BC WQG FWAL</b>																			
<b>Greenhills Operation</b>																			
GH E1	GH E1 WS 2022-01-03 NP	2022-01-24	17.9	< 0.0020	< 0.0020	< 0.00020	< 0.00020	0.0132	< 0.040	< 0.000100	0.023	< 0.0100	< 0.000112	278	< 0.00050	0.00073	< 0.00040	< 0.00020	< 0.00020
GH E1	GH E1 WS 2022-02-07 NP	2022-02-14	14.1	< 0.0010	0.00014	0.0001	0.0236	< 0.020	< 0.000050	0.02	< 0.000050	0.018	< 0.000159	152	< 0.00010	< 0.00010	< 0.00020	< 0.00020	< 0.00020
GH E1	GH E1 WS 2022-03-07 NP	2022-03-09	9.3	0.0017	< 0.00010	0.00014	0.0248	< 0.020	< 0.000050	0.018	< 0.000050	0.023	< 0.000159	148	< 0.00010	< 0.10	< 0.00020	< 0.00020	< 0.00020
GH E1	GH E1 WS 2022-04-04 NP	2022-04-20	6	< 0.0020	< 0.00020	< 0.00020	0.0196	< 0.040	< 0.000100	0.023	< 0.000050	0.023	< 0.000021	347	< 0.00020	0.00124	< 0.00040	< 0.00040	< 0.00040
GH E1	GH E1 WS 2022-05-09 NP	2022-05-12	6.7	0.0016	0.00023	0.00014	0.0321	< 0.020	< 0.000050	0.032	< 0.000050	0.032	0.0000144	163	< 0.00010	< 0.10	< 0.00020	< 0.00020	< 0.00020
GH E1	GH E1 WS 2022-06-07 NP	2022-06-20	13.2	< 0.0010	0.00014	0.00016	0.0353	< 0.020	< 0.000050	0.027	< 0.000050	0.027	0.0000141	161	< 0.00010	< 0.10	< 0.00020	< 0.00020	< 0.00020
GH E1	GH E1 WS 2022-07-04 NP	2022-07-08	9.4	< 0.0010	0.00016	0.00019	0.039	< 0.020	< 0.000050	0.036	< 0.000050	0.036	0.0000166	157	< 0.00010	< 0.10	< 0.00020	< 0.00020	< 0.00020
GH E1	GH E1 WS 2022-08-10 NP	2022-08-10	12.4	< 0.0020	< 0.00020	< 0.00020	0.02	< 0.040	< 0.000100	0.03	< 0.000100	0.03	< 0.0100	325	< 0.00020	0.00124	< 0.00040	< 0.00040	< 0.00040
GH E1	GH E1 WS 2022-09-05 NP	2022-09-22	15.3	< 0.0020	< 0.00020	< 0.00020	0.0164	< 0.040	< 0.000100	0.027	< 0.000100	0.027	< 0.0100	324	< 0.00020	0.00111	< 0.00040	< 0.00040	< 0.00040
GH E1	GH E1 WS 2022-10-03 NP	2022-10-07	12.2	< 0.0010	< 0.00010	0.00012	0.017	< 0.020	< 0.000050	0.029	< 0.000050	0.029	< 0.0050	337	< 0.00010	0.00114	< 0.00020	< 0.00020	< 0.00020
GH E3	GH E3 WS 2022-01-03 NP	2022-01-24	3.1	< 0.0010	0.00019	< 0.00010	0.0281	< 0.020	< 0.000050	0.021	< 0.000050	0.021	0.0000248	230	< 0.00050	0.0001	0.00076	< 0.00076	< 0.00076
GH E3	GH E3 WS 2022-02-07 NP	2022-02-14	7.6	< 0.0010	0.00026	0.00012	0.0219	< 0.020	< 0.000050	0.021	< 0.000050	0.021	0.0000501	173	< 0.00010	< 0.00010	0.00043	< 0.00043	< 0.00043
GH E3	GH E3 WS 2022-03-07 NP	2022-03-09	6.8	0.0019	0.00025	0.00017	0.0209	< 0.020	< 0.000050	0.02	< 0.000050	0.02	0.0000748	176	< 0.00010	< 0.10	0.0005	< 0.0005	< 0.0005
GH E3	GH E3 WS 2022-05-02 NP	2022-05-11	18.1	0.0021	0.00022	0.0002	0.0331	< 0.020	< 0.000050	0.022	< 0.000050	0.022	0.0000152	197	< 0.00010	0.00016	0.00041	< 0.00041	< 0.00041
GH E3	GH E3 WS 2022-06-07 NP	2022-06-23	8.6	0.0015	0.00016	0.00029	0.0285	< 0.040	< 0.000050	0.026	< 0.000050	0.026	0.0000062	183	< 0.00010	0.00012	0.00032	< 0.00032	< 0.00032
GH E3	GH E3 WS 2022-07-04 NP	2022-07-08	10.6	0.0019	0.00017	0.00037	0.0371	< 0.020	< 0.000050	0.032	< 0.000050	0.032	0.0000085	185	< 0.00010	< 0.10	0.00043	< 0.00043	< 0.00043
GH E3	GH E3 WS 2022-08-01 NP	2022-08-10	14.3	0.0027	< 0.00020	0.0005	0.0394	< 0.040	< 0.000100	0.034	< 0.000100	0.034	< 0.0100	215	< 0.00020	< 0.20	< 0.00040	< 0.00040	< 0.00040
GH E3	GH E3 WS 2022-09-05 NP	2022-09-27	7.3	0.0029	< 0.00020	0.00031	0.0354	< 0.040	< 0.000100	0.033	< 0.000100	0.033	< 0.0100	219	< 0.00020	< 0.20	0.00128	< 0.00128	< 0.00128
GH E3	GH E3 WS 2022-10-03 NP	2022-10-07	23.7	< 0.0010	0.00017	0.00043	0.0417	< 0.020	< 0.000050	0.027	< 0.000050	0.027	< 0.0050	234	< 0.00010	0.00015	< 0.00020	< 0.00020	< 0.00020
GH SEEP 12	GH SEEP 12 WS 2022-06-07 NP	2022-06-21	7.1	< 0.0010	< 0.00010	0.00019	0.12	< 0.020	< 0.000050	< 0.010	< 0.000050	< 0.010	0.000129	55.8	0.00096	< 0.10	0.00027	< 0.00027	< 0.00027
GH SEEP 12	GH SEEP 12 WS 2022-09-06 NP	2022-09-20	12.4	< 0.0010	< 0.00010	0.00011	0.116	< 0.020	< 0.000050	< 0.010	< 0.000050	< 0.010	0.0000377	57.3	0.0005	< 0.10	< 0.00020	< 0.00020	< 0.00020
GH SEEP 16	GH SEEP 16 WS 2022-09-06 NP	2022-09-20	12.1	< 0.0010	< 0.00010	0.00021	0.058	< 0.020	< 0.000050	0.014	< 0.000050	0.014	< 0.0050	115	< 0.00010	< 0.10	< 0.00020	< 0.00020	< 0.00020
GH SEEP 21	GH SEEP 21 WS 2022-06-07 NP	2022-06-28	11.5	< 0.0020	< 0.00020	0.00027	0.0207	< 0.040	< 0.000100	< 0.020	< 0.000100	< 0.020	0.000383	301	< 0.00020	< 0.20	0.001	< 0.001	< 0.001
GH SEEP 21	GH SEEP 21 WS 2022-09-06 NP	2022-09-20	0.7	< 0.0020	< 0.00020	0.00020	0.0202	< 0.040	< 0.000100	< 0.020	< 0.000100	< 0.020	0.000252	362	< 0.00020	0.00032	< 0.00040	< 0.00040	< 0.00040
GH SEEP 22	GH SEEP 22 WS 2022-06-07 NP	2022-06-28	12.9	< 0.0020	< 0.00020	0.00024	0.0367	< 0.040	< 0.000100	< 0.020	< 0.000100	< 0.020	0.000123	261	< 0.00020	0.00594	< 0.00040	< 0.00040	< 0.00040
GH SEEP 22	GH SEEP 22 WS 2022-09-06 NP	2022-09-20	4.55	< 0.0020	< 0.00020	0.00020	0.0152	< 0.040	< 0.000100	< 0.020	< 0.000100	< 0.020	0.0000384	324	< 0.00020	< 0.20	< 0.00040	< 0.00040	< 0.00040
GH SEEP 46	GH SEEP 46 WS 2022-06-07 NP	2022-06-24	4	0.0016	0.0003	0.00027	0.0892	< 0.020	< 0.000050	< 0.010	< 0.000050	< 0.010	0.0000304	131	< 0.00010	< 0.10	0.00024	< 0.00024	< 0.00024
GH SEEP 5	GH SEEP 5 WS 2022-06-07 NP	2022-06-23	5.1	0.0012	0.00016	0.00023	0.112	< 0.020	< 0.000050	0.015	< 0.000050	0.015	0.000111	79.2	< 0.00010	0.00038	0.00023	< 0.00023	< 0.00023
GH SEEP 5	GH SEEP 5 WS 2022-09-06 NP	2022-09-22	5.4	0.0015	0.00016	0.0003	0.094	< 0.020	< 0.000050	0.016	< 0.000050	0.016	0.000204	89.9	< 0.00010	0.00037	0.00033	< 0.00033	< 0.00033
GH SEEP 50	GH SEEP 50 WS 2022-06-07 NP	2022-06-26	5.2	0.026	< 0.00020	0.00025	0.0637	< 0.040	< 0.000100	< 0.020	< 0.000100	< 0.020	0.0000271	46.5	< 0.00020	< 0.20	0.00106	< 0.00106	< 0.00106
GH SEEP 60	GH SEEP 60 WS 2022-06-07 NP	2022-06-29	7.2	0.0215	< 0.00020	0.00020	0.0333	< 0.040	< 0.000100	< 0.020	< 0.000100	< 0.020	0.000349	20.1	< 0.00020	< 0.20	0.00124	< 0.00124	< 0.00124
GH SEEP 76	GH SEEP 76 WS 2022-06-07 NP	2022-06-29	6.6	0.0024	0.0017	0.00022	0.0657	< 0.040	< 0.000100	< 0.020	< 0.000100	< 0.020	0.000119	206	< 0.00020	0.00221	< 0.00040	< 0.00040	< 0.00040
GH SEEP 76	GH SEEP 76 WS 2022-09-06 NP	2022-09-27	6.4	0.0023	0.00186	0.00021	0.0727	< 0.040	< 0.000100	< 0.020	< 0.000100	< 0.020	0.0000173	257	< 0.00020	0.00105	0.00063	< 0.00063	< 0.00063
GH SEEP 77	GH SEEP 77 WS 2022-06-07 NP	2022-06-29	5.8	< 0.0020	0.00099	< 0.00020	0.0799	< 0.040	< 0.000100	< 0.020	< 0.000100	< 0.020	0.000115	290	< 0.00020	0.00149	0.00046	< 0.00046	< 0.00046
GH SEEP 77	GH SEEP 77 WS 2022-09-06 NP	2022-09-27	6.4	0.0059	< 0.00010	0.00023	0.0913	< 0.040	< 0.000100	0.032	< 0.000100	0.032	0.0000088	322	< 0.00020	0.00013	0.00065	< 0.00065	< 0.00065
GH SEEP 79	GH SEEP 79 WS 2022-06-07 NP	2022-06-29	-	0.0032	0.00054	0.00021	0.0494	< 0.040	< 0.000100	0.071	< 0.000100	0.071	0.0000451	275	< 0.00020	< 0.20	< 0.00040	< 0.00040	< 0.00040
GH SEEP 79	GH SEEP 79 WS 2022-09-06 NP	2022-09-27	19.1	0.0281	0.00024	0.00039	0.0962	< 0.020	< 0.000050	0.081	< 0.000050	0.081	< 0.0050	41.8	< 0.00010	< 0.10	0.00074	< 0.00074	< 0.00074
GH SEEP 98	GH SEEP 98 WS 2022-06-07 NP	2022-06-29	13.2	< 0.0020	< 0.00020	0.00020	0.0499	< 0.040	< 0.000100	< 0.020	< 0.000100	< 0.020	0.0000326	170	< 0.00020	< 0.20	< 0.00040	< 0.00040	< 0.00040
GH SEEP 98	GH SEEP 98 WS 2022-09-06 NP	2022-09-28	14.4	< 0.0010	< 0.00010	0.00014	0.0277	< 0.020	< 0.000050	0.015	< 0.000050	0.015	0.0000391	190	< 0.00010	< 0.10	< 0.00020	< 0.00020	< 0.00020
GH W-SEEP	GH W-SEEP WS 2022-04-04 NP	2022-04-20	11.2	< 0.0010	< 0.00020	0.00020	0.00963	< 0.040	< 0.000100	< 0.020	< 0.000100	< 0.020	0.0000391	261	< 0.00020				

APPENDIX B - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L
			Acute	0.25	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>BC WQG FWAL</b>			n/a	0.25	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Green Hills Operation</b>																			
GH E1	GH E1_WS_2022-01-03_NP	2022-01-24	17.9	0.243	< 0.000100	0.0478	182	0.0544	0.00799	3.64	0.389	< 0.000020	8.25	0.37	< 0.000020	< 0.000020	< 0.00060	0.00697	0.0023
GH E1	GH E1_WS_2022-02-07_NP	2022-02-14	14.1	< 0.010	< 0.000050	0.0532	109	0.00413	0.00236	4.14	4.54	< 0.000010	8.9	0.294	< 0.000010	< 0.000010	< 0.00030	0.0074	< 0.0010
GH E1	GH E1_WS_2022-03-07_NP	2022-03-09	9.3	< 0.010	< 0.000050	0.0487	102	0.0102	0.00265	4	1.89	< 0.000010	9.22	0.29	< 0.000010	< 0.000010	< 0.00030	0.00798	0.0015
GH E1	GH E1_WS_2022-04-04_NP	2022-04-20	6	0.265	< 0.000100	0.0485	214	0.11	0.0125	4.02	0.256	< 0.000020	8.24	0.485	< 0.000020	< 0.000020	< 0.00060	0.00892	0.0093
GH E1	GH E1_WS_2022-05-09_NP	2022-05-12	6.7	< 0.010	< 0.000050	0.0656	112	0.0197	0.00264	4.64	4.18	< 0.000010	8.63	0.315	0.000015	< 0.000010	< 0.00030	0.0078	< 0.0010
GH E1	GH E1_WS_2022-06-07_NP	2022-06-20	13.2	< 0.010	< 0.000050	0.0588	126	0.0181	0.00265	4.18	4.36	< 0.000010	8.78	0.298	< 0.000010	< 0.000010	< 0.00030	0.00672	< 0.0010
GH E1	GH E1_WS_2022-07-04_NP	2022-07-08	9.4	< 0.010	< 0.000050	0.0708	126	0.0256	0.00288	4.75	4.16	< 0.000010	9.47	0.327	0.000024	< 0.000010	< 0.00030	0.00706	< 0.0010
GH E1	GH E1_WS_2022-08-10_NP	2022-08-10	12.4	0.212	< 0.000100	0.0601	250	0.14	0.0105	4.82	0.168	< 0.000020	9.86	0.459	< 0.000020	< 0.000020	< 0.00060	0.00814	0.0054
GH E1	GH E1_WS_2022-09-05_NP	2022-09-22	15.3	0.286	< 0.000100	0.06	212	0.102	0.00878	4.28	0.182	< 0.000020	8.54	0.435	< 0.000020	< 0.000020	< 0.00060	0.00791	0.0039
GH E1	GH E1_WS_2022-10-03_NP	2022-10-07	12.2	0.065	< 0.000050	0.0617	211	0.116	0.00911	4.52	0.321	< 0.000010	9.74	0.463	< 0.000010	< 0.000010	< 0.00030	0.00817	0.0018
GH E3	GH E3_WS_2022-01-03_NP	2022-01-24	3.1	< 0.010	< 0.000050	0.0548	162	0.0058	0.00404	4.57	2.19	< 0.000010	7.36	0.29	0.000015	< 0.000010	< 0.00030	0.00941	0.0068
GH E3	GH E3_WS_2022-02-07_NP	2022-02-14	7.6	0.016	< 0.000050	0.0514	114	0.0049	0.00363	3.26	14.8	< 0.000010	5.92	0.338	< 0.000010	< 0.000010	< 0.00030	0.00585	0.0024
GH E3	GH E3_WS_2022-03-07_NP	2022-03-09	6.8	0.022	< 0.000050	0.0499	115	0.00671	0.00392	3.39	12.6	< 0.000010	6.13	0.33	0.000011	< 0.000010	< 0.00030	0.007	0.002
GH E3	GH E3_WS_2022-05-02_NP	2022-05-11	18.1	0.022	< 0.000050	0.0618	190	0.0252	0.00362	4.74	2.95	< 0.000020	7.27	0.335	< 0.000010	< 0.000010	< 0.00030	0.00903	< 0.0010
GH E3	GH E3_WS_2022-06-07_NP	2022-06-23	8.6	0.016	< 0.000050	0.0637	170	0.0225	0.003	4.49	2.05	< 0.000010	6.9	0.305	0.000014	< 0.000010	< 0.00030	0.0076	< 0.0010
GH E3	GH E3_WS_2022-07-04_NP	2022-07-08	10.6	0.012	< 0.000050	0.0701	207	0.0112	0.00354	4.95	1.31	< 0.000010	7.86	0.312	0.000019	< 0.000010	< 0.00030	0.00744	< 0.0010
GH E3	GH E3_WS_2022-08-01_NP	2022-08-10	14.3	< 0.020	< 0.000100	0.0832	266	0.0317	0.00475	6.46	0.6	< 0.000020	9.59	0.331	0.000023	< 0.000020	< 0.00060	0.00855	< 0.0020
GH E3	GH E3_WS_2022-09-05_NP	2022-09-27	7.3	< 0.020	< 0.000100	0.0877	224	0.00198	0.00354	6.3	0.453	< 0.000020	9.77	0.398	< 0.000020	< 0.000020	< 0.00060	0.0101	< 0.0020
GH E3	GH E3_WS_2022-10-03_NP	2022-10-07	23.7	< 0.010	< 0.000050	0.0812	285	0.0785	0.00444	5.85	0.686	< 0.000010	9.25	0.345	< 0.000010	< 0.000010	< 0.00030	0.0089	< 0.0010
GH SEEP 12	GH SEEP 12_WS_2022-06-07_NP	2022-06-21	7.1	< 0.010	< 0.000050	< 0.0010	23.8	0.00011	0.0009	0.362	2.98	< 0.000010	0.531	0.036	< 0.000010	< 0.000010	< 0.00030	0.00133	0.0078
GH SEEP 12	GH SEEP 12_WS_2022-09-06_NP	2022-09-20	12.4	< 0.010	< 0.000050	< 0.0010	23.6	0.00094	0.00112	0.344	5.37	< 0.000010	0.522	0.0423	0.000016	< 0.000010	< 0.00030	0.00183	0.0048
GH SEEP 16	GH SEEP 16_WS_2022-09-06_NP	2022-09-20	12.1	0.015	< 0.000050	0.0084	45.1	0.0286	0.00073	0.933	25.2	< 0.000010	2.84	0.226	< 0.000010	< 0.000010	< 0.00030	0.00046	< 0.0010
GH SEEP 21	GH SEEP 21_WS_2022-06-07_NP	2022-06-28	11.5	< 0.020	< 0.000100	0.0622	206	< 0.00020	0.00349	4.99	96.9	< 0.000020	4.86	0.212	0.000023	< 0.000020	< 0.00060	0.00826	0.0227
GH SEEP 21	GH SEEP 21_WS_2022-09-06_NP	2022-09-20	0.7	0.13	< 0.000100	0.0698	215	0.817	0.0115	5.74	0.97	< 0.000020	6.67	0.266	0.000026	< 0.000020	< 0.00060	0.00473	0.0138
GH SEEP 22	GH SEEP 22_WS_2022-06-07_NP	2022-06-28	12.9	3.57	< 0.000100	0.0521	176	1.64	0.0107	4.94	1.05	< 0.000020	6.61	0.168	0.00004	< 0.000020	< 0.00060	0.00468	0.0098
GH SEEP 22	GH SEEP 22_WS_2022-09-06_NP	2022-09-20	4.55	0.204	< 0.000100	0.0588	211	0.239	0.00293	5.18	4.28	< 0.000020	8.07	0.201	< 0.000020	< 0.000020	< 0.00060	0.00764	0.0054
GH SEEP 46	GH SEEP 46_WS_2022-06-07_NP	2022-06-24	4.1	< 0.010	< 0.000050	0.0077	59.6	0.00027	0.00164	1.65	190	< 0.000010	4.1	0.176	0.000033	< 0.000010	< 0.00030	0.00196	0.0038
GH SEEP 5	GH SEEP 5_WS_2022-06-07_NP	2022-06-23	5	< 0.010	< 0.000050	0.0144	31.6	0.00805	0.00291	1.92	2.73	< 0.000010	5.48	0.173	0.000018	< 0.000010	< 0.00030	0.000415	0.0036
GH SEEP 5	GH SEEP 5_WS_2022-09-06_NP	2022-09-22	5.4	< 0.010	< 0.000050	0.0164	34.8	0.006	0.00443	1.88	3.02	< 0.000010	5.2	0.194	0.000016	< 0.000010	< 0.00030	0.00633	0.0057
GH SEEP 50	GH SEEP 50_WS_2022-06-07_NP	2022-06-28	5.2	0.028	< 0.000100	0.0052	12.8	0.00389	0.00151	1.26	0.34	< 0.000020	17.3	0.21	< 0.000020	< 0.000020	< 0.00060	0.00325	< 0.0020
GH SEEP 60	GH SEEP 60_WS_2022-06-07_NP	2022-06-29	7.2	0.021	< 0.000100	< 0.0020	5.61	0.00453	< 0.00100	0.639	0.296	< 0.000020	1.85	0.0868	< 0.000020	< 0.000020	< 0.00060	0.000333	< 0.0020
GH SEEP 76	GH SEEP 76_WS_2022-06-07_NP	2022-06-29	6.6	< 0.020	< 0.000100	0.137	108	0.00202	0.0354	2.85	476	< 0.000020	8.37	0.526	< 0.000020	< 0.000020	< 0.00060	0.0114	0.007
GH SEEP 76	GH SEEP 76_WS_2022-09-06_NP	2022-09-27	6.4	< 0.020	< 0.000100	0.169	174	0.00123	0.0604	4.26	676	< 0.000020	7.4	0.811	< 0.000020	< 0.000020	< 0.00060	0.0158	< 0.0020
GH SEEP 77	GH SEEP 77_WS_2022-06-07_NP	2022-06-29	5.8	< 0.020	< 0.000100	0.0904	125	0.0118	0.0409	3.03	443	< 0.000020	7.53	0.893	< 0.000020	< 0.000020	< 0.00060	0.00834	0.007
GH SEEP 77	GH SEEP 77_WS_2022-09-06_NP	2022-09-27	6.4	< 0.020	< 0.000100	0.0255	142	0.0132	0.00063	1.3	185	< 0.000010	26.1	1.3	0.000027	< 0.000020	< 0.00030	0.00112	< 0.0020
GH SEEP 79	GH SEEP 79_WS_2022-06-07_NP	2022-06-29	-	< 0.020	< 0.000100	0.162	225	0.0123	0.0282	4.63	87.1	< 0.000020	30.2	0.437	< 0.000020	< 0.000020	< 0.00060	0.0143	0.0026
GH SEEP 79	GH SEEP 79_WS_2022-09-06_NP	2022-09-27	19.1	0.025	< 0.000050	0.37	251	0.00019	< 0.00050	2.38	0.838	< 0.000010	169	2.28	0.000023	< 0.000010	0.00107	0.00506	< 0.0010
GH SEEP 98	GH SEEP 98_WS_2022-06-07_NP	2022-06-29	13.2	0.025	< 0.000100	0.0132	58.6	0.0149	< 0.00100	1.83	11.6	< 0.000020	19.6	0.302	< 0.000020	< 0.000020	< 0.00060	0.00193	< 0.0020
GH SEEP 98	GH SEEP 98_WS_2022-09-06_NP	2022-09-28	14.4	0.042	< 0.000050	0.0111	64.2	0.00826	0.00058	1.83	14.9	< 0.000010	13.6	0.376	< 0.000010	< 0.000010	< 0.00030	0.00184	< 0.0010
GH W-SEEP	GH W-SEEP_WS_2022-04-04_NP	2022-04-20	11.2	< 0.020	< 0.000100	0.0326	277	0.0133	< 0.00100	6.44	2.66	< 0.000020	4.38	0.175	< 0.000020	< 0.000020	< 0.00060	0.00332	< 0.0020
GH W-SEEP	GH W-SEEP_WS_2022-08-01_NP	2022-08-23	9.2	15.3	< 0.000250	0.0555	458	3.68	0.00516	7.96	< 0.250	< 0.000050	4.48	0.25	< 0.000050	< 0.000050	< 0.00150	0.0046	< 0.0050
GH WTD5	GH WTD5_WS_2022-01-03_NP	2022-01-26	10.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH WTD5	GH WTD5_WS_2022-02-07_NP	2022-02-14	9.6	< 0.010	0.000089	0.0497	49	0.00021	0.00737	2.43	5.3	< 0.000010	15.8	0.761	0.000043	< 0.000010	< 0.00030	0.00325	0.014
GH WTD5																			



APPENDIX B - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum		Arsimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper	
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Acute	Chronic	n/a	na	na	na	na	na	na	na	Acute	Chronic	na	na	na	Acute	Chronic	
			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	na	na	0.00004-0.0028 <sup>b</sup>	0.00002-0.00173 <sup>a</sup>	na	na	na	BLM <sup>c</sup>
<b>BC WQG FWAL</b>																		
<b>Line Creek Operation</b>																		
LC_3KM	LC_3KM_WS_SPRING-2022_NP	2022-06-29	3.9	0.0153	0.00037	0.00028	0.566	< 0.020	< 0.000050	0.043	0.000093	64	< 0.00010	< 0.10	0.00029			
LC_3KM	LC_3KM_WS_FALL-2022_NP	2022-09-26	7.8	0.0107	0.00033	0.00033	0.697	< 0.020	< 0.000050	0.048	< 0.0050	61.8	< 0.00010	< 0.10	0.00024			
LC_SEEP1	LC_SEEP1_WS_FALL-2022_NP	2022-09-23	5.5	0.0015	0.00018	0.00013	0.125	< 0.020	< 0.000050	0.08	< 0.0050	66.8	< 0.00010	< 0.10	0.00032			
LC_SEEP10	LC_SEEP10_WS_SPRING-2022_NP	2022-07-08	11.8	< 0.0010	< 0.00010	0.00033	0.155	< 0.020	< 0.000050	0.034	0.000385	209	< 0.00010	0.00417	0.00025			
LC_SEEP10	LC_SEEP10_WS_FALL-2022_NP	2022-09-16	4.3	0.0013	< 0.00010	0.00029	0.162	< 0.020	< 0.000050	0.032	0.0000278	219	< 0.00010	0.00362	< 0.00020			
LC_SEEP11	LC_SEEP11_WS_SPRING-2022_NP	2022-07-08	5.2	< 0.0010	< 0.00010	0.162	< 0.020	< 0.000050	0.021	0.0000119	150	< 0.00010	< 0.10	< 0.00020				
LC_SEEP11	LC_SEEP11_WS_FALL-2022_NP	2022-09-16	-	0.0011	< 0.00010	0.157	< 0.020	< 0.000050	0.02	0.0000083	148	< 0.00010	< 0.10	< 0.00020				
LC_SEEP14	LC_SEEP14_WS_SPRING-2022_NP	2022-06-29	-	0.0073	0.00024	< 0.00010	0.052	< 0.020	< 0.000050	0.014	0.0000283	103	0.00014	< 0.10	< 0.00020			
LC_SEEP15	LC_SEEP15_WS_SPRING-2022_NP	2022-06-29	-	0.0014	< 0.00010	0.0508	< 0.020	< 0.000050	< 0.010	0.0000196	128	0.00016	< 0.10	0.00024				
LC_SEEP15	LC_SEEP15_WS_FALL-2022_NP	2022-09-23	-	< 0.0010	< 0.00010	0.0421	< 0.020	< 0.000050	< 0.010	0.0000074	130	0.00014	< 0.10	< 0.00020				
LC_SEEP19	LC_SEEP19_WS_SPRING-2022_NP	2022-06-29	-	0.0011	0.00017	0.00012	0.0329	< 0.020	< 0.000050	< 0.010	0.000118	75.2	0.00012	< 0.10	0.00026			
LC_SEEP19	LC_SEEP19_WS_FALL-2022_NP	2022-09-26	-	< 0.0010	0.00022	0.00015	0.0685	< 0.020	< 0.000050	0.014	0.000287	152	0.00022	< 0.10	< 0.00020			
LC_SEEP2	LC_SEEP2_WS_SPRING-2022_NP	2022-06-29	-	< 0.0010	< 0.00010	0.203	< 0.020	< 0.000050	< 0.010	0.0000287	93.8	0.00019	< 0.10	0.00021				
LC_SEEP2	LC_SEEP2_WS_FALL-2022_NP	2022-09-26	-	< 0.0010	< 0.00010	0.141	< 0.020	< 0.000050	< 0.010	0.0000158	67.6	0.00032	< 0.10	< 0.00020				
LC_SEEP8	LC_SEEP8_WS_SPRING-2022_NP	2022-06-28	-	0.0163	0.00034	0.00043	0.131	< 0.020	< 0.000050	< 0.010	0.0000369	40.6	0.00014	0.0001	0.00128			
LC_SEEP8	LC_SEEP8_WS_FALL-2022_NP	2022-09-20	-	<b>0.0804</b>	0.00065	0.00091	0.135	< 0.040	< 0.000100	< 0.020	0.0000612	30	0.0004	< 0.20	0.00481			
LC_UDHP	LC_UDHP_WS_SPRING-2022_NP	2022-06-23	-	0.0025	0.00033	0.00034	0.194	< 0.020	< 0.000050	< 0.010	0.0000604	70	0.00014	< 0.10	0.00042			
LC_UDHP	LC_UDHP_WS_FALL-2022_NP	2022-09-26	-	0.001	0.00044	0.00031	0.444	< 0.020	< 0.000050	0.014	0.00014	137	< 0.00010	< 0.10	< 0.00020			
LC_UDP1	LC_UDP1_WS_SPRING-2022_NP	2022-06-23	-	0.0013	0.00019	0.00034	0.217	< 0.020	< 0.000050	< 0.010	0.0000105	77.1	0.0003	< 0.10	0.00046			
LC_UDP1	LC_UDP1_WS_FALL-2022_NP	2022-09-26	-	< 0.0010	0.00023	0.00043	0.202	< 0.020	< 0.000050	0.014	0.0000226	55.5	0.00042	< 0.10	0.00023			
LC_WLC_LOT2	LC_WLC_LOT2_WS_SPRING-2022_NP	2022-07-08	-	0.0011	0.00046	0.00018	0.0192	< 0.020	< 0.000050	0.023	0.00158	194	< 0.00010	< 0.10	0.00082			
LC_WLC_LOT2	LC_WLC_LOT2_WS_FALL-2022_NP	2022-09-23	-	0.0014	0.0005	0.00031	0.0613	< 0.020	< 0.000050	0.052	0.000489	263	< 0.00010	< 0.10	0.00058			

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<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX B - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L
			Acute	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>BC WQG FWAL</b>																			
<b>Line Creek Operation</b>																			
LC_3KM	LC_3KM_WS_SPRING-2022_NP	2022-06-29	3.9	< 0.010	< 0.000050	0.154	28.4	0.00017	0.00087	6.86	1.83	< 0.000010	15.8	0.227	0.000019	< 0.00010	< 0.00030	0.0025	< 0.0010
LC_3KM	LC_3KM_WS_FALL-2022_NP	2022-09-26	7.8	< 0.010	< 0.000050	0.227	38.5	< 0.00010	0.00074	9.48	0.886	< 0.000010	26.4	0.277	0.000017	< 0.00010	< 0.00030	0.00334	< 0.0010
LC_SEEP1	LC_SEEP1_WS_FALL-2022_NP	2022-09-23	5.5	< 0.010	< 0.000050	0.424	39.3	0.00022	0.00083	4.28	0.794	< 0.000010	72.4	0.294	< 0.000010	< 0.00010	< 0.00030	0.002	0.0026
LC_SEEP10	LC_SEEP10_WS_SPRING-2022_NP	2022-07-08	11.8	0.912	< 0.000050	0.0413	63.1	0.237	0.00731	3.34	0.27	< 0.000010	16.6	0.516	< 0.000010	< 0.00010	< 0.00030	0.00128	0.0049
LC_SEEP10	LC_SEEP10_WS_FALL-2022_NP	2022-09-16	4.3	0.843	< 0.000050	0.0365	71.9	0.252	0.00741	3.72	0.152	< 0.000010	17.8	0.529	< 0.000010	< 0.00010	< 0.00030	0.00137	0.0032
LC_SEEP11	LC_SEEP11_WS_SPRING-2022_NP	2022-07-08	5.2	< 0.010	< 0.000050	0.0238	55.4	0.00357	< 0.00050	2.04	2.36	< 0.000010	18.7	0.519	< 0.000010	< 0.00010	< 0.00030	0.00312	< 0.0010
LC_SEEP11	LC_SEEP11_WS_FALL-2022_NP	2022-09-16	-	< 0.010	< 0.000050	0.0232	57.9	0.00418	< 0.00050	2.07	2.36	< 0.000010	19.1	0.531	< 0.000010	< 0.00010	< 0.00030	0.0029	< 0.0010
LC_SEEP14	LC_SEEP14_WS_SPRING-2022_NP	2022-06-29	-	< 0.010	< 0.000050	0.0374	51.2	< 0.00010	0.00073	1.49	62.6	< 0.000010	6.65	0.191	< 0.000010	< 0.00010	< 0.00030	0.00323	< 0.0010
LC_SEEP15	LC_SEEP15_WS_SPRING-2022_NP	2022-06-29	-	< 0.010	< 0.000050	0.0092	51	0.00014	< 0.00050	0.905	126	< 0.000010	1.31	0.108	< 0.000010	< 0.00010	< 0.00030	0.00257	< 0.0010
LC_SEEP15	LC_SEEP15_WS_FALL-2022_NP	2022-09-23	-	< 0.010	< 0.000050	0.009	59.2	< 0.00010	< 0.00050	0.968	143	< 0.000010	1.33	0.105	< 0.000010	< 0.00010	< 0.00030	0.00304	< 0.0010
LC_SEEP19	LC_SEEP19_WS_SPRING-2022_NP	2022-06-29	-	< 0.010	< 0.000050	0.0093	35	< 0.00010	0.00642	1.08	44.4	< 0.000010	0.896	0.121	< 0.000010	< 0.00010	< 0.00030	0.00375	0.008
LC_SEEP19	LC_SEEP19_WS_FALL-2022_NP	2022-09-26	-	< 0.010	< 0.000050	0.0165	88.1	< 0.00010	0.0167	1.93	87.4	< 0.000010	1.9	0.243	< 0.000010	< 0.00010	< 0.00030	0.00843	0.0169
LC_SEEP2	LC_SEEP2_WS_SPRING-2022_NP	2022-06-29	-	< 0.010	< 0.000050	0.0067	24.9	0.00028	< 0.00050	0.829	5.55	< 0.000010	4	0.166	< 0.000010	< 0.00010	< 0.00030	0.00114	0.0014
LC_SEEP2	LC_SEEP2_WS_FALL-2022_NP	2022-09-26	-	< 0.010	< 0.000050	0.0049	20.9	0.00014	< 0.00050	0.694	2.05	< 0.000010	2.72	0.124	< 0.000010	< 0.00010	< 0.00030	0.000951	< 0.0010
LC_SEEP8	LC_SEEP8_WS_SPRING-2022_NP	2022-06-28	-	0.022	< 0.000050	0.001	16.5	0.00115	0.00184	0.787	0.495	0.000013	0.964	0.0647	< 0.000010	< 0.00010	0.00143	0.00121	< 0.0010
LC_SEEP8	LC_SEEP8_WS_FALL-2022_NP	2022-09-20	-	0.142	0.000133	< 0.0020	15.2	0.00145	0.00644	1.52	0.874	0.000023	1.5	0.051	0.000039	< 0.00020	0.0167	0.00122	0.0024
LC_UDHP	LC_UDHP_WS_SPRING-2022_NP	2022-06-23	-	< 0.010	< 0.000050	0.0086	20.4	0.00024	0.00089	1.56	10.4	< 0.000010	1.67	0.0886	< 0.000010	< 0.00010	< 0.00030	0.00115	0.0014
LC_UDHP	LC_UDHP_WS_FALL-2022_NP	2022-09-26	-	< 0.010	< 0.000050	0.0269	51	0.00205	0.00126	2.71	105	< 0.000010	7.68	0.198	< 0.000010	< 0.00010	< 0.00030	0.00186	0.0026
LC_UDP1	LC_UDP1_WS_SPRING-2022_NP	2022-06-23	-	< 0.010	< 0.000050	0.0078	19.3	0.00016	< 0.00050	1.4	1.57	< 0.000010	1.8	0.107	< 0.000010	< 0.00010	< 0.00030	0.00116	0.0022
LC_UDP1	LC_UDP1_WS_FALL-2022_NP	2022-09-26	-	< 0.010	< 0.000050	0.0148	15.8	0.00016	< 0.00050	1.25	3.2	< 0.000010	2.53	0.0726	< 0.000010	< 0.00010	< 0.00030	0.000529	< 0.0010
LC_WLC_LOT2	LC_WLC_LOT2_WS_SPRING-2022_NP	2022-07-08	-	< 0.010	< 0.000050	0.0307	124	0.00047	0.0264	2.52	256	< 0.000010	3.34	0.249	0.00003	< 0.00010	< 0.00030	0.00876	0.065
LC_WLC_LOT2	LC_WLC_LOT2_WS_FALL-2022_NP	2022-09-23	-	< 0.010	< 0.000050	0.0584	108	0.00023	0.0119	2.41	105	< 0.000010	16.5	1.55	0.000017	< 0.00010	< 0.00030	0.00409	0.0199

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<sup>1</sup> Guideline varies with hardness  
<sup>2</sup> Guideline varies with pH and water temperature  
<sup>3</sup> Guideline varies with chloride  
<sup>4</sup> Guideline varies with pH  
<sup>5</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX B - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness	Aluminum	Antimony	Arsenic	Barium*	Beryllium*	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead		
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
			Acute	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Acute	Chronic	Chronic	Acute	Acute	Chronic		
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>a</sup>	3.3-3.6 <sup>a</sup>
Coal Mountain Mine																			
CM 37PIT-SEEP-E	CM 37PIT-SEEP-E WS 2022-07-07 NP	2022-07-07	709	0.0112	< 0.00020	0.00031	0.0235	< 0.040	< 0.000100	0.256	0.000108	194	< 0.00020	<b>0.0202</b>	< 0.00100	0.828	< 0.000100		
CM 37PIT-SEEP-E	CM 37PIT-SEEP-E WS 2022-09-02 NP	2022-09-28	476	0.0067	< 0.00010	0.0003	0.0253	< 0.020	< 0.000050	0.289	0.0000269	123	< 0.00010	0.00088	< 0.00050	0.517	< 0.000050		
CM 37PIT-SEEP-W	CM 37PIT-SEEP-W WS 2022-07-07 NP	2022-07-07	458	< 0.0060	< 0.00020	0.00032	0.0361	< 0.040	< 0.000100	0.383	0.0000253	143	< 0.00020	<b>0.00474</b>	< 0.00100	0.886	< 0.000100		
CM 37PIT-SEEP-W	CM 37PIT-SEEP-W WS 2022-09-02 NP	2022-09-28	180	< 0.0030	< 0.00010	0.00017	0.0432	< 0.020	< 0.000050	0.285	< 0.00050	60.5	< 0.00010	0.00296	< 0.00050	0.209	< 0.000050		
CM CCDS	CM CCDS WS 2022-07-20 NP	2022-06-16	300	0.006	0.00014	0.00034	0.0357	< 0.020	< 0.000050	0.012	0.0000283	69.2	0.00029	< 0.10	< 0.00050	< 0.010	< 0.000050		
CM CS1	CM CS1 WS 2022-07-20 NP	2022-06-16	365	0.007	< 0.00010	0.00045	0.0365	< 0.020	< 0.000050	< 0.010	0.0000165	82.4	0.00027	< 0.10	< 0.00050	0.016	< 0.000050		
CM CS1	CM CS1 WS 2022-09-02 NP	2022-09-15	314	0.0127	< 0.00010	0.0003	0.0504	< 0.020	< 0.000050	< 0.010	0.0000119	65.9	0.00023	< 0.10	< 0.00050	< 0.010	< 0.000050		
CM MM-SEEP1	CM MM-SEEP1 WS 2022-07-20 NP	2022-06-16	614	0.0032	0.00022	0.0002	0.0583	< 0.020	< 0.000050	0.063	0.0000335	116	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
CM MM-SEEP1	CM MM-SEEP1 WS 2022-09-02 NP	2022-09-15	490	0.004	0.00022	< 0.00010	0.0791	< 0.020	< 0.000050	0.077	0.0000227	99.4	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
CM MM-SEEP3	CM MM-SEEP3 WS 2022-07-20 NP	2022-06-16	1020	0.0194	0.0001	0.00063	0.0602	< 0.020	< 0.000050	0.069	0.0000131	242	< 0.0001	0.0003	< 0.00050	0.195	< 0.000050		
CM MM-SEEP3	CM MM-SEEP3 WS 2022-09-02 NP	2022-09-15	976	0.006	< 0.00010	0.00058	0.053	< 0.020	< 0.000050	0.073	< 0.00050	213	< 0.00010	0.0004	< 0.00050	0.099	< 0.000050		
CM MM-SEEP5	CM MM-SEEP5 WS 2022-07-20 NP	2022-06-16	791	0.0704	< 0.00010	0.00023	0.0293	<b>0.00014</b>	< 0.000050	0.06	0.0000817	174	< 0.00010	<b>0.00913</b>	0.00163	0.144	< 0.000050		
CM MM-SEEP5	CM MM-SEEP5 WS 2022-09-02 NP	2022-09-15	581	0.0139	< 0.00010	0.00015	0.0316	0.000033	< 0.000050	0.064	0.000147	135	< 0.00010	0.00048	< 0.00050	0.025	< 0.000050		
CM NS1	CM NS1 WS 2022-07-20 NP	2022-06-16	1380	0.01	0.00024	0.00026	0.0281	< 0.020	< 0.000050	0.028	0.000153	246	0.0001	0.00019	< 0.00050	0.042	< 0.000050		
CM NS1	CM NS1 WS 2022-09-02 NP	2022-09-14	1650	0.0109	0.00021	0.0002	0.0184	< 0.040	< 0.000100	0.03	0.00017	270	< 0.00020	0.00037	< 0.00100	0.069	< 0.000100		
CM NS4	CM NS4 WS 2022-07-20 NP	2022-06-16	768	0.0112	0.00026	0.0002	0.026	< 0.020	< 0.000050	0.059	0.00013	160	0.00011	< 0.10	< 0.00050	0.013	< 0.000050		
CM NS4	CM NS4 WS 2022-09-02 NP	2022-09-14	1100	< 0.0060	< 0.00020	< 0.00020	0.0305	< 0.040	< 0.000100	0.111	0.000133	235	< 0.00020	0.00098	< 0.00100	< 0.020	< 0.000100		
CM NS7	CM NS7 WS 2022-07-20 NP	2022-06-16	1020	0.0157	0.00028	0.00036	0.025	< 0.020	< 0.000050	0.043	0.000124	191	0.00012	0.00031	< 0.00050	0.098	< 0.000050		
CM NS7	CM NS7 WS 2022-09-02 NP	2022-09-14	1080	0.011	< 0.00020	0.00031	0.0332	< 0.040	< 0.000100	0.049	0.0000529	209	< 0.00020	0.00064	< 0.00100	0.143	< 0.000100		
CM PLANT-SEEP1	CM PLANT-SEEP1 WS 2022-07-20 NP	2022-06-16	756	0.0116	< 0.00010	0.00021	0.0472	< 0.020	< 0.000050	0.062	0.0000142	166	< 0.00010	0.00186	< 0.00050	0.306	< 0.000050		
CM PLANT-SEEP1	CM PLANT-SEEP1 WS 2022-09-02 NP	2022-09-15	800	0.0052	< 0.00010	0.00033	0.039	< 0.020	< 0.000050	0.062	0.0000108	177	< 0.00010	<b>0.005</b>	< 0.00050	<b>4.5</b>	< 0.000050		
CM WD15	CM WD15 WS 2022-07-20 NP	2022-06-15	1250	0.0075	0.00023	0.00021	0.021	< 0.020	< 0.000050	0.056	0.0000403	244	< 0.00010	< 0.10	< 0.00050	0.015	< 0.000050		
CM WD15	CM WD15 WS 2022-09-02 NP	2022-09-14	1570	0.0335	< 0.00020	< 0.00020	0.0212	< 0.040	< 0.000100	0.061	0.0000325	340	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
CM WD15	CM WD15 WS 2022-09-19 NP	2022-09-19	1530	0.008	< 0.00020	0.00022	0.0186	< 0.040	< 0.000100	0.056	0.0000335	354	0.00039	< 0.20	< 0.00100	< 0.020	< 0.000100		
CM WD15-SOURCE	CM WD15-SOURCE WS 2022-07-20 NP	2022-06-15	1330	0.0181	0.0002	0.00025	0.0138	< 0.020	< 0.000050	0.048	0.0000454	278	0.00011	0.00045	< 0.00050	< 0.010	< 0.000050		
CM WD15-SOURCE	CM WD15-SOURCE WS 2022-09-02 NP	2022-09-14	1680	0.0251	< 0.00020	< 0.00020	0.0123	< 0.040	< 0.000100	0.057	0.0000232	370	< 0.00020	0.00029	< 0.00100	< 0.020	< 0.000100		
CM WD15-SOURCE	CM WD15-SOURCE WS 2022-09-19 NP	2022-09-19	1640	0.0276	< 0.00020	< 0.00020	0.0143	< 0.040	< 0.000100	0.056	0.0000389	386	< 0.00020	0.00048	< 0.00100	< 0.020	< 0.000100		
CM WD18	CM WD18 WS 2022-07-20 NP	2022-06-15	1260	0.0092	0.00017	0.0003	0.0164	< 0.020	< 0.000050	0.017	0.00017	264	0.00011	0.00014	< 0.00050	0.017	< 0.000050		
CM WD18	CM WD18 WS 2022-09-02 NP	2022-09-14	1690	0.0187	< 0.00020	< 0.00020	0.0177	< 0.040	< 0.000100	0.022	0.000104	385	< 0.00020	0.00026	< 0.00100	0.025	< 0.000100		
CM WD19	CM WD19 WS 2022-07-20 NP	2022-06-15	1000	0.0076	0.00016	0.00032	0.0189	0.00006	< 0.000050	0.032	0.0000871	233	0.00014	0.00043	< 0.00050	0.053	< 0.000050		
CM WD19	CM WD19 WS 2022-09-02 NP	2022-09-14	1200	0.0152	< 0.00020	< 0.00020	0.0226	< 0.040	< 0.000100	0.05	0.0000187	342	< 0.00020	0.00044	< 0.00100	0.048	< 0.000100		
CM WD4	CM WD4 WS 2022-07-20 NP	2022-06-15	503	0.0176	0.0002	0.00021	0.0294	< 0.020	< 0.000050	0.016	0.000108	108	0.00012	< 0.10	< 0.00050	0.027	< 0.000050		
CM WD4	CM WD4 WS 2022-09-02 NP	2022-09-14	718	0.0104	0.00013	0.00015	0.0395	< 0.020	< 0.000050	0.023	0.000116	167	< 0.00010	< 0.10	< 0.00050	0.011	< 0.000050		
CM WD7	CM WD7 WS 2022-07-20 NP	2022-06-15	354	0.0899	0.00035	0.00028	0.0429	0.000029	< 0.000050	0.012	0.0000217	76.7	0.00015	0.00018	0.0008	0.082	0.00013		
CM WD7	CM WD7 WS 2022-09-02 NP	2022-09-14	480	0.0515	0.00014	0.0001	0.0458	< 0.020	< 0.000050	0.018	0.000131	114	< 0.00010	< 0.000050	< 0.00050	0.04	0.000054		

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX B - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese		Nickel* mg/L	Potassium		Selenium mg/L	Silver		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc	
						Acute mg/L	Chronic mg/L		Chronic mg/L	Acute mg/L		Chronic mg/L	Acute mg/L							Chronic mg/L	
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03 <sup>a</sup>	0.0009-0.01 <sup>a</sup>	0.025-0.15 <sup>b</sup>	n/a	2	0.0001-0.003 <sup>c</sup>	0.00005-0.0015 <sup>d</sup>	n/a	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2 <sup>e</sup>	0.0075-2 <sup>e</sup>
Coal Mountain Mine																					
CM 37PIT-SEEP-E	CM 37PIT-SEEP-E WS 2022-07-07 NP	2022-07-07	709	0.091	56.1	<b>0.286</b>		0.0708	3.42	1.07	< 0.000020		71.6	1.77	0.000074	< 0.00020	< 0.00060	0.00273		0.019	
CM 37PIT-SEEP-E	CM 37PIT-SEEP-E WS 2022-09-02 NP	2022-09-28	476	0.038	53.6	<b>0.0161</b>		0.00707	4.62	<b>0.176</b>	< 0.000010		100	1.78	0.000014	< 0.00010	< 0.00030	0.00532		< 0.0030	
CM 37PIT-SEEP-W	CM 37PIT-SEEP-W WS 2022-07-07 NP	2022-07-07	458	0.184	38.7	<b>0.0967</b>		0.0171	3.82	< 0.100	< 0.000020		150	3.01	< 0.000020	< 0.00020	< 0.00060	0.000479		0.0094	
CM 37PIT-SEEP-W	CM 37PIT-SEEP-W WS 2022-09-02 NP	2022-09-28	180	0.147	25.9	<b>0.0256</b>		0.0118	3.64	< 0.050	< 0.000010		165	2.02	0.000012	< 0.00010	< 0.00030	0.000613		< 0.0030	
CM CCDS	CM CCDS WS 2022-07-20 NP	2022-06-16	300	0.005	27.5	0.00029		0.00099	0.753	<b>5.94</b>	< 0.000010		6.24	0.17	0.000018	< 0.00010	< 0.00030	0.000892		< 0.0030	
CM CS1	CM CS1 WS 2022-07-20 NP	2022-06-16	365	0.003	29.4	0.00053		0.00097	0.722	<b>7.92</b>	< 0.000010		9.29	0.15	0.000018	< 0.00010	< 0.00030	0.00052		< 0.0030	
CM CS1	CM CS1 WS 2022-09-02 NP	2022-09-15	314	0.004	23.8	0.00084		0.00091	0.662	<b>5</b>	< 0.000010		6.07	0.13	0.000016	< 0.00010	0.00038	0.000406		< 0.0030	
CM MM-SEEP1	CM MM-SEEP1 WS 2022-07-20 NP	2022-06-16	614	0.027	68.9	0.00029		0.0029	3.07	4.92	< 0.000010		28.9	0.87	< 0.000010	< 0.00010	< 0.00030	0.00296		< 0.0030	
CM MM-SEEP1	CM MM-SEEP1 WS 2022-09-02 NP	2022-09-15	480	0.021	50.4	0.00212		0.00214	2.82	1.67	< 0.000010		21.2	0.73	< 0.000010	< 0.00010	< 0.00030	0.00181		< 0.0030	
CM MM-SEEP3	CM MM-SEEP3 WS 2022-07-20 NP	2022-06-16	1020	0.005	89	<b>0.151</b>		0.00092	1.31	0.822	< 0.000010		43.8	0.86	< 0.000010	< 0.00010	0.00054	0.00144		< 0.0030	
CM MM-SEEP3	CM MM-SEEP3 WS 2022-09-02 NP	2022-09-15	976	0.005	86.3	<b>0.277</b>		0.00093	1.35	0.146	< 0.000010		57.2	0.79	< 0.000010	< 0.00010	< 0.00030	0.000951		< 0.0030	
CM MM-SEEP5	CM MM-SEEP5 WS 2022-07-20 NP	2022-06-16	971	0.016	73.5	<b>0.13</b>		0.0092	2.22	1.38	< 0.000010		13.9	0.99	0.000038	< 0.00010	< 0.00030	0.00187		0.119	
CM MM-SEEP5	CM MM-SEEP5 WS 2022-09-02 NP	2022-09-15	581	0.012	49.2	<b>0.011</b>		0.0111	1.88	<b>0.203</b>	< 0.000010		12.2	0.7	0.00002	< 0.00010	< 0.00030	0.0014		0.0279	
CM NS1	CM NS1 WS 2022-07-20 NP	2022-06-16	1380	0.014	189	<b>0.0123</b>		0.0075	3.94	<b>22.5</b>	< 0.000010		14	0.48	0.000014	< 0.00010	< 0.00030	0.00479		0.0131	
CM NS1	CM NS1 WS 2022-09-02 NP	2022-09-14	1650	0.022	207	<b>0.0242</b>		0.00969	3.6	<b>12.9</b>	< 0.000020		17.5	0.61	< 0.000020	< 0.00020	< 0.00060	0.00615		0.0139	
CM NS4	CM NS4 WS 2022-07-20 NP	2022-06-16	768	0.022	78.4	0.0172		0.00502	3.36	15.3	< 0.000010		22.5	0.48	0.000014	< 0.00010	< 0.00030	0.00272		0.0061	
CM NS4	CM NS4 WS 2022-09-02 NP	2022-09-14	1100	0.036	96	<b>0.0641</b>		0.00998	3.6	<b>0.416</b>	< 0.000020		34.1	0.98	0.000033	< 0.00020	< 0.00060	0.00245		< 0.0060	
CM NS7	CM NS7 WS 2022-07-20 NP	2022-06-16	1020	0.017	118	<b>0.0346</b>		0.00854	3.48	<b>19.6</b>	< 0.000010		24.5	0.41	0.000012	< 0.00010	0.00034	0.00372		0.0104	
CM NS7	CM NS7 WS 2022-09-02 NP	2022-09-14	1080	0.018	126	<b>0.169</b>		0.00852	3.28	6.92	< 0.000020		26.6	0.57	< 0.000020	< 0.00020	< 0.00060	0.00402		0.006	
CM PLANT-SEEP1	CM PLANT-SEEP1 WS 2022-07-20 NP	2022-06-16	756	0.025	73.4	<b>0.262</b>		0.00579	2.81	0.411	< 0.000010		14.7	0.71	0.000028	< 0.00010	< 0.00030	0.0024		0.0095	
CM PLANT-SEEP1	CM PLANT-SEEP1 WS 2022-09-02 NP	2022-09-15	800	0.028	66.7	<b>0.457</b>		0.00973	2.62	<b>0.651</b>	< 0.000010		17.4	0.72	< 0.000010	< 0.00010	< 0.00030	0.00219		0.0074	
CM WD15	CM WD15 WS 2022-07-20 NP	2022-06-15	1250	0.031	151	0.00067		0.00837	3.92	<b>10.9</b>	< 0.000010		17.7	0.74	< 0.000010	< 0.00010	< 0.00030	0.005		< 0.0030	
CM WD15	CM WD15 WS 2022-09-02 NP	2022-09-14	1570	0.039	240	0.00074		0.0107	4.46	<b>6.83</b>	< 0.000020		21.2	0.96	< 0.000020	< 0.00020	< 0.00060	0.00698		< 0.0060	
CM WD15	CM WD15 WS 2022-09-19 NP	2022-09-19	1530	0.035	220	0.00077		0.012	4.51	<b>6.78</b>	< 0.000020		19.8	1	< 0.000020	< 0.00020	< 0.00060	0.00645		< 0.0060	
CM WD15-SOURCE	CM WD15-SOURCE WS 2022-07-20 NP	2022-06-15	1330	0.029	167	0.00323		0.0182	3.92	<b>14.8</b>	< 0.000010		17.1	0.77	0.000021	< 0.00010	< 0.00030	0.0055		0.006	
CM WD15-SOURCE	CM WD15-SOURCE WS 2022-09-02 NP	2022-09-14	1680	0.035	234	0.0034		0.0178	4.26	<b>8.65</b>	< 0.000020		19.7	0.89	< 0.000020	< 0.00020	< 0.00060	0.00744		< 0.0060	
CM WD15-SOURCE	CM WD15-SOURCE WS 2022-09-19 NP	2022-09-19	1640	0.034	232	0.00748		0.0219	4.24	<b>9.16</b>	< 0.000020		19.7	0.95	< 0.000020	< 0.00020	< 0.00060	0.00689		0.0086	
CM WD18	CM WD18 WS 2022-07-20 NP	2022-06-15	1260	0.011	158	0.00255		0.00652	3.01	<b>29</b>	< 0.000010		5.16	0.45	0.000016	< 0.00010	< 0.00030	0.0051		0.0065	
CM WD18	CM WD18 WS 2022-09-02 NP	2022-09-14	1690	0.017	252	0.00761		0.00805	3.82	<b>26.7</b>	< 0.000020		7.98	0.65	0.000025	< 0.00020	< 0.00060	0.00809		< 0.0060	
CM WD19	CM WD19 WS 2022-07-20 NP	2022-06-15	1000	0.023	106	<b>0.0176</b>		0.00749	2.98	<b>17.4</b>	< 0.000010		16	0.62	0.00004	< 0.00010	< 0.00030	0.00237		0.0062	
CM WD19	CM WD19 WS 2022-09-02 NP	2022-09-14	1200	0.041	164	<b>0.0401</b>		0.00757	3.38	<b>4.42</b>	< 0.000020		29.7	0.96	< 0.000020	< 0.00020	< 0.00060	0.0021		< 0.0060	
CM WD4	CM WD4 WS 2022-07-20 NP	2022-06-15	503	0.005	58.1	<b>0.00495</b>		0.00317	1.64	<b>16.7</b>	< 0.000010		1.81	0.29	< 0.000010	< 0.00010	0.00034	0.00203		0.006	
CM WD4	CM WD4 WS 2022-09-02 NP	2022-09-14	718	0.007	94.3	<b>0.00409</b>		0.00263	2.18	<b>7.07</b>	< 0.000010		4.35	0.47	< 0.000010	< 0.00010	< 0.00030	0.00223		0.008	
CM WD7	CM WD7 WS 2022-07-20 NP	2022-06-15	354	0.006	42.6	<b>0.0118</b>		0.00433	1.55	<b>28.3</b>	< 0.000010		1.61	0.25	0.000037	< 0.00010	0.00119	0.00305		0.0112	
CM WD7	CM WD7 WS 2022-09-02 NP	2022-09-14	480	0.01	63.7	<b>0.0175</b>		0.00434	0.696	8.39	< 0.000010		3.61	0.39	< 0.000010	< 0.00010	0.00041	0.00228		0.0085	

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX B - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Total Metals																
				Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	Iron mg/L	Lead mg/L			
				Acute	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Acute	Chronic	Acute	Acute	Chronic			
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5*	3.3-3.6 <sup>2</sup>
<b>Elkview Operation</b>																				
EV CN1	EV CN1 WS 2022-05-18 NP	2022-05-18	461	0.008	0.00054	0.00012	0.0182	< 0.020	< 0.000050	< 0.010	0.000136	83.4	0.00013	< 0.10	< 0.00050	0.012	< 0.000050			
EV CN1	EV CN1 WS 2022-06-29 NP	2022-06-29	500	< 0.0030	0.00054	0.00013	0.0174	< 0.020	< 0.000050	< 0.010	0.000196	80	0.00011	< 0.10	< 0.00050	< 0.010	< 0.000050			
EV CN1	EV CN1 WS 2022-07-14 NP	2022-07-14	550	0.0035	0.00052	0.00021	0.0184	< 0.020	< 0.000050	< 0.010	0.000177	86.5	0.00013	< 0.10	< 0.00050	< 0.010	< 0.000050			
EV CN1	EV CN1 WS 2022-07-20 NP	2022-07-20	649	< 0.0030	0.00057	0.00018	0.0194	< 0.020	< 0.000050	< 0.010	0.000179	93	0.00016	< 0.10	< 0.00050	< 0.010	< 0.000050			
EV CN1	EV CN1 WS 2022-08-25 NP	2022-08-25	702	0.0075	0.00054	0.00017	0.0205	0.000022	< 0.000050	< 0.010	0.000206	103	0.00017	< 0.10	< 0.00050	< 0.010	< 0.000050			
EV CN1	EV CN1 WS 2022-09 SA NP	2022-09-27	652	< 0.0030	0.00056	0.00001	0.0204	< 0.020	< 0.000050	< 0.010	0.000187	107	0.00014	< 0.10	< 0.00050	< 0.010	< 0.000050			
EV CN1	EV CN1 WS 2022-10-20 NP	2022-10-20	723	< 0.0030	0.00054	< 0.00010	0.0208	< 0.020	< 0.000050	< 0.010	0.000169	126	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050			
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-05-18 NP	2022-05-18	589	0.165	< 0.00010	0.00023	0.0653	0.000031	< 0.000050	0.013	0.000174	154	0.00028	0.00028	0.00079	0.338	0.000394			
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-06-29 NP	2022-06-29	594	0.0052	< 0.00010	< 0.00010	0.0395	< 0.020	< 0.000050	0.013	0.0000205	132	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050			
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-07-14 NP	2022-07-14	601	0.0047	< 0.00010	0.00013	0.0442	< 0.020	< 0.000050	0.012	0.0000279	130	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050			
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-07-20 NP	2022-07-20	663	0.0053	< 0.00010	0.00016	0.0423	< 0.020	< 0.000050	0.013	0.0000254	134	< 0.00010	< 0.10	< 0.00050	0.01	< 0.000050			
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-08-24 NP	2022-08-24	648	0.0287	< 0.00010	0.00012	0.0443	< 0.020	< 0.000050	0.011	0.0000276	157	< 0.00010	< 0.10	< 0.00050	0.076	0.000065			
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-09 SA NP	2022-09-28	685	0.0822	< 0.00010	0.00014	0.0471	< 0.020	< 0.000050	0.011	0.0000463	140	0.00014	0.0002	< 0.00050	0.192	0.000198			
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-05-19 NP	2022-05-19	247	1.35	0.00018	0.0013	0.519	<b>0.000099</b>	< 0.000050	< 0.010	0.000166	86.1	0.00205	0.00342	0.005	2.7	0.00229			
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-06-29 NP	2022-06-29	247	0.261	0.0001	0.00041	0.458	0.000065	< 0.000050	< 0.010	0.000112	85.2	0.00058	0.00261	0.00136	0.521	0.000704			
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-07-20 NP	2022-07-20	258	0.0451	< 0.00010	0.00024	0.481	<b>0.00020</b>	< 0.000050	< 0.010	0.0000977	63.5	0.00013	0.00228	< 0.00050	0.059	0.000079			
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-08-24 NP	2022-08-24	226	0.0198	< 0.00010	0.00022	0.43	< 0.020	< 0.000050	< 0.010	0.0000919	64.2	< 0.00010	0.00218	< 0.00050	0.025	0.000076			
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-09 SA NP	2022-09-28	203	0.0115	< 0.00010	0.00014	0.392	< 0.020	< 0.000050	< 0.010	0.0000738	52.8	< 0.00010	0.00197	< 0.00050	0.014	< 0.000050			
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-10-20 NP	2022-10-20	192	0.0235	< 0.00010	0.00014	0.358	< 0.020	< 0.000050	< 0.010	0.0000672	50.7	< 0.00010	0.00166	< 0.00050	0.034	0.000082			
EV SEEP BREAKERLAKE	EV SEEP BREAKERLAKE WS 2022-06 SA NP	2022-07-14	242	0.0371	< 0.00010	0.00021	0.446	< 0.020	< 0.000050	< 0.010	0.0000933	60.7	< 0.00010	0.00226	< 0.00050	0.063	0.000146			
EV SEEP BREAKERLAKE	EV SEEP BREAKERLAKE WS 2022-09 SA NP	2022-09-27	535	0.0815	0.00077	0.00034	0.431	< 0.020	< 0.000050	0.02	0.000412	105	0.00016	0.00155	0.00129	0.237	0.000528			
EV SEEP CF1	EV SEEP CF1 WS 2022-06 SA NP	2022-07-07	489	0.0031	< 0.00010	0.00013	<b>2.86</b>	< 0.020	< 0.000050	0.056	0.0000076	99.4	< 0.00010	0.00032	< 0.00050	<b>1.66</b>	< 0.000050			
EV SEEP CF1	EV SEEP CF1 WS 2022-09 SA NP	2022-09-26	530	0.0037	< 0.00010	0.00018	<b>2.29</b>	< 0.020	< 0.000050	0.038	< 0.00050	95.1	0.00001	0.0002	< 0.00050	<b>1.43</b>	< 0.000050			
EV SEEP CF2	EV SEEP CF2 WS 2022-06 SA NP	2022-07-08	619	0.039	< 0.00010	0.00018	0.472	< 0.020	< 0.000050	0.064	0.0000069	98.6	< 0.00010	< 0.10	< 0.00050	0.046	0.000054			
EV SEEP CF2	EV SEEP CF2 WS 2022-09 SA NP	2022-09-26	596	0.0048	< 0.00010	0.00017	0.38	< 0.020	< 0.000050	0.041	< 0.00050	78.1	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050			
EV SEEP ERICKSON1	EV SEEP ERICKSON1 WS 2022-06 SA NP	2022-07-13	600	< 0.0060	< 0.00020	0.000179	0.0242	< 0.040	< 0.000100	< 0.020	0.0000123	160	< 0.00020	0.00179	< 0.00100	<b>3.2</b>	< 0.000100			
EV SEEP ERICKSON1	EV SEEP ERICKSON1 WS 2022-09 SA NP	2022-10-05	663	0.0068	< 0.00010	0.00017	0.026	< 0.020	< 0.000050	0.01	0.0000162	177	< 0.00010	0.00182	< 0.00050	<b>3.26</b>	< 0.000050			
EV SEEP ERICKSON2	EV SEEP ERICKSON2 WS 2022-06 SA NP	2022-07-07	349	0.0241	0.00064	0.00099	0.192	< 0.020	< 0.000050	0.014	0.00000876	99.1	0.00026	< 0.10	0.00112	0.015	< 0.000050			
EV SEEP ERICKSON2	EV SEEP ERICKSON2 WS 2022-09 SA NP	2022-09-28	2350	0.012	0.00144	0.00069	0.0196	< 0.040	< 0.000100	0.027	0.0000408	365	< 0.00020	0.00076	0.00105	< 0.020	< 0.000100			
EV SEEP HOPPER2	EV SEEP HOPPER2 WS 2022-06 SA NP	2022-07-14	2720	0.0104	0.0014	0.00032	0.0111	< 0.040	< 0.000100	0.084	0.0000794	329	0.00226	0.00265	< 0.00100	0.066	< 0.000100			
EV SEEP HOPPER2	EV SEEP HOPPER2 WS 2022-09 SA NP	2022-09-27	2010	0.188	0.00171	0.00057	0.0545	0.000045	< 0.000100	0.148	0.000079	303	0.0016	<b>0.0603</b>	0.00421	0.495	0.00136			
EV SEEP PLANT1	EV SEEP PLANT1 WS 2022-06 SA NP	2022-07-08	464	0.0456	0.00026	0.00036	0.108	< 0.020	< 0.000050	0.22	0.0000678	107	< 0.00010	0.00016	0.00117	0.071	0.000095			
EV SEEP PLANT10	EV SEEP PLANT10 WS 2022-06 SA NP	2022-07-08	767	0.498	0.00038	0.00071	0.0468	0.00009	< 0.000100	0.544	0.000162	178	0.00094	0.00083	0.00185	<b>1.73</b>	0.00229			
EV SEEP PLANT11	EV SEEP PLANT11 WS 2022-06 SA NP	2022-07-07	484	< 0.0030	< 0.00010	0.00026	0.183	< 0.020	< 0.000050	0.282	0.0000101	125	< 0.00010	0.0001	< 0.00050	0.012	< 0.000050			
EV SEEP PLANT11	EV SEEP PLANT11 WS 2022-09 SA NP	2022-09-26	544	0.0032	< 0.00010	0.00032	0.12	< 0.020	< 0.000050	0.182	0.0000186	112	< 0.00010	< 0.10	< 0.00050	0.019	< 0.000050			
EV SEEP PLANT23	EV SEEP PLANT23 WS 2022-06 SA NP	2022-07-07	776	0.0035	0.00037	0.00026	0.0333	< 0.020	< 0.000050	0.087	0.00002	161	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050			
EV SEEP PLANT23	EV SEEP PLANT23 WS 2022-09 SA NP	2022-09-26	868	0.0032	0.00032	0.00036	0.0276	< 0.020	< 0.000050	0.075	0.00000888	169	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050			
EV SEEP SOUTHPT3	EV SEEP SOUTHPT3 WS 2022-06 SA NP	2022-07-13	264	< 0.0060	0.00042	0.00046	0.0832	< 0.040	< 0.000100	< 0.020	0.0000458	59.8	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100			
EV SEEP SOUTHPT3	EV SEEP SOUTHPT3 WS 2022-09 SA NP	2022-09-30	438	0.0076	0.00039	0.00044	0.116	< 0.020	< 0.000050	0.011	0.000028	77	< 0.00010	< 0.10	0.0006	0.011	0.000052			
EV SEEP SOUTHPT4	EV SEEP SOUTHPT4 WS 2022-06 SA NP	2022-07-13	377	0.0284	< 0.00020	0.0003	<b>3.14</b>	< 0.040	< 0.000100	0.098	0.0000163	90.8	0.00022	< 0.20	< 0.00100	0.984	0.000743			
EV SEEP SOUTHPT4	EV SEEP SOUTHPT4 WS 2022-09 SA NP	2022-09-30	387	0.008	< 0.00010	0.00017	<b>4.15</b>	< 0.020	< 0.000050	0.106	< 0.00050	96.7	< 0.00010	< 0.10	< 0.00050	0.53	< 0.000050			
EV SEEP SOUTHPT6	EV SEEP SOUTHPT6 WS 2022-06 SA NP	2022-07-13	1840	0.0142	0.0004	0.00044	0.0368	< 0.040	< 0.000100	0.02	0.0000947	395	< 0.00020	< 0.20	0.001	0.061	0.00024			
EV SEEP SOUTHPT6	EV SEEP SOUTHPT6 WS 2022-09 SA NP	2022-10-04	2140	0.0109	0.00048	0.00037	0.033	< 0.040	< 0.000100	0.027	0.000164	542	< 0.00020	< 0.20	0.00106	0.054	0.00015			

APPENDIX B - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness	Total Metals																
				Lithium	Magnesium	Manganese		Nickel <sup>a</sup>	Potassium	Selenium	Silver		Sodium	Strontium	Thallium	Tin	Titanium	Uranium <sup>b</sup>	Zinc	
						mg/L	mg/L				Acute	Chronic							mg/L	mg/L
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03 <sup>c</sup>	0.0009-0.01 <sup>c</sup>	0.025-0.15 <sup>c</sup>	n/a	2	0.0001-0.003 <sup>c</sup>	0.00005-0.0015 <sup>c</sup>	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2 <sup>d</sup>	0.0075-2 <sup>d</sup>
<b>Elkview Operation</b>																				
EV CN1	EV CN1 WS 2022-05-18 NP	2022-05-18	461	0.016	66.5		0.00037		0.00393	1.89	<b>127</b>		< 0.000010	2.47	0.07	0.000015	< 0.000010	< 0.000030	0.00455	0.0045
EV CN1	EV CN1 WS 2022-06-29 NP	2022-06-29	500	0.016	69.3		< 0.000010		0.00434	1.96	<b>177</b>		< 0.000010	2.64	0.07	0.000015	< 0.000010	< 0.000030	0.00456	0.0057
EV CN1	EV CN1 WS 2022-07-14 NP	2022-07-14	550	0.018	76.1		< 0.000010		0.00485	1.93	<b>145</b>		< 0.000010	2.53	0.07	0.000016	< 0.000010	< 0.000030	0.00487	0.006
EV CN1	EV CN1 WS 2022-07-20 NP	2022-07-20	649	0.018	77.2		< 0.000010		0.00494	1.98	<b>162</b>		< 0.000010	2.68	0.08	0.000018	< 0.000010	< 0.000030	0.0056	0.0064
EV CN1	EV CN1 WS 2022-08-25 NP	2022-08-25	702	0.019	90.3		0.00033		0.00545	1.84	<b>189</b>		< 0.000010	2.94	0.09	0.000016	< 0.000010	< 0.000030	0.00646	0.0078
EV CN1	EV CN1 WS 2022-09 SA NP	2022-09-27	652	0.019	94.1		< 0.000010		0.0058	1.9	<b>196</b>		< 0.000010	2.92	0.1	0.000016	< 0.000010	< 0.000030	0.00663	0.0068
EV CN1	EV CN1 WS 2022-10-20 NP	2022-10-20	723	0.02	117		< 0.000010		0.00614	2.07	<b>191</b>		< 0.000010	3.23	0.1	0.000017	< 0.000010	< 0.000030	0.0064	0.0061
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-05-18 NP	2022-05-18	589	0.019	60.6		0.0126		0.00219	1.58	<b>39.3</b>		< 0.000010	6.18	0.31	< 0.000010	< 0.000010	< 0.00150	0.00184	< 0.0032
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-06-29 NP	2022-06-29	594	0.018	62.8		0.0023		0.00059	1.55	<b>42</b>		< 0.000010	6.48	0.3	< 0.000010	< 0.000010	< 0.000030	0.00182	< 0.0030
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-07-14 NP	2022-07-14	601	0.019	62.8		<b>0.00384</b>		0.00069	1.47	<b>40.3</b>		< 0.000010	6.05	0.29	< 0.000010	< 0.000010	< 0.000030	0.00173	< 0.0030
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-07-20 NP	2022-07-20	663	0.019	60.8		0.0003		0.00064	1.46	<b>42.9</b>		< 0.000010	6.34	0.3	< 0.000010	< 0.000010	< 0.000030	0.00182	< 0.0030
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-08-24 NP	2022-08-24	648	0.019	70.2		0.00204		0.00065	1.48	<b>43.5</b>		< 0.000010	6.32	0.31	< 0.000010	< 0.000010	0.00037	0.0019	< 0.0030
EV SEEP 10MILE5	EV SEEP 10MILE5 WS 2022-09 SA NP	2022-09-28	685	0.017	71.5		<b>0.00698</b>		0.00141	1.45	<b>49.9</b>		< 0.000010	5.8	0.36	< 0.000010	< 0.000010	0.001	0.00204	< 0.0030
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-05-19 NP	2022-05-19	247	0.003	20.8		<b>0.878</b>		0.00949	1.47	<b>0.336</b>		0.00008	3.43	0.12	0.000085	< 0.000010	0.00677	0.00052	0.0249
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-06-29 NP	2022-06-29	247	0.003	21.2		<b>0.821</b>		0.00359	1.08	<b>0.247</b>		0.000013	3.78	0.13	0.000025	< 0.000010	< 0.00270	0.000299	0.0118
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-07-20 NP	2022-07-20	258	0.003	20.2		<b>0.771</b>		0.0045	0.959	<b>0.184</b>		< 0.000010	3.67	0.13	0.000016	< 0.000010	0.00062	0.000203	0.0077
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-08-24 NP	2022-08-24	226	0.002	19.9		<b>0.734</b>		0.00423	0.897	<b>0.196</b>		< 0.000010	3.63	0.12	0.000016	< 0.000010	< 0.000030	0.000173	0.0063
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-09 SA NP	2022-09-28	203	0.003	16.8		<b>0.595</b>		0.0038	0.814	<b>0.347</b>		< 0.000010	2.95	0.11	0.000014	< 0.000010	0.00042	0.000184	0.006
EV SEEP 10MILE9	EV SEEP 10MILE9 WS 2022-10-20 NP	2022-10-20	192	0.002	17.9		<b>0.563</b>		0.00353	0.839	<b>0.282</b>		< 0.000010	3.48	0.09	0.000014	< 0.000010	< 0.000030	0.00014	0.0054
EV SEEP BREAKERLAKE	EV SEEP BREAKERLAKE WS 2022-06 SA NP	2022-07-14	242	0.003	20.1		<b>0.73</b>		0.00444	0.91	<b>0.16</b>		< 0.000010	3.45	0.12	0.000016	< 0.000010	0.00033	0.000185	0.0069
EV SEEP BREAKERLAKE	EV SEEP BREAKERLAKE WS 2022-09 SA NP	2022-09-27	535	0.024	89.2		<b>0.128</b>		0.0102	2.48	<b>27.8</b>		0.000013	7.54	0.14	0.000059	< 0.000010	0.00088	0.00524	0.0089
EV SEEP CF1	EV SEEP CF1 WS 2022-06 SA NP	2022-07-07	489	0.052	65.6		<b>0.422</b>		0.00092	4.79	<b>0.148</b>		< 0.000010	6.12	0.46	< 0.000010	< 0.000010	< 0.000030	0.000201	0.0048
EV SEEP CF1	EV SEEP CF1 WS 2022-09 SA NP	2022-09-26	500	0.047	51		<b>0.259</b>		0.00056	4.13	<b>0.06</b>		< 0.000010	4.78	0.4	< 0.000010	< 0.000010	< 0.000030	0.000133	0.0061
EV SEEP CF2	EV SEEP CF2 WS 2022-06 SA NP	2022-07-08	619	0.052	91.8		0.0028		0.00072	3.76	<b>0.151</b>		< 0.000010	4.96	0.49	< 0.000010	< 0.000010	0.00075	0.00035	0.0059
EV SEEP CF2	EV SEEP CF2 WS 2022-09 SA NP	2022-09-26	596	0.048	68.4		0.00013		< 0.000050	3.99	<b>0.107</b>		< 0.000010	3.94	0.42	< 0.000010	< 0.000010	< 0.000030	0.000266	< 0.0030
EV SEEP ERICKSON1	EV SEEP ERICKSON1 WS 2022-06 SA NP	2022-07-13	600	0.01	49.1		<b>0.49</b>		0.00261	1.16	< 0.100		< 0.000020	2.25	0.32	< 0.000020	< 0.000020	< 0.00060	0.000161	< 0.0060
EV SEEP ERICKSON1	EV SEEP ERICKSON1 WS 2022-09 SA NP	2022-10-05	663	0.009	53.5		<b>0.562</b>		0.00296	1.11	< 0.050		< 0.000010	2.26	0.32	0.000013	< 0.000010	< 0.000030	0.000176	0.0036
EV SEEP ERICKSON2	EV SEEP ERICKSON2 WS 2022-06 SA NP	2022-07-07	349	0.008	30.7		0.00132		0.00366	2.1	<b>4.76</b>		< 0.000010	3.58	0.17	0.000028	< 0.000010	< 0.00060	0.00232	< 0.0030
EV SEEP ERICKSON2	EV SEEP ERICKSON2 WS 2022-09 SA NP	2022-09-28	2350	0.077	362		<b>0.0386</b>		0.046	6.09	<b>725</b>		< 0.000020	2.61	0.28	0.000051	< 0.000020	< 0.00060	<b>0.0292</b>	0.0707
EV SEEP HOPPER2	EV SEEP HOPPER2 WS 2022-06 SA NP	2022-07-14	2720	0.849	489		0.00222		0.00378	21.5	<b>621</b>		< 0.000010	51.6	0.65	0.00004	< 0.000020	< 0.00060	<b>0.0115</b>	0.0279
EV SEEP HOPPER2	EV SEEP HOPPER2 WS 2022-09 SA NP	2022-09-27	2010	0.4	290		<b>0.143</b>		0.0349	19.4	<b>552</b>		0.000031	25.2	0.83	0.000064	< 0.000020	0.0021	<b>0.0118</b>	0.0463
EV SEEP PLANT1	EV SEEP PLANT1 WS 2022-06 SA NP	2022-07-08	464	0.128	46.4		<b>0.0116</b>		0.00212	3.26	<b>1.63</b>		< 0.000010	67.1	2.09	0.000014	< 0.000010	< 0.00090	0.000843	0.0097
EV SEEP PLANT10	EV SEEP PLANT10 WS 2022-06 SA NP	2022-07-08	767	0.454	95.6		<b>0.102</b>		0.00329	3.21	<b>0.139</b>		< 0.000020	354	8.93	< 0.000020	< 0.000020	0.00446	0.00122	0.0724
EV SEEP PLANT11	EV SEEP PLANT11 WS 2022-06 SA NP	2022-07-07	484	0.151	50.7		<b>0.0027</b>		0.0009	2.7	<b>1.03</b>		< 0.000010	77.4	2.41	< 0.000010	< 0.000010	< 0.00030	0.00031	< 0.0030
EV SEEP PLANT11	EV SEEP PLANT11 WS 2022-09 SA NP	2022-09-26	544	0.158	45.6		<b>0.0499</b>		0.00107	2.54	<b>0.328</b>		< 0.000010	68	2.08	< 0.000010	< 0.000010	< 0.000030	0.000129	< 0.0030
EV SEEP PLANT23	EV SEEP PLANT23 WS 2022-06 SA NP	2022-07-07	776	0.066	99.4		0.00044		0.00257	2.92	<b>17.2</b>		< 0.000010	24.7	1.72	< 0.000010	< 0.000010	< 0.000030	0.00214	0.106
EV SEEP PLANT23	EV SEEP PLANT23 WS 2022-09 SA NP	2022-09-26	868	0.069	88.9		< 0.000010		0.00203	2.8	<b>14.4</b>		< 0.000010	22.4	1.79	< 0.000010	< 0.000010	< 0.000030	0.0019	0.0184
EV SEEP SOUTHPT3	EV SEEP SOUTHPT3 WS 2022-06 SA NP	2022-07-13	264	0.0021	28.3		< 0.000020		< 0.000100	0.89	<b>5.47</b>		< 0.000020	0.91	0.06	< 0.000020	< 0.000020	< 0.00060	0.000985	< 0.0060
EV SEEP SOUTHPT3	EV SEEP SOUTHPT3 WS 2022-09 SA NP	2022-09-30	438	0.003	45.7		0.00039		0.00153	0.365	<b>1.28</b>		< 0.000010	1.43	0.11	0.000017	< 0.000010	< 0.000030	0.00111	< 0.0030
EV SEEP SOUTHPT4	EV SEEP SOUTHPT4 WS 2022-06 SA NP	2022-07-13	377	0.105	37.8		<b>0.0572</b>		< 0.000100	6.25	<b>0.204</b>		< 0.000020	4.77	0.32	< 0.000020	< 0.000020	< 0.00060	0.000442	< 0.0060
EV SEEP SOUTHPT4	EV SEEP SOUTHPT4 WS 2022-09 SA NP	2022-09-30	387	0.117	38.5		<b>0.0588</b>		< 0.000050	7.33	<b>0.122</b>		< 0.000010	5.42	0.36	< 0.000010	< 0.000010	< 0.000030	0.000253	< 0.0030
EV SEEP SOUTHPT6	EV SEEP SOUTHPT6 WS 2022-06 SA NP	2022-07-13	1840	0.03	223		<b>0.0114</b>		0.00226	3.58	<b>73.6</b>		< 0.000020	4.23	0.45	< 0.000020	< 0.000020	< 0.00060	0.0008	< 0.0060
EV SEEP SOUTHPT6	EV SEEP SOUTHPT6 WS 2022-09 SA NP	2022-10-04	2140	0.03	276		0.00562		0.00231	4.07	<b>87.2</b>		< 0.000020	4.76	0.58	0.000023	< 0.000020	< 0.00060	0.00804	0.0073
EV SEEP TURCON1	EV SEEP TURCON1 WS 2022-06 SA NP	2022-07-08	515	0.036	50.4		<b>0.025</b>		< 0.000050	2.26	-									

APPENDIX B - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness	Total Metals															
				Aluminum	Antimony	Arsenic	Barium*	Beryllium*	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead		
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>a</sup>	3.3-3.6 <sup>b</sup>
<b>Fording River Operation</b>																			
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-02 NP	2022-01-02	1100	0.0129	0.00032	0.00019	0.0445	< 0.020	< 0.000050	0.028	0.000239	214	< 0.00010	< 0.10	0.00094	0.012	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-05 NP	2022-01-05	873	0.0066	0.00028	0.00016	0.0966	< 0.020	< 0.000050	0.011	0.0000969	155	0.00016	0.00015	< 0.00050	0.012	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-07 NP	2022-01-07	1120	0.009	0.00031	0.0002	0.0451	< 0.020	< 0.000050	0.031	0.000242	212	< 0.00010	0.0001	0.00091	0.014	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-12 NP	2022-01-12	1100	0.0033	0.0003	0.0002	0.0471	< 0.020	< 0.000050	0.029	0.000245	202	< 0.00010	< 0.10	0.00078	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-14 NP	2022-01-14	1120	0.386	0.00034	0.00035	0.0615	< 0.020	< 0.000050	0.029	0.000325	203	0.00088	0.00062	0.00136	0.24	0.00179		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-19 NP	2022-01-19	1230	0.0108	0.00031	0.0002	0.0454	< 0.020	< 0.000050	0.032	0.00026	213	< 0.00010	< 0.10	0.00083	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-22 NP	2022-01-22	1170	0.0161	0.00032	0.00017	0.0475	< 0.020	< 0.000050	0.031	0.000254	206	< 0.00010	< 0.10	0.00091	0.018	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-26 NP	2022-01-26	1200	0.0282	0.00034	0.00022	0.0499	< 0.020	< 0.000050	0.031	0.000255	214	< 0.00010	0.0001	0.00091	0.041	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-29 NP	2022-01-29	1200	0.0203	0.00032	0.0002	0.0824	< 0.020	< 0.000050	0.032	0.000252	225	0.00017	< 0.10	0.00096	0.018	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-02 NP	2022-02-02	1240	0.693	0.00042	0.00082	0.0748	0.000064	< 0.000050	0.035	0.000643	229	0.00126	0.00165	0.00478	<b>1.31</b>	0.00126		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-03 NP	2022-02-03	1230	0.0235	0.00031	0.0002	0.048	< 0.020	< 0.000050	0.032	0.000266	228	0.00014	< 0.10	0.00084	0.028	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-04 NP	2022-02-04	1190	0.0048	0.00037	0.00024	0.0514	< 0.020	< 0.000050	0.03	0.00027	222	0.00012	< 0.10	0.00086	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-05 NP	2022-02-05	1190	0.0059	0.00032	0.00019	0.0474	< 0.020	< 0.000050	0.033	0.000238	234	< 0.00010	< 0.10	0.0008	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-06 NP	2022-02-06	1200	0.0102	0.00032	0.00018	0.0461	< 0.020	< 0.000050	0.03	0.00025	212	0.00342	< 0.10	0.00086	0.026	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-07 NP	2022-02-07	1100	0.0445	0.00037	0.00031	0.154	< 0.020	< 0.000050	0.034	0.000245	196	0.00013	0.00061	0.00097	0.103	0.00012		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-08 NP	2022-02-08	1260	0.0117	0.00038	0.00021	0.0502	< 0.020	< 0.000050	0.034	0.000239	224	< 0.00010	0.00016	0.00077	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-09 NP	2022-02-09	984	4.18	0.00076	0.00287	0.159	<b>0.000284</b>	0.00006	0.03	0.00106	198	0.00659	<b>0.00431</b>	0.012	<b>5.87</b>	0.00539		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-10 NP	2022-02-10	1250	1.87	0.00055	0.00144	0.0953	0.000116	< 0.000050	0.035	0.000597	238	0.00301	0.00161	0.0061	<b>2.43</b>	0.00233		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-11 NP	2022-02-11	1120	0.116	0.00034	0.00023	0.0468	< 0.020	< 0.000050	0.032	0.000249	208	0.0003	< 0.10	0.00102	0.068	0.00062		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-12 NP	2022-02-12	1120	0.195	0.00035	0.0003	0.0498	< 0.040	< 0.000100	0.034	0.000284	211	0.0004	0.00031	0.00166	0.305	0.00039		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-13 NP	2022-02-13	1200	0.303	0.00037	0.00031	0.0517	< 0.040	< 0.000100	0.033	0.000314	218	0.00099	0.00037	0.00117	0.427	0.00039		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-14 NP	2022-02-14	1200	0.0498	0.00033	0.0002	0.0475	< 0.040	< 0.000100	0.038	0.000273	215	0.00021	< 0.20	0.00108	0.035	< 0.000100		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-15 NP	2022-02-15	1170	0.0336	0.00032	0.00022	0.0533	< 0.020	< 0.000050	0.032	0.00026	242	0.00015	0.00014	0.00095	0.038	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-16 NP	2022-02-16	1200	0.0133	0.00033	0.0002	0.0552	< 0.020	< 0.000050	0.034	0.000272	244	0.0002	< 0.10	0.001	0.014	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-17 NP	2022-02-17	1230	0.0216	0.00038	0.00019	0.0535	< 0.020	< 0.000050	0.035	0.000273	234	0.00011	< 0.10	0.0009	0.021	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-18 NP	2022-02-18	1200	0.0148	0.00034	< 0.00020	0.0532	< 0.040	< 0.000100	0.035	0.000266	251	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-19 NP	2022-02-19	1230	0.0884	0.00033	< 0.00020	0.0507	< 0.040	< 0.000100	0.031	0.000252	215	< 0.00020	< 0.20	< 0.00100	0.024	< 0.000100		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-20 NP	2022-02-20	1300	0.807	0.00041	0.00059	0.0681	0.000043	< 0.000050	0.036	0.000507	254	0.00191	0.00158	0.00306	0.812	0.00087		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-21 NP	2022-02-21	1300	0.0122	0.00032	0.00018	0.0501	< 0.020	< 0.000050	0.033	0.00025	244	0.00018	< 0.10	0.00082	0.011	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-22 NP	2022-02-22	1330	0.0128	0.00032	0.00018	0.0504	< 0.020	< 0.000050	0.033	0.000275	238	< 0.00010	< 0.10	0.00084	0.012	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-23 NP	2022-02-23	1260	0.0136	0.00034	0.00021	0.0511	< 0.040	< 0.000100	0.034	0.000287	234	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-24 NP	2022-02-24	1320	0.0138	0.00033	< 0.00020	0.0504	< 0.040	< 0.000100	0.032	0.000251	222	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-25 NP	2022-02-25	1240	0.0083	0.00033	0.00025	0.0536	< 0.040	< 0.000100	0.032	0.000276	226	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-26 NP	2022-02-26	1250	0.0181	0.00036	0.00023	0.0529	< 0.020	< 0.000050	0.036	0.000263	234	0.00013	< 0.10	0.00117	0.044	0.000225		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-27 NP	2022-02-27	1250	0.0079	0.00035	< 0.00020	0.0533	< 0.040	< 0.000100	0.035	0.000261	239	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-28 NP	2022-02-28	1320	0.0125	0.00035	< 0.00020	0.0507	< 0.040	< 0.000100	0.035	0.000252	243	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-02 NP	2022-03-02	1280	0.0067	0.00034	0.00018	0.0532	< 0.020	< 0.000050	0.031	0.000275	225	< 0.00010	< 0.10	0.0009	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-03 NP	2022-03-03	1260	0.305	0.00041	0.00048	0.0549	< 0.040	< 0.000100	0.034	0.00041	296	0.00056	0.00068	0.00221	0.505	0.000651		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-04 NP	2022-03-04	1320	0.0353	0.00037	0.00019	0.0534	< 0.020	< 0.000050	0.034	0.000285	241	0.00018	0.00014	0.00099	0.033	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-05 NP	2022-03-05	1350	0.0124	0.00034	< 0.00020	0.0508	< 0.040	< 0.000100	0.033	0.000274	237	< 0.00020	< 0.20	0.00116	< 0.020	< 0.000100		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-06 NP	2022-03-06	1300	0.0068	0.00033	0.00019	0.0519	< 0.020	< 0.000050	0.035	0.000262	238	< 0.00010	< 0.10	0.0008	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-07 NP	2022-03-07	1310	0.0271	0.00034	0.00029	0.0555	< 0.020	< 0.000050	0.034	0.0003	217	0.00034	0.00027	0.00138	0.405	0.00024		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-08 NP	2022-03-08	1310	0.19	0.00034	0.00033	0.0593	< 0.020	< 0.000050	0.034	0.000313	250	0.00037	0.00031	0.00135	0.269	0.000253		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-09 NP	2022-03-09	1320	0.374	0.0004	0.00047	0.0632	0.000027	< 0.000050	0.033	0.000362	232	0.00094	0.0005	0.00193	0.562	0.00054		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-10 NP	2022-03-10	1290	0.031	0.00034	0.0002	0.054	< 0.020	< 0.000050	0.033	0.000282	243	0.00012	< 0.10	0.00094	0.022	< 0.000050		
FR ASPSEEP1	FR ASPSEEP																		

APPENDIX B - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese		Nickel <sup>a</sup> mg/L	Potassium mg/L	Selenium µg/L	Silver		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium <sup>m</sup> mg/L	Zinc	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03 <sup>a</sup>	0.0009-0.01 <sup>a</sup>	0.025-0.15 <sup>a</sup>	n/a	2	0.0001-0.003 <sup>a</sup>	0.00005-0.0015 <sup>a</sup>	n/a	n/a	n/a	n/a	0.0085	0.033-2 <sup>a</sup>	0.0075-2 <sup>a</sup>	
Fording River Operation																				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-02 NP	2022-01-02	1100	0.056	154	0.00148	0.00098	3.89	115		< 0.000010	4.73	0.21	< 0.000010	< 0.000010	< 0.000030	0.00425		0.0078	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-05 NP	2022-01-05	673	0.086	66.3	0.0032	0.00326	2.54	83.6		0.000012	3.32	0.22	< 0.000010	< 0.000010	< 0.000030	0.00428		0.0056	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-07 NP	2022-01-07	1120	0.055	148	0.00198	0.00126	3.73	118		< 0.000010	4.53	0.2	< 0.000010	< 0.000010	< 0.000030	0.00429		0.0085	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-12 NP	2022-01-12	1100	0.054	151	0.0004	0.0011	3.81	125		< 0.000010	4.68	0.21	0.00001	< 0.000010	< 0.000030	0.0039		0.0085	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-14 NP	2022-01-14	1120	0.052	157	<b>0.0187</b>	0.00173	4.03	132		0.000012	4.55	0.2	0.000027	< 0.000010	< 0.0123	0.00416		0.0111	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-19 NP	2022-01-19	1230	0.055	158	0.00117	0.00118	3.93	129		< 0.000010	4.67	0.2	0.000011	< 0.000010	< 0.000060	0.00426		0.0086	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-22 NP	2022-01-22	1170	0.054	161	0.0014	0.00123	3.99	130		< 0.000010	4.79	0.21	0.000011	0.0001	< 0.000060	0.00428		0.0103	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-26 NP	2022-01-26	1200	0.056	165	0.00261	0.00114	3.74	123		< 0.000010	4.55	0.21	0.000012	< 0.000010	< 0.000090	0.00441		0.009	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-01-29 NP	2022-01-29	1200	0.058	168	0.0017	0.00128	4.11	129		< 0.000010	4.96	0.21	0.000012	< 0.000010	0.00065	0.00429		0.0082	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-02 NP	2022-02-02	1240	0.063	176	<b>0.0528</b>	0.00445	4.44	132		0.000038	5.06	0.22	0.000048	< 0.000010	0.0134	0.0045		0.0273	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-03 NP	2022-02-03	1230	0.059	174	0.0017	0.00109	4.24	130		< 0.000010	5.07	0.21	< 0.000010	< 0.000010	0.00059	0.00385		0.0104	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-04 NP	2022-02-04	1190	0.053	176	0.00082	0.0012	4.25	121		< 0.000010	5.1	0.22	< 0.000010	< 0.000010	< 0.000030	0.00432		0.0091	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-05 NP	2022-02-05	1190	0.063	178	0.00081	0.00113	4.39	132		< 0.000010	5.46	0.22	0.000011	< 0.000010	< 0.000030	0.00423		0.0075	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-06 NP	2022-02-06	1200	0.057	168	0.00144	0.00125	4.4	126		< 0.000010	4.98	0.2	< 0.000010	< 0.000010	< 0.000030	0.00403		0.0075	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-07 NP	2022-02-07	1100	0.057	158	<b>0.0225</b>	0.0049	4.45	108		< 0.000010	4.83	0.22	0.000017	0.0001	0.00107	0.00406		0.0132	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-08 NP	2022-02-08	1260	0.063	167	0.00587	0.0205	4.07	121		< 0.000010	4.79	0.22	0.000013	0.0001	< 0.000030	0.00432		0.0119	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-09 NP	2022-02-09	984	0.052	150	<b>0.137</b>	0.0145	4.46	112		0.000222	4.2	0.2	0.000197	0.00012	0.0604	0.00423		0.0735	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-10 NP	2022-02-10	1250	0.066	187	<b>0.0493</b>	0.00673	4.79	121		0.00011	5.36	0.22	0.000086	< 0.000010	0.0425	0.00462		0.0404	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-11 NP	2022-02-11	1120	0.057	159	0.00305	0.00121	3.87	116		< 0.000010	4.77	0.2	0.000013	< 0.000010	0.0034	0.00412		0.0077	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-12 NP	2022-02-12	1120	0.057	163	<b>0.0107</b>	0.00188	3.88	117		< 0.000020	4.78	0.21	< 0.000020	< 0.000020	0.00414	0.00417		0.0114	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-13 NP	2022-02-13	1200	0.061	171	<b>0.0116</b>	0.002	4.08	120		< 0.000010	5	0.21	0.000024	< 0.000020	0.00648	0.00421		0.0126	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-14 NP	2022-02-14	1200	0.061	174	0.00226	0.00126	4	119		< 0.000020	5.17	0.21	< 0.000020	< 0.000020	0.00139	0.00435		0.0084	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-15 NP	2022-02-15	1170	0.065	190	0.00382	0.00131	4.27	131		< 0.000010	5.44	0.22	0.000013	< 0.000010	< 0.000090	0.00414		0.0091	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-16 NP	2022-02-16	1200	0.066	197	0.00246	0.00126	4.42	137		< 0.000010	5.64	0.22	0.000012	< 0.000010	< 0.000030	0.00414		0.0099	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-17 NP	2022-02-17	1230	0.065	185	0.00181	0.00129	4.43	146		< 0.000010	5.54	0.24	0.000014	< 0.000010	< 0.00120	0.00459		0.0093	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-18 NP	2022-02-18	1200	0.064	178	0.00169	0.00127	4.23	138		< 0.000020	5.44	0.24	< 0.000020	< 0.000020	< 0.00060	0.00458		0.0084	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-19 NP	2022-02-19	1230	0.059	171	0.00152	0.00152	4.04	131		< 0.000020	5.28	0.23	< 0.000020	< 0.000020	< 0.00060	0.00434		0.0081	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-20 NP	2022-02-20	1300	0.069	190	<b>0.0556</b>	0.00336	4.7	137		0.00003	5.28	0.23	0.000037	< 0.000010	0.0251	0.00456		0.0196	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-21 NP	2022-02-21	1300	0.064	174	0.00154	0.00123	4.28	140		< 0.000010	5.16	0.22	0.000013	< 0.000010	< 0.00060	0.00371		0.0075	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-22 NP	2022-02-22	1330	0.066	188	0.00132	0.00122	4.5	138		< 0.000010	5.5	0.23	0.00001	< 0.000010	< 0.000030	0.00435		0.0077	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-23 NP	2022-02-23	1260	0.069	196	0.00131	0.00122	4.41	134		< 0.000020	5.34	0.23	< 0.000020	< 0.000020	< 0.00060	0.00442		0.0081	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-24 NP	2022-02-24	1320	0.062	185	0.00128	0.00122	4.2	120		< 0.000020	5.21	0.22	< 0.000020	< 0.000020	0.0007	0.00446		0.0078	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-25 NP	2022-02-25	1240	0.058	193	0.00094	0.00116	4.23	128		< 0.000020	5.1	0.23	< 0.000020	< 0.000020	< 0.00060	0.00453		0.0093	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-26 NP	2022-02-26	1250	0.07	181	0.0022	0.00148	4.55	140		0.000012	5.67	0.22	0.000013	< 0.000010	< 0.000030	0.0049		0.0101	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-27 NP	2022-02-27	1250	0.062	194	0.00096	0.00122	4.26	128		< 0.000020	5.19	0.23	< 0.000020	< 0.000020	< 0.00060	0.00463		0.0094	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-02-28 NP	2022-02-28	1320	0.069	193	0.00117	0.00114	4.35	132		< 0.000020	5.42	0.22	< 0.000020	< 0.000020	< 0.00060	0.00462		0.0083	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-02 NP	2022-03-02	1280	0.064	187	0.00092	0.00107	4.34	135		< 0.000010	5.35	0.22	0.000011	< 0.000010	< 0.00060	0.00439		0.0081	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-03 NP	2022-03-03	1260	0.064	176	<b>0.0235</b>	0.00248	4.08	123		0.000028	4.82	0.23	0.000028	< 0.000020	0.00588	0.0045		0.0154	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-04 NP	2022-03-04	1320	0.07	194	0.00263	0.00123	4.4	133		< 0.000010	5.53	0.22	0.000014	< 0.000010	< 0.00120	0.00398		0.009	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-05 NP	2022-03-05	1350	0.072	189	0.00182	0.00121	4.29	127		< 0.000020	5.43	0.22	< 0.000020	< 0.000020	< 0.00060	0.004		0.009	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-06 NP	2022-03-06	1300	0.073	186	0.00114	0.00116	4.89	137		< 0.000010	5.5	0.22	0.00001	< 0.000010	< 0.000030	0.00428		0.0086	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-07 NP	2022-03-07	1310	0.063	188	<b>0.0107</b>	0.00163	4.69	137		0.000012	5.32	0.22	0.000014	< 0.000010	0.00706	0.00411		0.0099	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-08 NP	2022-03-08	1310	0.065	201	<b>0.0104</b>	0.00185	4.58	141		0.000012	5.59	0.23	0.00002	0.00013	0.00488	0.00405		0.0109	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-09 NP	2022-03-09	1320	0.07	186	<b>0.0174</b>	0.00256	4.71	138		0.000024	5.65	0.24	0.000044	< 0.000010	0.00895	0.00473		0.0149	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-10 NP	2022-03-10	1290	0.068	189	0.00228	0.0013	4.56	131		< 0.000010	5.56	0.23	0.000012	< 0.000010	< 0.00120	0.00441		0.0081	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-12 NP	2022-03-12	1150	0.061	170	0.00235	0.00116	4.13	125		< 0.000010	5.04	0.22	0.000013	< 0.000010	< 0.00060	0.0045		0.007	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-13 NP	2022-03-13	1270	0.062	179	<b>0.0285</b>	0.00274	4.38	127		0.000031									



APPENDIX B - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness	Aluminum	Antimony	Arsenic	Barium*	Beryllium*	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead		
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>a</sup>	3.3-3.6 <sup>b</sup>
<b>Fording River Operation</b>																			
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-27 NP	2022-03-27	1090	0.028	0.00039	0.00022	0.0497	< 0.020	< 0.000050	0.046	0.000252	204	0.00012	< 0.10	0.00122	0.035	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-28 NP	2022-03-28	1060	0.508	0.00046	0.00085	0.081	0.000044	< 0.000050	0.046	0.000393	202	0.00094	0.00068	0.00269	0.932	0.000792		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-29 NP	2022-03-29	1020	0.0533	0.00041	0.00024	0.0498	< 0.020	< 0.000050	0.046	0.000285	199	0.00015	0.0001	0.00134	0.049	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-30 NP	2022-03-30	1040	0.0201	< 0.00050	< 0.00050	0.0446	< 0.100	< 0.000250	< 0.050	0.000248	167	< 0.00050	< 0.50	< 0.00250	< 0.050	< 0.000250		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-31 NP	2022-03-31	1030	0.0207	0.00037	0.00026	0.0424	< 0.020	< 0.000050	0.043	0.000205	164	0.00023	< 0.10	0.00111	0.028	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-01 NP	2022-04-01	1010	0.0271	0.00038	0.0002	0.0444	< 0.020	< 0.000050	0.038	0.000235	164	0.00019	< 0.10	0.00121	0.038	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-02 NP	2022-04-02	1090	< 0.0150	< 0.00050	< 0.00050	0.0412	< 0.100	< 0.000250	< 0.050	0.000231	169	< 0.00050	< 0.50	< 0.00250	< 0.050	< 0.000250		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-08 NP	2022-04-08	993	0.0258	< 0.00050	< 0.00050	0.0393	< 0.100	< 0.000250	< 0.050	0.000266	180	< 0.00050	< 0.50	< 0.00250	< 0.050	< 0.000250		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-13 NP	2022-04-13	1020	0.0631	0.00037	0.0003	0.0478	< 0.020	< 0.000050	0.038	0.000266	177	0.00018	0.0002	0.00124	0.109	0.000168		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-14 NP	2022-04-14	985	0.0565	0.00034	0.00025	0.0407	< 0.020	< 0.000050	0.035	0.000265	178	0.00015	0.00013	0.00121	0.084	0.000094		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-21 NP	2022-04-21	915	0.019	0.0005	0.00021	0.038	< 0.020	< 0.000050	0.032	0.000245	156	0.00013	0.00016	0.00097	0.058	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-02 NP	2022-05-02	932	0.0031	0.00046	0.00015	0.04	< 0.020	< 0.000050	0.029	0.000248	163	< 0.00010	< 0.10	0.00098	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-03 NP	2022-05-03	916	< 0.0150	0.00046	0.00014	0.0367	< 0.020	< 0.000050	0.03	0.000226	175	< 0.00010	< 0.10	0.00082	0.017	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-05 NP	2022-05-05	1130	0.0535	0.00047	0.00024	0.0423	< 0.020	< 0.000050	0.029	0.000241	150	0.00019	0.00015	0.00123	0.097	0.000121		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-06 NP	2022-05-06	875	< 0.0120	0.00046	0.00017	0.0367	< 0.020	< 0.000050	0.029	0.000237	163	< 0.00010	< 0.10	0.00089	0.014	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-07 NP	2022-05-07	888	0.035	0.00043	0.00021	0.0376	< 0.020	< 0.000050	0.029	0.000223	157	0.00014	0.00011	0.0012	0.066	0.000062		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-08 NP	2022-05-08	857	0.0429	0.00042	0.00018	0.0355	< 0.020	< 0.000050	0.029	0.000235	151	0.00016	0.0001	0.00108	0.062	0.000058		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-09 NP	2022-05-09	816	0.0227	0.00052	0.00015	0.0363	< 0.020	< 0.000050	0.028	0.000225	154	< 0.00010	0.0001	0.00099	0.038	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-10 NP	2022-05-10	870	0.0935	0.0004	0.00025	0.0459	< 0.020	< 0.000050	0.026	0.000296	142	0.00058	0.0004	0.00157	0.169	0.000297		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-11 NP	2022-05-11	852	0.0382	0.0004	0.0002	0.036	< 0.020	< 0.000050	0.025	0.000214	139	0.00033	0.00019	0.00131	0.057	0.000099		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-12 NP	2022-05-12	791	0.004	0.00043	0.00014	0.036	< 0.020	< 0.000050	0.029	0.000208	148	0.0001	< 0.10	0.00139	0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-13 NP	2022-05-13	807	0.0035	0.00039	0.00016	0.0304	< 0.020	< 0.000050	0.026	0.000233	149	0.0001	< 0.10	0.00093	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-14 NP	2022-05-14	771	0.0031	0.00039	0.00018	0.0313	< 0.020	< 0.000050	0.027	0.000236	156	< 0.00010	< 0.10	0.00099	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-15 NP	2022-05-15	836	< 0.0030	0.0004	0.00015	0.0322	< 0.020	< 0.000050	0.027	0.000248	151	< 0.00010	< 0.10	0.00086	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-16 NP	2022-05-16	847	0.111	0.00043	0.00021	0.0389	< 0.020	< 0.000050	0.027	0.000277	151	0.00031	0.00016	0.00115	0.129	0.000135		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-17 NP	2022-05-17	853	0.0188	0.00041	0.00021	0.0362	< 0.020	< 0.000050	0.028	0.000233	156	0.00019	< 0.10	0.00096	0.03	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-19 NP	2022-05-19	820	0.041	0.00043	0.00016	0.038	< 0.020	< 0.000050	0.029	0.000238	159	0.00015	< 0.10	0.00109	0.069	0.000056		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-20 NP	2022-05-20	842	0.035	0.00042	0.00017	0.0394	< 0.020	< 0.000050	0.027	0.000222	159	0.00015	< 0.10	0.00115	0.04	0.000052		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-21 NP	2022-05-21	840	0.0035	0.00038	0.00017	0.0341	< 0.020	< 0.000050	0.027	0.00023	155	< 0.00010	< 0.10	0.00085	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-23 NP	2022-05-23	868	0.0146	0.00037	0.00019	0.0349	< 0.020	< 0.000050	0.022	0.00024	150	< 0.00010	< 0.10	0.00086	0.013	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-24 NP	2022-05-24	850	0.0207	0.00037	0.00015	0.0356	< 0.020	< 0.000050	0.029	0.000238	158	0.00013	< 0.10	0.00093	0.035	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-25 NP	2022-05-25	847	0.0095	0.0004	0.00016	0.0341	< 0.020	< 0.000050	0.026	0.000233	158	< 0.00010	< 0.10	0.00086	0.013	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-26 NP	2022-05-26	857	0.0101	0.00038	0.00019	0.0333	< 0.020	< 0.000050	0.026	0.000236	158	< 0.00010	< 0.10	0.00079	0.015	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-27 NP	2022-05-27	837	0.0107	0.00034	0.00022	0.036	< 0.020	< 0.000050	0.027	0.000233	155	0.00012	< 0.10	0.00085	0.012	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-28 NP	2022-05-28	823	0.0076	0.00035	0.00023	0.0362	< 0.020	< 0.000050	0.027	0.000232	154	0.00017	< 0.10	0.00089	0.012	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-29 NP	2022-05-29	820	< 0.0030	0.00039	0.00015	0.0347	< 0.020	< 0.000050	0.028	0.000244	152	< 0.00010	< 0.10	0.0009	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-30 NP	2022-05-30	808	0.0219	0.00037	0.00015	0.0353	< 0.020	< 0.000050	0.027	0.000219	148	0.0001	< 0.10	0.0009	0.027	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-01 NP	2022-06-01	780	0.0055	0.00038	0.0005	0.0318	< 0.020	< 0.000050	0.026	0.000208	140	0.00012	< 0.10	0.00084	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-02 NP	2022-06-02	782	0.0258	0.00039	0.00019	0.0375	< 0.020	< 0.000050	0.024	0.000196	143	0.00019	< 0.10	0.00104	0.042	0.000094		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-03 NP	2022-06-03	784	0.0285	0.00038	0.0002	0.0324	< 0.020	< 0.000050	0.028	0.000191	139	< 0.00010	< 0.10	0.00088	0.037	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-04 NP	2022-06-04	470	0.0399	0.00051	0.00028	0.0678	< 0.020	< 0.000050	0.018	0.0000866	88.5	0.00014	0.00045	0.00074	0.053	0.000076		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-05 NP	2022-06-05	730	< 0.0030	0.00037	0.00014	0.0307	< 0.020	< 0.000050	0.025	0.000241	140	< 0.00010	< 0.10	0.0009	< 0.010	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-06 NP	2022-06-06	724	0.0352	0.00041	0.00017	0.0316	< 0.020	< 0.000050	0.025	0.000207	140	0.00018	< 0.10	0.00111	0.032	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-07 NP	2022-06-07	781	0.0192	0.00037	0.00018	0.0356	< 0.020	< 0.000050	0.026	0.000193	142	< 0.00010	< 0.10	0.0009	0.021	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-08 NP	2022-06-08	724	0.0231	0.00035	0.00016	0.0298	< 0.020	< 0.000050	0.024	0.000201	134	0.00011	< 0.10	0.00084	0.033	< 0.000050		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-09 NP</																		

APPENDIX B - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness	Lithium	Magnesium	Manganese		Nickel <sup>a</sup>	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin	Titanium	Uranium <sup>b</sup>	Zinc		
			mg/L	mg/L	mg/L	Acute	Chronic	Chronic	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Chronic	Acute	Chronic
<b>BC WQG FWAL</b>			n/a	n/a	n/a	0.001-0.03 <sup>c</sup>	0.0009-0.01 <sup>c</sup>	0.025-0.15 <sup>c</sup>		2	0.0001-0.003 <sup>c</sup>	0.00005-0.0015 <sup>c</sup>	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2 <sup>a</sup>	0.0075-2 <sup>a</sup>
<b>Fording River Operation</b>																				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-27 NP	2022-03-27	1090	0.077	182	0.00188	0.00145	4.53	108	< 0.000010	5.4	0.17	0.000012	< 0.000010	0.0009	0.00409			0.0086	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-28 NP	2022-03-28	1060	0.075	171	<b>0.0265</b>	0.00319	4.36	103	0.000033	5.01	0.17	0.000031	< 0.000010	0.0118	0.00426			0.0203	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-29 NP	2022-03-29	1020	0.073	176	0.00352	0.00155	4.6	110	< 0.000010	5.14	0.17	0.000013	< 0.000010	0.0222	0.00404			0.0394	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-30 NP	2022-03-30	1040	0.064	157	0.00129	< 0.00250	3.88	95.95	< 0.000050	4.53	0.14	< 0.000050	< 0.000050	< 0.00150	0.00363			< 0.0150	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-03-31 NP	2022-03-31	1030	0.063	149	0.00108	0.00125	4.1	101	< 0.000010	4.84	0.16	0.000013	< 0.000010	0.00045	0.00365			0.0118	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-01 NP	2022-04-01	1010	0.063	150	0.00145	0.00128	4.11	105	< 0.000010	4.5	0.16	0.000014	< 0.000010	< 0.00090	0.00401			0.0101	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-02 NP	2022-04-02	1090	0.062	149	0.00055	< 0.00250	3.73	104	< 0.000050	4.42	0.16	< 0.000050	< 0.000050	< 0.00150	0.00346			< 0.0150	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-03 NP	2022-04-03	993	0.065	146	0.00079	< 0.00250	3.54	110	< 0.000050	4.25	0.18	< 0.000050	< 0.000050	< 0.00150	0.00382			< 0.0150	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-13 NP	2022-04-13	1020	0.057	134	0.0038	0.00175	3.8	124	< 0.000010	4.06	0.18	0.000014	< 0.000010	< 0.00150	0.00425			0.012	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-14 NP	2022-04-14	985	0.055	136	0.00406	0.00146	3.69	128	< 0.000010	4.05	0.18	0.000012	< 0.000010	0.00156	0.00421			0.01	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-04-21 NP	2022-04-21	915	0.057	127	0.00382	0.00124	3.82	100	< 0.000010	4.13	0.17	0.000011	< 0.000010	< 0.00060	0.00378			0.0096	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-02 NP	2022-05-02	932	0.051	125	0.00031	0.00125	4.2	131	< 0.000010	3.75	0.19	0.000012	< 0.000010	< 0.00030	0.00392			0.0102	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-03 NP	2022-05-03	916	0.046	119	0.00067	0.00124	3.73	139	< 0.000010	3.53	0.19	0.000011	< 0.000010	< 0.00030	0.00388			0.0094	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-05 NP	2022-05-05	1130	0.047	119	0.00314	0.00169	3.72	132	< 0.000010	3.61	0.19	0.000015	< 0.000010	0.00119	0.00386			0.0131	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-06 NP	2022-05-06	875	0.049	125	0.00108	0.00127	3.59	129	< 0.000010	3.52	0.18	0.000011	< 0.000010	< 0.00030	0.00344			0.0105	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-07 NP	2022-05-07	888	0.048	118	0.00215	0.00126	3.7	136	< 0.000010	3.62	0.18	0.000012	< 0.000010	0.00106	0.00368			0.0095	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-08 NP	2022-05-08	857	0.046	115	0.00187	0.00138	3.6	133	< 0.000010	3.43	0.18	0.000013	< 0.000010	0.00101	0.00364			0.0102	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-09 NP	2022-05-09	816	0.045	113	0.00162	0.00133	3.62	130	< 0.000010	3.26	0.17	0.000011	< 0.000010	0.00067	0.00336			0.0132	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-10 NP	2022-05-10	870	0.041	120	<b>0.0138</b>	0.00215	3.38	117	< 0.000010	3.26	0.16	0.000014	< 0.000010	0.00279	0.00296			0.0129	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-11 NP	2022-05-11	852	0.039	112	0.00394	0.00234	3.23	114	< 0.000010	3.08	0.15	< 0.000010	< 0.000010	0.00091	0.00289			0.0114	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-12 NP	2022-05-12	791	0.044	111	0.00072	0.00136	3.55	117	< 0.000010	3.38	0.16	0.000011	< 0.000010	< 0.00030	0.00331			0.01	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-13 NP	2022-05-13	807	0.043	111	< 0.00040	0.00112	3.2	115	< 0.000010	2.98	0.16	< 0.000010	< 0.000010	< 0.00030	0.00303			0.0089	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-14 NP	2022-05-14	771	0.043	114	< 0.00040	0.00121	3.33	117	< 0.000010	3.09	0.16	< 0.000010	< 0.000010	< 0.00030	0.00313			0.0093	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-15 NP	2022-05-15	836	0.046	107	0.00028	0.00123	3.44	120	< 0.000010	3.22	0.17	0.000011	< 0.000010	< 0.00030	0.0034			0.0106	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-16 NP	2022-05-16	847	0.047	109	<b>0.00444</b>	0.00154	3.55	119	< 0.000010	3.33	0.16	0.000013	< 0.000010	< 0.00030	0.00339			0.014	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-17 NP	2022-05-17	853	0.046	118	0.00147	0.00137	3.59	115	< 0.000010	3.36	0.17	< 0.000010	< 0.000010	< 0.00060	0.0033			0.0104	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-19 NP	2022-05-19	820	0.045	125	0.0021	0.00149	3.8	129	0.000115	3.69	0.17	< 0.000020	< 0.000010	< 0.00150	0.00339			0.0114	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-20 NP	2022-05-20	842	0.046	124	0.00197	0.00149	3.76	121	< 0.000010	3.72	0.17	0.000011	< 0.000010	0.00066	0.00331			0.0118	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-21 NP	2022-05-21	840	0.044	115	0.00036	0.00124	3.48	118	< 0.000010	3.38	0.16	< 0.000010	< 0.000010	< 0.00030	0.00325			0.0101	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-23 NP	2022-05-23	868	0.043	112	0.0009	0.00091	3.47	113	< 0.000010	3.2	0.16	0.000011	< 0.000010	0.00052	0.00316			0.01	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-24 NP	2022-05-24	850	0.047	111	0.00174	0.00132	3.44	109	< 0.000010	3.3	0.16	0.000011	< 0.000010	< 0.00060	0.00329			0.0102	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-25 NP	2022-05-25	847	0.042	114	0.00072	0.0013	3.27	109	< 0.000010	3.11	0.16	< 0.000010	< 0.000010	0.00044	0.00325			0.0101	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-26 NP	2022-05-26	857	0.043	115	0.0006	0.00131	3.29	108	< 0.000010	3.24	0.17	< 0.000010	< 0.000010	< 0.00030	0.00319			0.0092	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-27 NP	2022-05-27	837	0.043	113	0.00079	0.00094	3.48	108	< 0.000010	3.32	0.17	< 0.000010	< 0.000010	0.00043	0.00314			0.0101	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-28 NP	2022-05-28	823	0.043	115	0.00073	0.0009	3.51	109	< 0.000010	3.3	0.17	< 0.000010	< 0.000010	< 0.00030	0.00308			0.0089	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-29 NP	2022-05-29	820	0.045	118	0.00026	0.00133	3.57	110	< 0.000010	3.48	0.16	< 0.000010	< 0.000010	< 0.00030	0.00296			0.0107	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-05-30 NP	2022-05-30	808	0.044	116	0.00168	0.00123	3.51	105	< 0.000010	3.37	0.16	< 0.000010	< 0.000010	0.00081	0.00288			0.0098	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-01 NP	2022-06-01	780	0.041	107	0.00053	0.00118	3.3	108	< 0.000010	3.24	0.15	< 0.000010	< 0.000010	< 0.00030	0.00296			0.0095	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-02 NP	2022-06-02	782	0.041	107	0.00183	0.0017	3.32	97.3	0.00004	3.23	0.15	0.000011	< 0.000010	< 0.00090	0.00274			0.0098	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-03 NP	2022-06-03	784	0.038	107	0.00162	0.00122	3.35	102	0.00006	3.04	0.14	< 0.000010	< 0.000010	0.00075	0.00272			0.0095	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-04 NP	2022-06-04	470	0.027	64	<b>0.0132</b>	0.00272	2.64	56.6	< 0.000010	2.06	0.1	0.000015	< 0.000010	0.00096	0.00184			0.0065	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-05 NP	2022-06-05	730	0.041	107	0.00031	0.00122	3.09	96.8	< 0.000010	3.15	0.14	< 0.000010	< 0.000010	< 0.00030	0.00296			0.0095	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-06 NP	2022-06-06	724	0.041	106	0.00106	0.00122	3.1	95.9	0.000015	3.18	0.14	0.000011	< 0.000010	< 0.00120	0.00296			0.0114	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-07 NP	2022-06-07	781	0.041	106	0.00086	0.00123	3.08	97.9	< 0.000010	3.16	0.14	< 0.000010	< 0.000010	< 0.00060	0.00294			0.0097	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-08 NP	2022-06-08	724	0.038	100	0.00146	0.0011	3.17	101	< 0.000010	2.93	0.14	< 0.000010	< 0.000010	0.00068	0.00272			0.0101	
FR ASPSEEP1	FR ASPSEEP1 WS 2022-06-09 NP	2022-06-09	775	0.039	91	0.0004	0.00109	3.04	86.5	< 0.000010										

APPENDIX B - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness	Total Metals															
				Aluminum	Antimony	Arsenic	Barium*	Beryllium*	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead		
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5*	3.3-3.6*
<b>Fording River Operation</b>																			
FR ASPSEEP1	FR ASPSEEP1 WS 2022-08-24 NP	2022-08-24	1130	0.028	0.00034	0.00018	0.0444	< 0.020	< 0.000050	0.031	0.000266	200	0.00012	< 0.10	0.001	0.046	0.000066		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-09-01 NP	2022-09-01	1160	0.0561	0.00036	< 0.00050	0.0481	< 0.020	< 0.000050	0.035	0.000305	206	0.00018	0.00019	0.0123	0.109	0.000146		
FR ASPSEEP1	FR ASPSEEP1 WS 2022-09-05 NP	2022-09-05	1200	0.0668	0.00034	0.00029	0.0496	< 0.020	< 0.000050	0.032	0.00031	200	0.00021	0.0002	0.00117	0.12	0.000146		
FR BLAINSEEP1	FR BLAINSEEP1 WS 2022-04-27 NP	2022-04-27	2100	0.0153	0.00054	< 0.00020	0.0147	< 0.040	< 0.000100	0.041	0.000117	314	< 0.00020	< 0.20	< 0.00100	0.023	< 0.000100		
FR BLAINSEEP1	FR BLAINSEEP1 SEEP 2022-07-01 NP	2022-07-01	1790	0.0085	0.00061	< 0.00020	0.0152	< 0.040	< 0.000100	0.034	0.000096	315	< 0.00020	< 0.20	0.00124	0.022	< 0.000100		
FR BLAINSEEP1	FR BLAINSEEP1 SEEP 2022-09-01 NP	2022-09-01	2240	0.0063	0.00058	0.00047	0.0243	< 0.020	< 0.000050	0.038	0.000745	355	0.0002	0.00018	0.00104	0.152	0.000159		
FR BLAINSEEP5	FR BLAINSEEP5 SEEP 2022-04-11 NP	2022-06-10	2340	0.666	0.00073	0.00096	0.0486	0.000058	< 0.000100	0.081	0.000329	374	0.00106	0.001	0.00304	1.2	0.00123		
FR BLAINSEEP5	FR BLAINSEEP5 SEEP 2022-08-26 NP	2022-08-26	2350	0.863	0.00053	0.0008	0.0451	0.000055	< 0.000100	0.065	0.000278	379	0.00083	0.00082	0.00269	1.23	0.000899		
FR BLAKESEEP1	FR BLAKESEEP1 SEEP 2022-04-11 NP	2022-05-16	1729	0.0443	0.0004	0.0003	0.0474	< 0.020	< 0.000050	0.028	0.0000552	181	< 0.00019	0.00033	0.00087	0.131	0.000115		
FR BLAKESEEP1	FR BLAKESEEP1 SEEP 2022-09-22 NP	2022-09-22	728	0.0289	0.00042	0.00032	0.042	< 0.020	< 0.000050	0.033	0.000115	200	< 0.0001	0.0003	< 0.00050	0.054	0.00008		
FR COSEEP1	FR COSEEP1 SEEP 2022-04-11 NP	2022-06-10	1180	< 0.0030	0.00095	0.00012	0.0132	< 0.020	< 0.000050	0.036	0.000989	244	< 0.00010	0.00047	0.00054	< 0.010	< 0.000050		
FR COSEEP1	FR COSEEP1 SEEP 2022-06-17 N	2022-06-17	1240	< 0.0030	0.00093	0.00013	0.0136	< 0.020	< 0.000050	0.038	0.00106	268	< 0.00010	0.00048	0.00054	< 0.010	< 0.000050		
FR COSEEP1	FR COSEEP1 SEEP 2022-07-01 NP	2022-08-22	1410	0.0044	0.00099	0.00022	0.0151	< 0.020	< 0.000050	0.043	0.00146	384	< 0.00010	0.00062	0.00067	< 0.010	< 0.000050		
FR COSEEP1	FR COSEEP1 SEEP 2022-03-28 N	2022-03-28	2100	< 0.0090	0.00099	< 0.00020	0.0137	< 0.040	< 0.000100	0.048	0.00123	458	< 0.00020	0.00074	< 0.00100	< 0.020	< 0.000100		
FR COSEEP1	FR COSEEP1 SEEP 2022-04-11 NP	2022-06-10	1590	0.0285	0.00083	0.00039	0.0163	< 0.040	< 0.000100	0.022	0.000967	297	< 0.0002	< 0.20	< 0.00100	0.048	< 0.000100		
FR COSEEP1	FR COSEEP1 SEEP 2022-07-01 NP	2022-08-22	1590	0.0091	0.00083	0.00037	0.0144	< 0.020	< 0.000050	0.02	0.00144	316	< 0.00010	0.00028	0.00191	< 0.010	< 0.000050		
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-04-11 NP	2022-05-16	283	0.0858	0.00014	0.00022	0.0949	< 0.020	< 0.000050	0.025	0.0000181	77.4	0.00025	< 0.10	0.0006	0.092	0.000114		
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-07-01 NP	2022-07-29	298	0.317	0.00015	0.00041	0.12	< 0.020	< 0.000050	0.039	0.00006	83.7	0.00067	0.00022	0.001	0.467	0.000313		
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-09-21 NP	2022-09-21	260	0.0686	< 0.00010	0.00027	0.102	< 0.020	< 0.000050	0.027	0.0000153	82.1	0.00011	< 0.10	< 0.00050	0.121	0.000101		
FR EAGLENORTH	FR EAGLENORTH SEEP 2022-04-11 NP	2022-05-16	2370	< 0.0060	0.0005	0.00023	0.0144	< 0.040	< 0.000100	0.026	0.000497	411	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
FR EAGLENORTH	FR EAGLENORTH SEEP 2022-07-01 NP	2022-07-06	2310	< 0.0060	0.00051	< 0.00020	0.0158	< 0.040	< 0.000100	0.028	0.000885	411	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
FR EAGLENORTH	FR EAGLE NORTH SEEP 2022-09-22 NP	2022-09-22	2340	0.0554	0.00058	0.00039	0.0186	< 0.040	< 0.000100	0.029	0.0013	459	0.00022	0.00033	0.00242	0.167	0.000243		
FR FCSEEP2	FR FCSEEP2 SEEP 2022-04-11 NP	2022-06-10	159	0.0057	< 0.00010	0.00031	0.0186	< 0.020	< 0.000050	< 0.010	0.0000085	37.2	0.00011	< 0.10	< 0.00050	< 0.010	< 0.000050		
FR FCSEEP2	FR FCSEEP2 SEEP 2022-09-22 NP	2022-09-22	241	0.0205	0.00014	0.0002	0.0818	< 0.020	< 0.000050	< 0.010	0.0000222	73.4	0.00022	< 0.10	< 0.00050	0.026	< 0.000050		
FR FRWSEEP3	FR FRWSEEP3 SEEP 2022-04-11 NP	2022-06-16	765	0.0077	0.00054	0.00011	0.0223	< 0.020	< 0.000050	0.011	0.0000559	120	< 0.00010	0.00043	< 0.00050	0.011	< 0.000050		
FR FRWSEEP3	FR FRWSEEP3 SEEP 2022-09-08 NP	2022-09-08	1010	0.0142	0.00029	0.00013	0.0223	< 0.020	< 0.000050	0.015	0.0000521	177	0.00017	< 0.10	< 0.00050	0.037	< 0.000050		
FR FSEAMSEEP7	FR FSEAMSEEP7 SEEP 2022-04-11 NP	2022-05-16	441	0.5	0.00081	0.00064	0.096	0.00008	< 0.000050	0.017	0.000139	104	0.00084	0.00128	0.0019	0.37	0.00156		
FR FSEAMSEEP7	FR FSEAMSEEP7 SEEP 2022-07-01 NP	2022-07-20	368	0.146	0.00102	0.00043	0.116	< 0.020	< 0.000050	0.037	0.0000193	89.2	0.00033	0.00027	0.00106	0.14	0.00014		
FR FSEAMWSEEP4	FR FSEAMWSEEP4 SEEP 2022-04-11 NP	2022-06-16	505	0.109	0.00147	0.00031	0.0744	0.000023	< 0.000050	0.028	0.000244	114	0.0004	0.00208	0.00156	0.471	0.000634		
FR HENSEEP3	FR HENSEEP3 SEEP 2022-04-11 NP	2022-04-11	1710	0.0166	0.00031	0.00021	0.0416	< 0.020	< 0.000100	0.022	0.000156	324	< 0.00020	< 0.20	0.00113	0.046	< 0.000100		
FR HENSEEP3	FR HENSEEP3 SEEP 2022-05-16 NP	2022-05-16	1860	< 0.0090	0.00021	< 0.00020	0.0402	< 0.040	< 0.000100	< 0.020	0.000131	382	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
FR HENSEEP3	FR HENSEEP3 SEEP 2022-07-01 NP	2022-07-14	1580	0.0089	0.00025	< 0.00020	0.0324	< 0.040	< 0.000100	< 0.020	0.000163	322	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
FR HENSEEP3	FR HENSEEP3 SEEP 2022-09-21 NP	2022-09-21	1590	0.007	< 0.00020	0.00028	0.0359	< 0.040	< 0.000100	< 0.020	0.000192	349	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
FR HENSEEP1	FR HENSEEP1 SEEP 2022-04-11 NP	2022-04-11	1030	0.235	0.00028	0.0004	0.0899	0.000023	< 0.000050	< 0.010	0.000282	250	0.00049	0.00033	0.00144	0.388	0.000352		
FR HENSEEP1	FR HENSEEP1 SEEP 2022-07-01 NP	2022-07-14	1360	0.0221	0.00035	< 0.00020	0.051	< 0.040	< 0.000100	< 0.020	0.000261	330	< 0.00020	< 0.20	< 0.00100	0.038	< 0.000100		
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-04-11 NP	2022-06-16	271	0.218	0.00028	0.00029	0.0318	< 0.020	< 0.000050	< 0.010	0.000114	50.9	0.00052	0.00034	0.00155	0.357	0.000338		
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-07-01 NP	2022-07-06	316	0.0285	0.00027	0.00018	0.0282	< 0.020	< 0.000050	< 0.010	0.0000918	67.8	0.00011	< 0.10	0.00087	0.073	0.000077		
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-09-22 NP	2022-09-22	864	0.0185	0.00035	0.00032	0.0585	< 0.020	< 0.000050	0.011	0.00017	152	< 0.00010	< 0.10	0.00058	0.016	< 0.000050		
FR SCRDSEEP1	FR SCRDSEEP1 SEEP 2022-04-11 NP	2022-05-16	1430	0.0102	0.00025	0.00088	0.0896	< 0.020	< 0.000050	0.021	0.000349	341	0.00012	0.00071	0.00182	0.022	0.000053		
FR SCRDSEEP1	FR SCRDSEEP1 SEEP 2022-09-21 NP	2022-09-21	1820	0.0155	0.00104	0.00037	0.0196	< 0.040	< 0.000100	< 0.020	0.00108	322	< 0.00020	0.00061	0.00126	0.038	< 0.000100		
FR SPRWSEEP1	FR SPRWSEEP1 WS 2022-04-27 NP	2022-04-27	636	0.111	0.00122	0.00028	0.0401	< 0.020	< 0.000050	0.039	0.000482	143	0.0002	0.00026	0.00105	0.257	0.000351		
FR SPRWSEEP1	FR SPRWSEEP1 SEEP 2022-07-01 NP	2022-07-14	642	0.1294	0.00025	0.00035	0.0595	< 0.020	< 0.000050	0.0795	0.000526	145.5	< 0.00010	< 0.10	0.001975	< 0.010	< 0.000050		
FR STPNSEEP	FR STPNSEEP SEEP 2022-04-11 NP	2022-05-19	493	0.048	0.00016	< 0.00010	0.102	< 0.020	< 0.000050	0.013	0.0000562	113	0.00015	< 0.10	< 0.00050	< 0.010	< 0.000050		
FR STPNSEEP	FR STPNSEEP SEEP 2022-07-01 NP	2022-07-15	279	0.0035	0.00019	< 0.00010	0.0595	< 0.020	< 0.000050	0.012	0.000032	64.1	0.00013	< 0.10	< 0.00050	0.013	< 0.000050		
FR STPSWSEEP	FR STPSWSEEP SEEP 2022-04-11 NP	2022-05-19	610	0.0086	< 0.00010	0.0001	0.0597												

APPENDIX B - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese		Nickel <sup>a</sup> mg/L	Potassium mg/L	Selenium µg/L	Silver		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium <sup>b</sup> mg/L	Zinc	
						Acute mg/L	Chronic mg/L				Acute mg/L	Chronic mg/L								
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03 <sup>c</sup>	0.0009-0.01 <sup>c</sup>	0.025-0.15 <sup>c</sup>	n/a	2	0.0001-0.003 <sup>c</sup>	0.00005-0.0015 <sup>c</sup>	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2 <sup>a</sup>	0.0075-2 <sup>a</sup>
Fording River Operation																				
FR ASPSEEP1	FR ASPSEEP1 WS 2022-08-24 NP	2022-08-24	1130	0.054	152	0.0027		0.00146	3.85	106	< 0.000010		4.41	0.18	0.000013	< 0.000010	0.0008	0.00382		0.102
FR ASPSEEP1	FR ASPSEEP1 WS 2022-09-01 NP	2022-09-01	1160	0.056	158	0.00357		0.00182	3.68	124	< 0.000010		4.36	0.19	0.000018	< 0.000010	0.00136	0.00361		0.117
FR ASPSEEP1	FR ASPSEEP1 WS 2022-09-05 NP	2022-09-05	1200	0.055	155	0.00473		0.00171	3.66	123	< 0.000010		4.62	0.19	0.000014	< 0.000010	0.00183	0.00389		0.121
FR BLAINSEEP1	FR BLAINSEEP1 WS 2022-04-27 NP	2022-04-27	2100	0.115	303	0.0115		0.0515	6.2	465	< 0.000020		3.69	0.24	0.000038	< 0.000020	< 0.00060	0.0242		0.062
FR BLAINSEEP1	FR BLAINSEEP1 SEEP 2022-07-01 NP	2022-07-19	1790	0.104	262	0.0136		0.0477	5.38	424	< 0.000020		3.04	0.24	0.000038	< 0.000020	< 0.00060	0.023		0.0368
FR BLAINSEEP1	FR BLAINSEEP1 SEEP 2022-09-01 NP	2022-09-15	2240	0.13	329	0.0184		0.0561	5.93	486	< 0.000010		3.51	0.26	0.000039	< 0.000010	0.001	0.0291		0.0298
FR BLAINSEEP5	FR BLAINSEEP5 SEEP 2022-04-11 NP	2022-06-10	2340	0.178	345	0.0393		0.0144	6.51	232	0.000042		3.23	0.23	0.00007	< 0.000020	0.00689	0.0209		0.0202
FR BLAINSEEP5	FR BLAINSEEP5 SEEP 2022-09-28 NP	2022-09-28	2350	0.176	319	0.0228		0.03551	7.15	283	0.000024		3.44	0.23	0.000047	< 0.000020	0.0119	0.0293		0.0151
FR BLAKESEEP1	FR BLAKESEEP1 SEEP 2022-04-11 NP	2022-05-16	729	0.032	78	0.00904		0.00616	2.46	110	< 0.000010		6.21	0.72	< 0.000010	< 0.000010	0.00078	0.00237		0.046
FR BLAKESEEP1	FR BLAKESEEP1 SEEP 2022-09-22 NP	2022-09-22	728	0.04	82.8	0.0045		0.00613	2.59	127	< 0.000010		7.41	0.86	< 0.000010	< 0.000010	0.00034	0.0023		0.0048
FR CCSEEP1	FR CCSEEP1 SEEP 2022-04-11 NP	2022-06-10	1180	0.375	150	0.00018		0.0436	7.45	177	< 0.000010		12	0.37	0.000054	< 0.000010	< 0.00030	0.0132		0.055
FR CCSEEP1	FR CCSEEP1 SEEP 2022-06-17 NP	2022-06-17	1240	0.395	142	0.00016		0.0446	7.8	155	< 0.000010		12.4	0.42	0.000056	< 0.000010	< 0.00030	0.0136		0.082
FR CCSEEP1	FR CCSEEP1 SEEP 2022-07-01 NP	2022-08-22	1410	0.62	213	0.0002		0.0737	9.11	197	< 0.000010		18.7	0.59	0.000063	< 0.000010	< 0.00030	0.0208		0.0674
FR CCSEEP1	FR CCSEEP1 SEEP 2022-03-28 NP	2022-03-28	2100	0.618	242	0.00038		0.0819	10.3	264	< 0.000020		15.5	0.73	0.000064	< 0.000020	< 0.00060	0.0222		0.0832
FR CCSEEP1	FR CCSEEP1 SEEP 2022-04-11 NP	2022-06-10	1590	0.255	210	0.00532		0.0391	6.21	283	< 0.000020		14.2	0.31	0.000043	< 0.000020	< 0.00120	0.0141		0.0573
FR CCSEEP1	FR CCSEEP1 SEEP 2022-07-01 NP	2022-08-22	1590	0.176	253	0.00518		0.0597	5.74	322	< 0.000010		13	0.31	0.000051	< 0.000010	< 0.00030	0.0163		0.106
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-04-11 NP	2022-05-16	283	0.008	22	0.00414		0.00073	1.14	3.03	< 0.000010		3.37	0.36	< 0.000010	< 0.000010	0.00142	0.000406		< 0.0030
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-07-29 NP	2022-07-29	298	0.011	24.2	0.0272		0.00127	1.45	0.852	0.000474		4.6	0.46	< 0.000010	0.00011	< 0.00420	0.000428		0.005
FR DOKASEEP1	FR DOKASEEP1 SEEP 2022-09-21 NP	2022-09-21	260	0.013	23.7	0.0114		0.00053	1.34	0.774	< 0.000010		3.79	0.42	< 0.000010	< 0.000010	0.0011	0.000338		< 0.0030
FR EAGLENORTH	FR EAGLENORTH SEEP 2022-04-11 NP	2022-05-16	2370	0.175	346	0.00041		0.0226	6.08	415	< 0.000020		17	0.79	0.000038	< 0.000020	< 0.00060	0.0223		0.0255
FR EAGLENORTH	FR EAGLENORTH SEEP 2022-07-01 NP	2022-07-06	2310	0.181	348	0.00075		0.0254	5.95	439	< 0.000020		16.6	0.31	0.000039	< 0.000020	< 0.00060	0.0246		0.0391
FR EAGLENORTH	FR EAGLE NORTH SEEP 2022-09-22 NP	2022-09-22	2340	0.186	389	0.00678		0.0298	6.79	390	< 0.000020		16.6	0.31	0.000054	< 0.000020	0.00074	0.0272		0.05
FR FCSEEP2	FR FCSEEP2 SEEP 2022-04-11 NP	2022-06-10	159	0.007	15.4	0.00012		< 0.00050	0.59	5.84	< 0.000010		0.53	0.07	< 0.000010	< 0.000010	< 0.00030	0.000714		< 0.0030
FR FCSEEP2	FR FCSEEP2 SEEP 2022-09-22 NP	2022-09-22	241	0.01	26	0.00313		< 0.00050	0.97	18	< 0.000010		0.64	0.13	< 0.000010	< 0.000010	< 0.00030	0.00105		< 0.0030
FR FRWSEEP3	FR FRWSEEP3 SEEP 2022-04-11 NP	2022-06-16	765	0.032	112	0.00367		0.00496	2.82	92	< 0.000010		4.45	0.11	< 0.000010	< 0.000010	< 0.00030	0.00505		0.0034
FR FRWSEEP3	FR FRWSEEP3 SEEP 2022-09-08 NP	2022-09-08	1010	0.034	157	0.0162		0.00269	3.1	86.8	< 0.000010		5.52	0.14	< 0.000010	< 0.000010	0.00033	0.00601		0.0126
FR FSEAMSEEP7	FR FSEAMSEEP7 SEEP 2022-04-11 NP	2022-05-16	441	0.032	53.7	0.0029		0.00321	2.97	30.3	0.000019		3.74	0.3	0.000011	< 0.000010	0.00141	0.00386		0.0067
FR FSEAMSEEP7	FR FSEAMSEEP7 SEEP 2022-07-01 NP	2022-07-20	368	0.039	52.7	0.00476		0.00306	3.62	94.8	< 0.000010		4.99	0.32	0.000011	0.0006	< 0.00360	0.00335		< 0.0030
FR FSEAMWSEEP4	FR FSEAMWSEEP4 SEEP 2022-04-11 NP	2022-06-16	505	0.073	48.4	0.0159		0.025	5.4	95.8	0.000012		1.14	0.11	0.000046	< 0.000010	0.00132	0.00531		0.015
FR HENSEEP3	FR HENSEEP3 SEEP 2022-04-11 NP	2022-04-11	1710	0.058	218	0.00218		0.00358	4.02	507	< 0.000020		1.9	0.23	< 0.000020	< 0.000020	< 0.00060	0.00562		0.008
FR HENSEEP3	FR HENSEEP3 SEEP 2022-05-16 NP	2022-05-16	1860	0.063	224	0.00131		0.00283	3.42	528	< 0.000020		2.6	0.28	< 0.000020	< 0.000020	< 0.00060	0.0044		0.0067
FR HENSEEP3	FR HENSEEP3 SEEP 2022-07-01 NP	2022-07-14	1580	0.05	188	0.00254		0.00326	3.12	460	< 0.000020		1.86	0.25	< 0.000020	< 0.000020	< 0.00060	0.00442		0.0061
FR HENSEEP3	FR HENSEEP3 SEEP 2022-09-21 NP	2022-09-21	1590	0.088	219	0.00074		0.00275	3.65	460	< 0.000020		2.68	0.26	< 0.000020	< 0.000020	< 0.00060	0.00367		0.0062
FR HENSEEP1	FR HENSEEP1 SEEP 2022-04-11 NP	2022-04-11	1030	0.009	98.5	0.00948		0.00352	2.72	51.2	0.000016		1.48	0.2	0.000026	< 0.000010	0.00388	0.00313		0.0396
FR HENSEEP1	FR HENSEEP1 SEEP 2022-07-01 NP	2022-07-14	1360	0.01	126	0.0206		0.00449	3.16	8.01	< 0.000020		1.7	0.24	0.000026	< 0.000020	< 0.00060	0.00491		0.0161
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-04-11 NP	2022-06-16	271	0.009	32.8	0.00774		0.0031	1.64	37.2	0.000014		0.52	0.04	0.000023	< 0.000010	0.00329	0.0013		0.0114
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-07-01 NP	2022-07-06	316	0.009	41.2	0.0262		0.00285	1.65	52.6	< 0.000010		0.59	0.06	0.000015	< 0.000010	< 0.00060	0.00159		0.0052
FR LMCWSEEP5	FR LMCWSEEP5 SEEP 2022-09-22 NP	2022-09-22	664	0.019	94.5	0.0198		0.00538	2.62	135	< 0.000010		0.89	0.12	0.000019	< 0.000010	< 0.00030	0.00394		0.009
FR SCRDSEEP1	FR SCRDSEEP1 SEEP 2022-04-11 NP	2022-05-16	1430	0.084	148	0.0143		0.102	7.51	474	< 0.000010		2.53	0.34	0.000051	< 0.000010	< 0.00030	0.00805		0.0373
FR SCRDSEEP1	FR SCRDSEEP1 SEEP 2022-09-21 NP	2022-09-21	1820	0.091	224	0.03381		0.0555	4.18	478	< 0.000020		1.58	0.19	0.000041	< 0.000020	< 0.00060	0.0131		0.0855
FR SPRWSEEP1	FR SPRWSEEP1 WS 2022-04-27 NP	2022-04-27	636	0.037	63.2	0.0089		0.00871	2.67	33.8	< 0.000010		8.84	0.26	0.000105	0.00011	0.00148	0.00408		0.0203
FR SPRWSEEP1	FR SPRWSEEP1 SEEP 2022-07-01 NP	2022-07-14	642	0.04	67.6	0.01317		0.0109	2.64	32.8	< 0.000010		10.6	0.56	0.000169	< 0.000010	< 0.00030	0.00237		0.0273
FR STPNSEEP	FR STPNSEEP SEEP 2022-04-11 NP	2022-05-19	493	0.054	48	0.00077		< 0.00050	1.86	62.2	< 0.000010		4.78	0.19	< 0.000010	< 0.000010	< 0.00030	0.00283		< 0.0030
FR STPNSEEP	FR STPNSEEP SEEP 2022-07-01 NP	2022-07-15	279	0.031	25.6	0.00265		< 0.00050	1.49	19.3	< 0.000010		3.06	0.12	< 0.000010	< 0.000010	< 0.00030	0.00163		< 0.0030
FR STPSWSEEP	FR STPSWSEEP SEEP 2022-04-11 NP	2022-05-19	610	0.097	74.3	0.0357		0.00395	5.97	0.654	< 0.000010		7.24	0.22	0.000012	< 0.000010	< 0.00030	0.0054		< 0.0030
FR STPSWSEEP	FR STPSWSEEP SEEP 2022-07-01 NP	2022-07-15	597	0.096	72															

APPENDIX B - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Total Metals															
				Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	Iron mg/L	Lead mg/L		
						Acute	Chronic	Chronic		Chronic				Acute	Chronic		Acute	Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>a</sup>	3.3-3.5 <sup>b</sup>
<b>Greenhills Operation</b>																			
GH E1	GH E1 WS 2022-01-03 NP	2022-01-24	1440	0.0503	< 0.00020	0.00033	0.0162	< 0.040	< 0.000100	0.023	0.0000173	302	< 0.00020	0.00178	< 0.00100	<b>2.8</b>	< 0.000100		
GH E1	GH E1 WS 2022-02-07 NP	2022-02-14	828	0.006	0.00014	0.00015	0.0229	< 0.020	< 0.000050	0.024	0.0000114	146	< 0.00010	< 0.10	< 0.00050	0.02	< 0.000050		
GH E1	GH E1 WS 2022-05-07 NP	2022-03-09	790	0.015	0.0001	0.00013	0.027	< 0.020	< 0.000050	0.021	0.0000186	168	< 0.00010	< 0.10	< 0.00050	0.062	< 0.000050		
GH E1	GH E1 WS 2022-04-04 NP	2022-04-20	1750	< 0.0060	< 0.00020	< 0.00020	0.0193	< 0.040	< 0.000100	0.022	0.0000101	345	< 0.00020	0.00122	< 0.00100	0.379	< 0.000100		
GH E1	GH E1 WS 2022-05-09 NP	2022-05-12	868	0.007	0.00027	0.00019	0.0323	< 0.020	< 0.000050	0.038	0.0000166	162	< 0.00020	< 0.10	< 0.00050	0.018	< 0.000050		
GH E1	GH E1 WS 2022-06-07 NP	2022-06-20	921	0.0088	0.00012	0.00017	0.0342	< 0.020	< 0.000050	0.03	0.0000172	171	< 0.00010	< 0.10	< 0.00050	0.016	< 0.000050		
GH E1	GH E1 WS 2022-07-04 NP	2022-07-08	911	0.009	< 0.00020	0.00028	0.0391	< 0.040	< 0.000100	0.036	0.0000161	154	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
GH E1	GH E1 WS 2022-08-01 NP	2022-08-10	1840	0.0046	< 0.00010	0.00029	0.0184	< 0.020	< 0.000050	0.026	0.000008	349	< 0.00010	0.00138	< 0.00050	0.511	< 0.000050		
GH E1	GH E1 WS 2022-09-05 NP	2022-09-22	1680	< 0.0030	< 0.00010	0.00026	0.0173	< 0.020	< 0.000050	0.028	< 0.00050	340	< 0.00010	0.00117	< 0.00050	0.239	< 0.000050		
GH E1	GH E1 WS 2022-10-03 NP	2022-10-07	1710	< 0.0060	< 0.00020	< 0.00020	0.0165	< 0.040	< 0.000100	0.027	< 0.0100	357	< 0.00020	0.0012	< 0.00100	0.32	< 0.000100		
GH E3	GH E3 WS 2022-01-03 NP	2022-01-24	1240	0.481	0.00021	0.00046	0.0364	0.000038	< 0.000050	0.024	0.000059	245	< 0.00057	0.00069	0.00246	<b>1.38</b>	0.000655		
GH E3	GH E3 WS 2022-02-07 NP	2022-02-14	901	0.0186	0.00026	0.00015	0.0211	< 0.020	< 0.000050	0.022	0.0000553	167	< 0.00010	< 0.10	0.00051	0.048	< 0.000050		
GH E3	GH E3 WS 2022-03-07 NP	2022-03-09	913	0.0003	0.00003	0.00064	0.0366	0.000048	< 0.000050	0.024	0.0000306	218	< 0.00081	0.0006	0.00235	<b>1.33</b>	0.000671		
GH E3	GH E3 WS 2022-05-02 NP	2022-05-11	1270	0.024	0.00021	0.00024	0.0302	< 0.020	< 0.000050	0.022	0.0000188	180	< 0.00010	0.00019	< 0.00050	0.139	< 0.000050		
GH E3	GH E3 WS 2022-06-07 NP	2022-06-23	1160	0.127	0.00018	0.00036	0.0296	< 0.020	< 0.000050	0.026	0.0000301	186	0.0016	0.00024	0.00066	0.242	0.000148		
GH E3	GH E3 WS 2022-07-04 NP	2022-07-08	1310	0.102	< 0.00020	0.00051	0.037	< 0.040	< 0.000100	0.032	0.0000386	182	< 0.00020	0.00025	0.00133	0.297	0.000208		
GH E3	GH E3 WS 2022-08-01 NP	2022-08-10	1630	0.0127	0.00014	0.00053	0.0356	< 0.020	< 0.000050	0.03	0.0000074	226	< 0.00010	0.00014	< 0.00050	0.081	< 0.000050		
GH E3	GH E3 WS 2022-09-05 NP	2022-09-27	1720	0.0186	< 0.00020	0.00032	0.0294	< 0.040	< 0.000100	0.029	0.0000154	222	< 0.00020	< 0.20	< 0.00100	0.068	< 0.000100		
GH E3	GH E3 WS 2022-10-03 NP	2022-10-07	1510	0.0353	< 0.00020	0.00046	0.0376	< 0.040	< 0.000100	0.026	0.0000115	250	< 0.00020	0.00022	< 0.00100	0.202	0.000101		
GH SEEP 12	GH SEEP 12 WS 2022-06-07 NP	2022-06-21	237	0.0034	< 0.00010	0.00021	0.019	< 0.020	< 0.000050	< 0.010	0.000142	61.3	0.00106	< 0.10	< 0.00050	< 0.010	< 0.000050		
GH SEEP 12	GH SEEP 12 WS 2022-09-06 NP	2022-09-20	240	0.0413	< 0.00010	0.00018	0.13	< 0.020	< 0.000050	< 0.010	0.000216	67.1	0.00067	< 0.10	< 0.00050	0.078	0.000056		
GH SEEP 16	GH SEEP 16 WS 2022-09-06 NP	2022-09-20	473	0.0136	< 0.00010	0.00022	0.0624	< 0.020	< 0.000050	0.014	< 0.0050	132	< 0.00010	< 0.10	< 0.00050	0.062	< 0.000050		
GH SEEP 21	GH SEEP 21 WS 2022-06-07 NP	2022-06-28	1600	0.0071	0.00021	0.00022	0.0232	< 0.040	< 0.000100	< 0.020	0.0000477	332	< 0.00020	< 0.20	0.00245	0.025	< 0.000100		
GH SEEP 21	GH SEEP 21 WS 2022-09-06 NP	2022-09-20	1790	< 0.0060	< 0.00020	< 0.00020	0.0242	< 0.040	< 0.000100	< 0.020	0.000307	474	< 0.00020	0.00044	< 0.00100	0.178	< 0.000100		
GH SEEP 22	GH SEEP 22 WS 2022-06-07 NP	2022-06-28	1380	< 0.0060	< 0.00020	0.00026	0.0381	< 0.040	< 0.000100	< 0.020	0.000132	319	< 0.00020	<b>0.00609</b>	< 0.00100	<b>3.83</b>	< 0.000100		
GH SEEP 22	GH SEEP 22 WS 2022-09-06 NP	2022-09-20	1690	< 0.0060	< 0.00020	0.00023	0.0177	< 0.040	< 0.000100	< 0.020	0.0000462	402	< 0.00020	0.00039	< 0.00100	0.241	< 0.000100		
GH SEEP 46	GH SEEP 46 WS 2022-06-07 NP	2022-06-24	572	0.0165	0.00042	0.00043	0.104	< 0.040	< 0.000100	< 0.020	0.000361	149	< 0.00020	< 0.20	< 0.00100	0.024	< 0.000100		
GH SEEP 5	GH SEEP 5 WS 2022-06-07 NP	2022-06-23	328	0.0154	0.00018	0.00028	0.108	< 0.020	< 0.000050	0.015	0.000118	79.2	< 0.00010	0.00041	< 0.00050	0.015	< 0.000050		
GH SEEP 5	GH SEEP 5 WS 2022-09-06 NP	2022-09-22	368	0.0433	0.00019	0.00031	0.0939	< 0.020	< 0.000050	0.016	0.000018	94	0.00013	0.0004	< 0.00050	0.032	< 0.000050		
GH SEEP 50	GH SEEP 50 WS 2022-06-07 NP	2022-06-28	174	0.223	< 0.00020	0.00039	0.11	< 0.040	< 0.000100	0.023	0.0000319	53.2	0.00022	0.00024	0.00151	0.22	0.000151		
GH SEEP 60	GH SEEP 60 WS 2022-06-07 NP	2022-06-29	73.3	0.327	0.00016	0.00025	0.0427	0.000027	< 0.000050	< 0.010	0.000115	20.8	0.00037	0.00029	0.00078	0.368	0.00031		
GH SEEP 76	GH SEEP 76 WS 2022-06-07 NP	2022-06-29	959	0.164	0.0017	0.00036	0.0709	< 0.040	< 0.000100	< 0.020	0.000157	208	0.00027	0.00021	< 0.00100	0.33	0.00014		
GH SEEP 76	GH SEEP 76 WS 2022-09-06 NP	2022-09-27	1360	0.0202	0.00169	0.0002	0.0567	< 0.020	< 0.000050	< 0.010	0.0000275	234	< 0.00010	0.00093	< 0.00050	0.018	< 0.000050		
GH SEEP 77	GH SEEP 77 WS 2022-06-07 NP	2022-06-29	1240	0.0071	0.00102	0.0002	0.0808	< 0.040	< 0.000100	0.021	0.000121	292	< 0.00020	0.00168	< 0.00100	< 0.020	< 0.000100		
GH SEEP 77	GH SEEP 77 WS 2022-09-06 NP	2022-09-27	1390	0.716	< 0.00010	0.00058	0.108	0.000061	< 0.000050	0.031	0.000222	324	0.00052	0.00056	0.00216	0.782	0.000631		
GH SEEP 79	GH SEEP 79 WS 2022-06-07 NP	2022-06-29	1610	0.446	0.00058	0.00046	0.0555	< 0.040	< 0.000100	0.078	0.000104	276	0.00048	0.00026	0.00121	0.693	0.00031		
GH SEEP 79	GH SEEP 79 WS 2022-09-06 NP	2022-09-27	208	1.63	0.00027	0.00157	0.159	<b>0.000223</b>	< 0.000050	0.461	0.000456	54.6	0.00147	<b>0.00543</b>	0.0067	<b>2.38</b>	0.00421		
GH SEEP 98	GH SEEP 98 WS 2022-06-07 NP	2022-06-29	666	0.011	< 0.00020	< 0.00020	0.0467	< 0.040	< 0.000100	< 0.020	0.000049	178	< 0.00020	< 0.20	< 0.00100	0.12	< 0.000100		
GH SEEP 98	GH SEEP 98 WS 2022-09-06 NP	2022-09-28	739	0.0229	0.00011	0.00015	0.0341	< 0.020	< 0.000050	0.014	0.0000644	210	< 0.00010	< 0.10	< 0.00050	0.123	0.000065		
GH W-SEEP	GH W-SEEP WS 2022-04-04 NP	2022-04-20	1790	0.286	< 0.00020	0.0005	0.0229	< 0.040	< 0.000100	< 0.020	0.0000366	275	< 0.00032	0.00093	< 0.00100	<b>2.71</b>	0.000536		
GH W-SEEP	GH W-SEEP WS 2022-08-01 NP	2022-08-23	3040	< 0.0150	< 0.00020	0.00133	0.0275	< 0.040	< 0.000100	0.025	< 0.0100	498	< 0.00020	0.00118	< 0.00100	<b>14.6</b>	< 0.000100		
GH WDS	GH WDS WS 2022-01-03 NP	2022-01-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH WDS	GH WDS WS 2022-02-07 NP	2022-02-14	549	0.0038	0.00014	< 0.00010	0.036	< 0.020	< 0.000050	0.047	0.000316	133	< 0.00010	0.00115	< 0.00050	< 0.010	0.000095		
GH WDS	GH WDS WS 2022-03-07 NP	2022-03-07	532	< 0.0030	0.00014	< 0.00010	0.0368	< 0.020	< 0.000050	0.045	0.000296	140	< 0.00010	0.00117	< 0.00050	< 0.010	0.000081		
GH WDS	GH WDS WS 2022-04-04 NP	2022-04-06	547	0.0082	0.00021	0.00012	0.0334	< 0.020	< 0.000050	0.046	0.00030								

APPENDIX B - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Total Metals																
				Lithium mg/L	Magnesium mg/L	Manganese		Nickel <sup>a</sup> mg/L	Potassium mg/L	Selenium mg/L	Silver		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium <sup>m</sup> mg/L	Zinc	
						Acute mg/L	Chronic mg/L				Acute mg/L	Chronic mg/L							Acute mg/L	Chronic mg/L
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03 <sup>b</sup>	0.0009-0.01 <sup>b</sup>	0.025-0.15 <sup>b</sup>	n/a	2	0.0001-0.003 <sup>c</sup>	0.00005-0.0015 <sup>c</sup>	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2 <sup>d</sup>	0.0075-2 <sup>d</sup>
Greenhills Operation																				
GH E1	GH E1 WS 2022-01-03 NP	2022-01-24	1440	0.049	192	<b>0.125</b>	0.01	3.82	<b>0.367</b>	< 0.000020	8.58	0.4	< 0.000020	< 0.000020	0.0006	0.00788	< 0.0060			
GH E1	GH E1 WS 2022-02-07 NP	2022-02-14	528	0.052	106	<b>0.0932</b>	0.00243	4.15	4.01	< 0.000010	9.32	0.29	< 0.000010	< 0.000010	< 0.000030	0.00789	< 0.0030			
GH E1	GH E1 WS 2022-03-09 NP	2022-03-09	790	0.057	124	<b>0.0377</b>	0.00273	4.31	1.6	< 0.000010	9.71	0.3	< 0.000010	< 0.000010	< 0.000030	0.00831	< 0.0030			
GH E1	GH E1 WS 2022-04-04 NP	2022-04-20	1750	0.048	213	<b>0.108</b>	0.012	3.92	<b>0.313</b>	< 0.000020	8.12	0.48	< 0.000020	0.00093	< 0.00060	<b>0.00852</b>	< 0.0097			
GH E1	GH E1 WS 2022-05-09 NP	2022-05-12	868	0.071	125	<b>0.0246</b>	0.00301	5.09	<b>3.98</b>	< 0.000010	9.43	0.31	0.000019	< 0.000010	< 0.00030	<b>0.00881</b>	< 0.0030			
GH E1	GH E1 WS 2022-06-07 NP	2022-06-20	921	0.065	129	<b>0.0194</b>	0.00288	4.35	<b>3.39</b>	< 0.000010	9.48	0.32	< 0.000010	< 0.000010	< 0.00030	0.00746	< 0.0030			
GH E1	GH E1 WS 2022-07-04 NP	2022-07-08	911	0.073	132	<b>0.0279</b>	0.00283	4.96	3.08	< 0.000020	9.72	0.33	0.000025	< 0.000020	< 0.00060	0.00718	< 0.0060			
GH E1	GH E1 WS 2022-08-01 NP	2022-08-10	1640	0.057	245	<b>0.146</b>	0.0108	4.81	0.94	< 0.000010	9.89	0.48	0.000011	< 0.000010	< 0.00030	0.00786	0.0057			
GH E1	GH E1 WS 2022-09-05 NP	2022-09-22	1680	0.056	242	<b>0.107</b>	0.01	4.43	0.196	< 0.000010	9.98	0.45	< 0.000010	< 0.000010	< 0.00030	0.0083	0.0034			
GH E1	GH E1 WS 2022-10-03 NP	2022-10-07	1710	0.053	231	<b>0.109</b>	0.00946	4.36	<b>0.128</b>	< 0.000020	9.04	0.48	< 0.000020	< 0.000020	< 0.00060	0.00772	< 0.0060			
GH E3	GH E3 WS 2022-01-03 NP	2022-01-24	1240	0.062	167	<b>0.0298</b>	0.00642	4.93	-	0.000013	6.86	0.31	0.000043	< 0.000010	0.00414	<b>0.0103</b>	0.0175			
GH E3	GH E3 WS 2022-02-07 NP	2022-02-14	901	0.049	112	<b>0.00576</b>	0.00386	3.36	<b>12.6</b>	< 0.000010	6.15	0.33	0.00001	< 0.000010	< 0.00090	0.00608	< 0.0030			
GH E3	GH E3 WS 2022-03-07 NP	2022-03-09	913	0.062	153	<b>0.0402</b>	0.00621	4.16	<b>11.8</b>	0.000011	6.88	0.37	0.000042	< 0.000010	0.0069	0.00815	0.0117			
GH E3	GH E3 WS 2022-05-02 NP	2022-05-11	1270	0.062	174	<b>0.0267</b>	0.00362	4.27	3.19	< 0.000010	6.88	0.31	0.000011	< 0.000010	< 0.00030	<b>0.00946</b>	< 0.0030			
GH E3	GH E3 WS 2022-06-07 NP	2022-06-23	1160	0.066	167	<b>0.0389</b>	0.0035	4.33	<b>1.66</b>	< 0.000010	6.72	0.3	0.000017	< 0.000010	0.00462	0.00534	< 0.0030			
GH E3	GH E3 WS 2022-07-04 NP	2022-07-08	1310	0.074	207	<b>0.0263</b>	0.00405	4.9	-	< 0.000020	7.77	0.32	0.000021	< 0.000020	0.00121	0.00763	< 0.0060			
GH E3	GH E3 WS 2022-08-01 NP	2022-08-10	1630	0.079	244	<b>0.0316</b>	0.00489	6.12	0.489	< 0.000010	9.14	0.33	0.00002	< 0.000010	0.00039	0.00803	< 0.0030			
GH E3	GH E3 WS 2022-09-05 NP	2022-09-27	1720	0.08	226	0.00328	0.00321	5.3	0.571	< 0.000020	8.52	0.33	< 0.000020	< 0.000020	< 0.00060	0.00826	< 0.0060			
GH E3	GH E3 WS 2022-10-03 NP	2022-10-07	1510	0.069	234	<b>0.0925</b>	0.0045	5.42	<b>0.443</b>	< 0.000020	8.15	0.37	< 0.000020	< 0.000020	< 0.00060	0.00828	< 0.0060			
GH SEEP 12	GH SEEP 12 WS 2022-06-07 NP	2022-06-21	237	< 0.0010	25.8	0.0002	0.00112	0.41	<b>2.44</b>	< 0.000010	0.6	0.04	< 0.000010	< 0.000010	< 0.00030	0.00148	0.0075			
GH SEEP 12	GH SEEP 12 WS 2022-09-06 NP	2022-09-20	240	< 0.0010	27.6	<b>0.0172</b>	0.0019	0.49	<b>4.45</b>	< 0.000010	0.57	0.05	0.00003	< 0.000010	0.00034	0.00187	0.0154			
GH SEEP 16	GH SEEP 16 WS 2022-09-06 NP	2022-09-20	473	0.008	51.4	<b>0.00316</b>	0.0009	0.937	<b>20.5</b>	< 0.000010	2.96	0.24	< 0.000010	< 0.000010	< 0.00030	0.000474	< 0.0030			
GH SEEP 21	GH SEEP 21 WS 2022-06-07 NP	2022-06-28	1600	0.066	237	0.00119	0.00437	5.66	97.2	< 0.000020	5.33	0.23	0.000029	< 0.000020	< 0.00060	<b>0.00878</b>	0.0242			
GH SEEP 21	GH SEEP 21 WS 2022-09-06 NP	2022-09-20	1790	0.085	285	<b>0.928</b>	0.015	6.62	0.753	< 0.000020	8.03	0.33	0.000033	< 0.000020	< 0.00060	0.00582	0.016			
GH SEEP 22	GH SEEP 22 WS 2022-06-07 NP	2022-06-28	1380	0.06	187	<b>1.74</b>	0.011	5.26	<b>0.805</b>	< 0.000020	6.99	0.2	0.000049	< 0.000020	< 0.00060	0.00561	0.0088			
GH SEEP 22	GH SEEP 22 WS 2022-09-06 NP	2022-09-20	1680	0.063	265	<b>0.469</b>	0.00385	5.62	<b>2.86</b>	< 0.000020	9.03	0.25	< 0.000020	< 0.000020	< 0.00060	0.00814	< 0.0060			
GH SEEP 46	GH SEEP 46 WS 2022-06-07 NP	2022-06-24	572	0.008	72.2	0.00108	0.00245	1.89	<b>179</b>	< 0.000020	4.74	0.18	0.000038	< 0.000020	< 0.00060	0.00213	< 0.0060			
GH SEEP 5	GH SEEP 5 WS 2022-06-07 NP	2022-06-23	328	0.015	34	<b>0.00917</b>	0.00313	1.87	<b>2.46</b>	< 0.000010	5.42	0.18	0.000018	< 0.000010	0.00032	0.000469	0.0038			
GH SEEP 5	GH SEEP 5 WS 2022-09-06 NP	2022-09-22	368	0.015	34.9	<b>0.00631</b>	0.0049	1.82	2.48	< 0.000010	5.14	0.19	0.000019	< 0.000010	0.00106	0.000727	0.0061			
GH SEEP 50	GH SEEP 50 WS 2022-06-07 NP	2022-06-28	174	0.006	14.8	<b>0.00805</b>	0.00217	1.41	0.329	< 0.000020	19.5	0.23	< 0.000020	< 0.000020	< 0.00060	0.000362	< 0.0060			
GH SEEP 60	GH SEEP 60 WS 2022-06-07 NP	2022-06-29	73.3	< 0.0010	6.78	<b>0.0259</b>	0.00148	0.706	<b>0.313</b>	0.000022	1.87	0.09	0.000021	< 0.000010	0.00525	0.000031	0.0034			
GH SEEP 76	GH SEEP 76 WS 2022-06-07 NP	2022-06-29	959	0.139	116	<b>0.00868</b>	0.00383	3.04	<b>458</b>	< 0.000020	8.93	0.54	< 0.000020	< 0.000020	0.00134	<b>0.0713</b>	0.009			
GH SEEP 76	GH SEEP 76 WS 2022-09-06 NP	2022-09-27	1360	0.127	129	0.00141	0.00488	3.48	<b>526</b>	< 0.000010	6.13	0.61	0.000018	< 0.000010	0.0006	<b>0.0158</b>	< 0.0030			
GH SEEP 77	GH SEEP 77 WS 2022-06-07 NP	2022-06-29	1240	0.09	135	<b>0.0146</b>	0.0427	3.19	<b>427</b>	< 0.000020	7.98	0.91	< 0.000020	< 0.000020	< 0.00060	<b>0.00851</b>	0.0072			
GH SEEP 77	GH SEEP 77 WS 2022-09-06 NP	2022-09-27	1390	0.026	119	<b>0.0672</b>	0.00217	1.92	<b>144</b>	< 0.000010	23.8	1.17	0.000051	< 0.000010	0.00801	0.00105	0.006			
GH SEEP 79	GH SEEP 79 WS 2022-06-07 NP	2022-06-29	1610	0.163	238	<b>0.0275</b>	0.0036	4.84	80.3	< 0.000020	31.6	0.45	0.000034	< 0.000020	0.00728	<b>0.0145</b>	0.007			
GH SEEP 79	GH SEEP 79 WS 2022-09-06 NP	2022-09-27	208	0.296	21	<b>0.36</b>	0.00749	2.21	<b>0.658</b>	0.000024	139	1.95	0.000081	< 0.000010	0.00914	0.0006	0.0238			
GH SEEP 98	GH SEEP 98 WS 2022-06-07 NP	2022-06-29	666	0.014	65.1	<b>0.0177</b>	< 0.00100	1.74	<b>10.9</b>	< 0.000020	21.3	0.32	< 0.000020	< 0.000020	< 0.00060	0.00204	< 0.0060			
GH W-SEEP	GH W-SEEP WS 2022-09-06 NP	2022-09-28	739	0.01	72.5	<b>0.00485</b>	0.0007	1.59	<b>12.4</b>	< 0.000010	14.7	0.37	0.00001	0.00014	0.00047	0.00188	< 0.0030			
GH W-SEEP	GH W-SEEP WS 2022-04-04 NP	2022-04-20	1790	0.033	273	<b>0.876</b>	0.00158	6.25	2.57	< 0.000020	4.28	0.18	< 0.000020	< 0.000020	0.00498	0.00332	< 0.0060			
GH W-SEEP	GH W-SEEP WS 2022-08-01 NP	2022-08-23	3040	0.049	451	<b>3.69</b>	0.00468	7.84	<b>0.317</b>	< 0.000020	4.48	0.25	< 0.000020	< 0.000020	< 0.00060	0.0045	< 0.0060			
GH WTDS	GH WTDS WS 2022-01-03 NP	2022-01-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH WTDS	GH WTDS WS 2022-02-07 NP	2022-02-14	549	0.045	49.9	0.00028	0.00773	2.53	<b>4.96</b>	< 0.000010	17.2	0.74	0.000033	< 0.000010	< 0.00030	0.00328	0.015			
GH WTDS	GH WTDS WS 2022-03-07 NP	2022-03-07	532	0.05	50.8	0.00019	0.00742	2.54	<b>3.81</b>	< 0.000010	17.2	0.75	0.00003	< 0.000010	< 0.00030	0.00358	0.0131			
GH WTDS	GH WTDS WS 2022-04-04 NP	2022-04-06	547	0.05	50.8	0.00038	0.008	2.48	<b>22.1</b>	< 0.000010	15.1	0.74	0.000029	< 0.000010	< 0.00030	0.00373	0.0123			
GH WTDS	GH WTDS WS 2022-05-02 NP	2022-05-06	529	0.054	54.2	0.00027	0.0089	2.79	<b>10.5</b>	< 0.000010	18.5	0.77	0.000032	< 0.						

APPENDIX B - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness	Aluminum	Antimony	Arsenic	Barium*	Beryllium*	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead		
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
						Acute	Chronic	Chronic		Chronic		Acute	Chronic		Acute	Chronic			
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>a</sup>	3.3-3.5 <sup>a</sup>
<b>Line Creek Operation</b>																			
LC 3KM	LC 3KM WS SPRING-2022 NP	2022-06-29	277	0.0198	0.00038	0.00025	0.58	< 0.020	< 0.000050	0.04	0.0000146	65	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.00050		
LC 3KM	LC 3KM WS FALL-2022 NP	2022-09-26	313	0.0161	0.0004	0.00031	0.674	< 0.020	< 0.000050	0.049	< 0.0050	63.2	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.00050	< 0.010	0.000146
LC SEEP1	LC SEEP1 WS FALL-2022 NP	2022-09-23	329	0.0045	0.00023	0.00016	0.117	< 0.020	< 0.000050	0.076	< 0.0050	73	< 0.00010	< 0.10	< 0.00050	0.015	< 0.00050		< 0.000050
LC SEEP10	LC SEEP10 WS SPRING-2022 NP	2022-07-08	782	0.0031	< 0.00010	0.00032	0.146	< 0.020	< 0.000050	0.035	0.0000569	201	< 0.00010	<b>0.00415</b>	< 0.00050	0.991	< 0.00050		< 0.000050
LC SEEP10	LC SEEP10 WS FALL-2022 NP	2022-09-16	843	0.0043	< 0.00010	0.00029	0.168	< 0.020	< 0.000050	0.038	0.0000387	230	< 0.00010	0.00349	< 0.00050	0.862	< 0.00050		< 0.000050
LC SEEP11	LC SEEP11 WS SPRING-2022 NP	2022-07-08	603	0.0046	< 0.00010	< 0.00010	0.153	< 0.020	< 0.000050	0.022	0.0000109	146	< 0.00010	< 0.10	< 0.00050	0.014	< 0.00050		< 0.000050
LC SEEP11	LC SEEP11 WS FALL-2022 NP	2022-09-16	608	0.0072	< 0.00010	0.00012	0.164	< 0.020	< 0.000050	0.024	0.0000119	156	< 0.00010	< 0.10	< 0.00050	0.018	< 0.00050		< 0.000050
LC SEEP14	LC SEEP14 WS SPRING-2022 NP	2022-06-29	468	< 0.0030	0.00025	0.00011	0.0479	< 0.020	< 0.000050	0.015	0.0000278	96	0.00014	< 0.10	< 0.00050	< 0.010	< 0.00050		< 0.000050
LC SEEP15	LC SEEP15 WS SPRING-2022 NP	2022-06-29	530	0.0543	< 0.00010	0.00012	0.0517	< 0.020	< 0.000050	< 0.010	0.0000348	127	0.00024	< 0.10	< 0.00050	0.074	< 0.00050		0.000082
LC SEEP15	LC SEEP15 WS FALL-2022 NP	2022-09-23	568	0.0087	< 0.00010	< 0.00010	0.039	< 0.020	< 0.000050	< 0.010	0.0000063	125	0.00022	< 0.10	< 0.00050	0.011	< 0.00050		< 0.000050
LC SEEP19	LC SEEP19 WS SPRING-2022 NP	2022-06-29	332	0.0077	0.00019	0.00015	0.0322	< 0.020	< 0.000050	< 0.010	0.000129	71.4	0.00016	< 0.10	< 0.00050	< 0.010	< 0.00050		< 0.000050
LC SEEP19	LC SEEP19 WS FALL-2022 NP	2022-09-26	742	0.004	0.00025	0.00016	0.0612	< 0.020	< 0.000050	0.014	0.000244	145	0.00019	< 0.10	< 0.00050	< 0.010	< 0.00050		< 0.000050
LC SEEP2	LC SEEP2 WS SPRING-2022 NP	2022-06-29	337	0.118	< 0.00010	0.00017	0.207	< 0.020	< 0.000050	< 0.010	0.0000595	92.2	0.00039	0.00023	0.00059	0.255	0.000267		< 0.000050
LC SEEP2	LC SEEP2 WS FALL-2022 NP	2022-09-26	255	0.0031	< 0.00010	0.00011	0.13	< 0.020	< 0.000050	< 0.010	0.0000138	63.9	0.00026	< 0.10	< 0.00050	< 0.010	< 0.00050		< 0.000050
LC SEEP8	LC SEEP8 WS SPRING-2022 NP	2022-06-28	169	0.471	0.00038	0.00059	0.14	0.00024	< 0.000050	< 0.010	0.0000577	41.6	0.00096	0.0002	0.00168	0.22	0.00181		0.000181
LC SEEP8	LC SEEP8 WS FALL-2022 NP	2022-09-20	138	5.41	0.00094	0.00479	0.31	<b>0.000776</b>	0.000151	< 0.020	0.00179	41.8	0.0103	<b>0.00523</b>	0.0248	<b>7.78</b>	0.00827		0.00827
LC UDHP	LC UDHP WS SPRING-2022 NP	2022-06-23	259	0.0286	0.00033	0.00034	0.187	< 0.020	< 0.000050	< 0.010	0.000068	68.7	0.00023	< 0.10	0.00056	0.031	< 0.00050		< 0.000050
LC UDHP	LC UDHP WS FALL-2022 NP	2022-09-26	552	< 0.0150	0.0004	0.0003	0.399	< 0.020	< 0.000050	0.013	0.000146	143	0.00012	< 0.10	< 0.00050	0.01	< 0.00050		< 0.000050
LC UDP1	LC UDP1 WS SPRING-2022 NP	2022-06-23	272	0.0121	0.0002	0.00033	0.204	< 0.020	< 0.000050	< 0.010	0.0000165	76	0.00037	< 0.10	0.0005	0.027	< 0.00050		< 0.000050
LC UDP1	LC UDP1 WS FALL-2022 NP	2022-09-26	204	0.0272	0.00021	0.00038	0.192	< 0.020	< 0.000050	0.013	0.0000343	60.4	0.00047	< 0.10	< 0.00050	0.169	< 0.00050		< 0.000050
LC WLC LOT2	LC WLC LOT2 WS SPRING-2022 NP	2022-07-08	995	0.0032	0.00046	0.00019	0.018	< 0.020	< 0.000050	0.024	0.00156	191	< 0.00010	< 0.10	0.00085	< 0.010	< 0.00050		< 0.000050
LC WLC LOT2	LC WLC LOT2 WS FALL-2022 NP	2022-09-23	1100	0.0127	0.00052	0.00041	0.0558	< 0.020	< 0.000050	0.052	0.00047	249	< 0.00010	< 0.10	0.00051	0.019	< 0.00050		< 0.000050

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX B - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness	Lithium	Magnesium	Manganese		Nickel <sup>a</sup>	Potassium	Selenium	Silver		Sodium	Strontium	Thallium	Tin	Titanium	Uranium <sup>c</sup>	Zinc
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
			Acute	Chronic	Chronic			Chronic	Acute	Chronic						Chronic	Acute	Chronic	
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03 <sup>b</sup>	0.0009-0.01 <sup>b</sup>	0.025-0.15 <sup>b</sup>	n/a	2	0.0001-0.003 <sup>d</sup>	0.00005-0.0015 <sup>d</sup>	n/a	n/a	n/a	n/a	0.0085	0.033-2 <sup>a</sup>	0.0075-2 <sup>a</sup>
Line Creek Operation																			
LC 3KM	LC 3KM WS SPRING-2022 NP	2022-06-29	277	0.154	32.3	0.00034	0.00094	6.87	2.04	< 0.000010	16.5	0.24	0.000017	< 0.000010	< 0.000030	0.00267	< 0.0030	< 0.0030	< 0.0030
LC 3KM	LC 3KM WS FALL-2022 NP	2022-09-26	313	0.259	37.2	0.00029	0.00073	8.63	0.726	< 0.000010	25.3	0.28	0.00002	< 0.000010	< 0.000030	0.00332	< 0.0030	< 0.0030	< 0.0030
LC SEEP1	LC SEEP1 WS FALL-2022 NP	2022-09-23	329	0.375	43.7	0.00055	0.00091	4.34	0.604	< 0.000010	74.8	0.29	< 0.000010	< 0.000010	< 0.000030	0.00205	0.00205	0.004	0.004
LC SEEP10	LC SEEP10 WS SPRING-2022 NP	2022-07-08	782	0.04	61.2	<b>0.236</b>	0.00728	3.15	0.278	< 0.000010	16.2	0.48	< 0.000010	< 0.000010	< 0.000030	0.00123	0.0052	0.0052	0.0052
LC SEEP10	LC SEEP10 WS FALL-2022 NP	2022-09-16	843	0.04	67.4	<b>0.212</b>	0.00715	3.38	<b>0.142</b>	< 0.000010	16.6	0.54	< 0.000010	< 0.000010	< 0.000030	0.00138	0.003	0.003	0.003
LC SEEP11	LC SEEP11 WS SPRING-2022 NP	2022-07-08	603	0.024	53.4	<b>0.00389</b>	0.00051	1.95	<b>2.38</b>	< 0.000010	18.6	0.51	< 0.000010	< 0.000010	< 0.000030	0.00314	< 0.0030	< 0.0030	< 0.0030
LC SEEP11	LC SEEP11 WS FALL-2022 NP	2022-09-16	608	0.025	55.8	<b>0.00665</b>	0.00054	2	<b>2.07</b>	< 0.000010	18.5	0.52	< 0.000010	< 0.000010	< 0.000030	0.00299	< 0.0030	< 0.0030	< 0.0030
LC SEEP14	LC SEEP14 WS SPRING-2022 NP	2022-06-29	468	0.04	47.3	0.00021	0.00071	1.6	<b>62.9</b>	< 0.000010	6.71	0.19	< 0.000010	< 0.000010	< 0.000030	0.00338	< 0.0030	< 0.0030	< 0.0030
LC SEEP15	LC SEEP15 WS SPRING-2022 NP	2022-06-29	530	0.009	52.3	<b>0.00509</b>	< 0.00050	1.02	<b>118</b>	< 0.000010	1.38	0.12	< 0.000010	< 0.000010	0.00093	0.00266	< 0.0030	< 0.0030	< 0.0030
LC SEEP15	LC SEEP15 WS FALL-2022 NP	2022-09-23	568	0.01	56.4	0.00049	< 0.00050	0.961	<b>119</b>	< 0.000010	1.24	0.11	< 0.000010	< 0.000010	< 0.000030	0.0029	< 0.0030	< 0.0030	< 0.0030
LC SEEP19	LC SEEP19 WS SPRING-2022 NP	2022-06-29	332	0.01	35.6	0.00028	0.00701	1.2	<b>43.3</b>	< 0.000010	1.05	0.13	< 0.000010	< 0.000010	< 0.000030	0.00366	0.0101	0.0101	0.0101
LC SEEP19	LC SEEP19 WS FALL-2022 NP	2022-09-26	742	0.018	77.1	0.00019	0.0145	1.67	<b>67.1</b>	< 0.000010	1.66	0.23	< 0.000010	< 0.000010	< 0.000030	0.00784	0.014	0.014	0.014
LC SEEP2	LC SEEP2 WS SPRING-2022 NP	2022-06-29	337	0.007	25.4	<b>0.00754</b>	0.00098	0.976	4.81	< 0.000010	4.7	0.18	< 0.000010	< 0.000010	0.00145	0.00119	0.0034	0.0034	0.0034
LC SEEP2	LC SEEP2 WS FALL-2022 NP	2022-09-26	255	0.005	18.9	0.00027	< 0.00050	0.622	1.58	< 0.000010	2.45	0.12	< 0.000010	< 0.000010	< 0.000030	0.000888	< 0.0030	< 0.0030	< 0.0030
LC SEEP8	LC SEEP8 WS SPRING-2022 NP	2022-06-28	169	0.001	16.1	<b>0.0051</b>	0.0024	0.952	0.316	0.000024	0.99	0.07	0.000026	< 0.000010	0.0164	0.00124	0.0031	0.0031	0.0031
LC SEEP8	LC SEEP8 WS FALL-2022 NP	2022-09-20	138	0.005	16.5	<b>0.19</b>	0.00321	3	<b>0.96</b>	0.00062	1.64	0.08	0.000425	< 0.000020	0.0441	0.00222	<b>0.103</b>	<b>0.103</b>	<b>0.103</b>
LC UDHP	LC UDHP WS SPRING-2022 NP	2022-06-23	259	0.009	19.6	0.00172	0.00082	1.53	<b>9.43</b>	< 0.000010	1.62	0.09	< 0.000010	< 0.000010	0.0006	0.00114	< 0.0030	< 0.0030	< 0.0030
LC UDHP	LC UDHP WS FALL-2022 NP	2022-09-26	552	0.025	51.3	0.00219	0.00117	2.64	77.2	< 0.000010	7.86	0.2	0.00001	< 0.000010	0.00048	0.00199	< 0.0030	< 0.0030	< 0.0030
LC UDPT	LC UDPT WS SPRING-2022 NP	2022-06-23	272	0.008	19	0.00092	< 0.00050	1.38	<b>1.26</b>	< 0.000010	1.81	0.11	< 0.000010	< 0.000010	< 0.000030	0.00113	0.0033	0.0033	0.0033
LC UDPT	LC UDPT WS FALL-2022 NP	2022-09-26	204	0.014	15.4	0.00121	< 0.00050	1.26	<b>2.27</b>	< 0.000010	2.57	0.08	< 0.000010	< 0.000010	0.00041	0.000582	< 0.0030	< 0.0030	< 0.0030
LC WLC LOT2	LC WLC LOT2 WS SPRING-2022 NP	2022-07-08	995	0.032	120	0.00042	0.0266	2.42	<b>250</b>	< 0.000010	3.28	0.23	0.000029	< 0.000010	< 0.000030	<b>0.00897</b>	0.0631	0.0631	0.0631
LC WLC LOT2	LC WLC LOT2 WS FALL-2022 NP	2022-09-23	1100	0.06	103	0.00036	0.0115	2.4	98.7	< 0.000010	15.4	1.45	0.000016	< 0.000010	< 0.000030	0.00384	0.0203	0.0203	0.0203

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL



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**Appendix C      2022 Comparison Point Analytical Data  
Summary**

APPENDIX C - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters					Physical Parameters					Dissolved Inorganics										Nutrients										
			Field Temperature	pH	Dissolved Oxygen	Field Conductivity	Field ORP	pH	Hardness	Conductivity	Total Suspended Solids	Total Dissolved Solids	Turbidity	Bicarbonate	Carbonate	Hydroxide	Bromide	Chloride	Fluoride	Sulfate	Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Nitrate Nitrogen-N	Ortho-Phosphate	Phosphorus, Total	Total Organic Carbon	Dissolved Organic Carbon					
			°C	Minimum Maximum	mg/L	µS/cm	mV	Minimum Maximum	mg/L	µS/cm	mg/L	mg/L	ntu	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L					
<b>BCWQG FWAL</b>			n/a	6.5 9	1 5	n/a	n/a	6.5 9	n/a	n/a	Acute Chronic	25 5	n/a	Acute Chronic	8 2	n/a	n/a	n/a	n/a	600 150	Acute Chronic	128-429 <sup>a</sup>	Acute Chronic	0.681-28.7 <sup>b</sup>	0.102-2.08 <sup>b</sup>	32.8 3.7	0.06-0.60 <sup>c</sup>	0.02-0.20 <sup>c</sup>	n/a	n/a	0.015	n/a	n/a
<b>Coal Mountain Mine</b>																																	
CM CC1	CM CC1 WS 2022-01-04 N	2022-01-06	-	-	-	-	-	8.13	922	1620	<1.0	1290	0.71	353	<1.0	<1.0	<0.250	1.67	0.163	<b>767</b>			0.155		<b>4.46</b>	<b>0.0391</b>	0.472	-	0.0027	0.74	0.88		
CM CC1	CM CC1 WS 2022-01-11 N	2022-01-11	-	-	-	-	-	8.03	913	1640	2.3	1370	0.71	344	<1.0	<1.0	<0.250	1.77	0.146	<b>816</b>			0.0899		<b>4.5</b>	<b>0.0299</b>	0.35	-	0.0035	0.83	0.76		
CM CC1	CM CC1 WS 2022-02-01 N	2022-02-01	-	-	-	-	-	8.17	1050	1660	<1.0	1400	0.39	354	<1.0	<1.0	<0.250	1.46	0.158	<b>757</b>			0.0568		<b>4.05</b>	0.0133	0.378	-	0.0039	0.57	<0.50		
CM CC1	CM CC1 WS 2022-03-01 N	2022-03-01	-	-	-	-	-	8.23	978	1640	2.2	1440	0.48	359	<1.0	<1.0	<0.250	2.04	0.132	<b>800</b>			0.0069		<b>4.53</b>	0.0135	0.368	-	0.0028	1.21	1.12		
CM CC1	CM CC1 WS 2022-03-15 N	2022-03-15	-	-	-	-	-	8.03	988	1660	1.2	1490	0.3	351	<1.0	<1.0	<0.250	2.1	0.119	<b>807</b>			<0.0050		<b>4.47</b>	<0.0050	0.417	-	0.0026	0.58	0.56		
CM CC1	CM CC1 WS 2022-03-22 N	2022-03-22	-	-	-	-	-	8.29	1030	1690	1.7	1370	0.19	365	<1.0	<1.0	<0.250	2.92	0.125	<b>746</b>			<0.0050		<b>4.35</b>	0.006	0.327	-	0.0023	0.61	0.57		
CM CC1	CM CC1 WS 2022-03-29 N	2022-03-29	-	-	-	-	-	8.16	970	1540	1.8	1290	<b>2.45</b>	327	<1.0	<1.0	<0.250	4.26	0.17	<b>721</b>			0.005		<b>4.08</b>	0.008	0.289	-	0.0044	0.71	0.64		
CM CC1	CM CC1 WS 2022-04-05 N	2022-04-05	-	-	-	-	-	8.22	899	1580	1.2	1240	0.91	362	<1.0	<1.0	<0.250	3.68	0.15	<b>662</b>			0.045		3.61	0.0344	0.319	-	0.0026	1	0.76		
CM CC1	CM CC1 WS 2022-04-12 N	2022-04-12	-	-	-	-	-	8.12	889	1540	2.1	1190	1.08	366	<1.0	<1.0	<0.250	3.5	0.166	<b>672</b>			0.0225		3.67	0.0139	0.272	-	0.0034	0.77	0.75		
CM CC1	CM CC1 WS 2022-04-19 N	2022-04-19	-	-	-	-	-	8.07	872	1560	2.4	1250	0.91	360	<1.0	<1.0	<0.250	3.41	0.155	<b>690</b>			0.021		<b>3.96</b>	0.006	0.374	-	0.0031	0.68	0.76		
CM CC1	CM CC1 WS 2022-04-26 N	2022-04-26	-	-	-	-	-	8.32	818.5	1500	2.95	1205	<b>2.35</b>	347	3.55	<1.0	<1.0	<0.250	3.385	0.168	<b>688.5</b>			0.011		<b>3.875</b>	0.01385	0.239	-	0.0039	0.91	0.905	
CM CC1	CM CC1 WS 2022-05-03 N	2022-05-03	-	-	-	-	-	8.13	772	1420	3.7	1120	<b>2.55</b>	327	<1.0	<1.0	<0.250	3.06	0.191	<b>644</b>			0.0653		3.06	0.0219	0.5	-	0.0037	0.64	0.68		
CM CC1	CM CC1 2022-05-06 N2	2022-05-06	-	-	-	-	-	-	-	-	<b>8.6</b>	-	<b>9.9</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
CM CC1	CM CC1 2022-05-06 N1	2022-05-06	-	-	-	-	-	-	-	-	<b>10.2</b>	-	<b>12</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
CM CC1	CM CC1 2022-05-07 N1	2022-05-07	-	-	-	-	-	-	-	-	<b>10.6</b>	-	<b>11.2</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
CM CC1	CM CC1 WS 2022-05-10 N	2022-05-10	-	-	-	-	-	8.28	694	1340	4	1120	<b>4.48</b>	338	<1.0	<1.0	<0.250	2.65	0.196	<b>587</b>			0.0972		<b>3.81</b>	0.0181	0.478	-	0.0061	1.14	0.96		
CM CC1	CM CC1 WS 2022-05-17 N	2022-05-17	-	-	-	-	-	8.2	730.5	1285	1.95	1040	<b>3.755</b>	307	<1.0	<1.0	<0.250	2.255	0.1845	<b>531.5</b>			0.0744		2.77	0.0154	0.4705	-	0.00375	0.99	0.905		
CM CC1	CM NNP WS 2022-05-17 N	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
CM CC1	CM CC1 WS 2022-05-24 N	2022-05-24	-	-	-	-	-	8.14	721	1290	2.4	992	1.26	290	<1.0	<1.0	<0.250	2.07	0.178	<b>538</b>			0.0832		3.01	0.0092	0.352	-	0.0032	0.98	0.88		
CM CC1	CM CC1 WS 2022-05-31 N	2022-05-31	-	-	-	-	-	8.45	637	1150	<b>8.3</b>	931	<b>3.71</b>	279	8.6	<1.0	<1.0	<0.250	1.14	0.155	<b>474</b>			0.0556		2.86	0.0093	0.322	-	0.0061	1.18	0.78	
CM CC1	CM CC1 WS 2022-06-07 N	2022-06-07	-	-	-	-	-	8.26	654	1160	4.8	843	<b>2.77</b>	296	<1.0	<1.0	<0.250	1	0.174	<b>465</b>			0.0666		2.5	0.0096	0.351	-	0.0065	1.25	1.08		
CM CC1	CM CC1 WS 2022-06-14 N	2022-06-14	-	-	-	-	-	8.21	538	1030	<b>11.6</b>	720	<b>8.2</b>	286	<1.0	<1.0	<0.250	1.92	0.14	423			1.88	<0.0050	0.418	-	0.0116	2.37	0.83				
CM CC1	CM CC1 WS 2022-06-21 N	2022-06-21	-	-	-	-	-	8.205	601.5	1030	1.65	817.5	1.685	304	<1.0	<1.0	<0.250	0.97	0.142	392			0.06025		1.89	0.01245	0.277	-	0.0042	<0.50	<0.50		
CM CC1	CM CC1 WS 2022-06-28 N	2022-06-28	-	-	-	-	-	8.23	798	1360	1.6	1040	0.74	346	<1.0	<1.0	<0.250	1.44	0.188	<b>517</b>			0.0779		2.28	0.0148	0.354	-	0.0033	1	0.89		
CM CC1	CM CC1 WS 2022-07-05 N	2022-07-05	-	-	-	-	-	8.12	834	1420	2.3	1130	1.3	362	<1.0	<1.0	<0.250	1.23	0.163	<b>619</b>			0.0874		2.71	0.0163	0.365	-	0.0036	1.08	1		
CM CC1	CM NNP WS 2022-07-12 N	2022-07-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
CM CC1	CM CC1 WS 2022-07-12 N	2022-07-12	-	-	-	-	-	8.245	970.5	1475	1.7	1260	1.315	364.5	<1.0	<1.0	<0.250	1.185	0.1465	<b>638.5</b>			0.0907		2.59	0.0127	0.357	-	0.0033	0.695	0.71		
CM CC1	CM CC1 WS 2022-08-02 N	2022-08-02	-	-	-	-	-	8.2	971	1580	1.85	1340	0.93	358.5	<1.0	<1.0	<0.250	1.705	0.201	<b>751.5</b>			0.07795		3.065	<b>0.02205</b>	0.347	-	0.00335	<0.50	<0.50		
CM CC1	CM NNP WS 2022-08-02 N	2022-08-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
CM CC1	CM CC1 2022-08-25 N1	2022-08-25	-	-	-	-	-	-	-	-	1.9	-	1.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
CM CC1	CM CC1 WS 2022-09-06 N	2022-09-06	-	-	-	-	-	8.145	1026.5	1630	2.35	1335	0.59	388.5	<1.0	<1.0	<0.250	2.345	0.1665	<b>805.5</b>			0.03495		3.185	0.01665	0.5605	-	<0.0020	0.535	0.605		
CM CC1	CM CC1 WS SEPT-2022 N	2022-09-08	-	-	-	-	-	8.18	1040	1600	1.4	1330	0.51	347	<1.0	<1.0	<0.250	2.52	0.204	<b>746</b>			0.0361		3.15	0.0246	0.308	-	<0.0020	0.71	0.67		
CM CC1	CM CC1 WS 2022-10-04 N	2022-10-04	-	-	-	-	-	8.09	1020	1510	2.8	1280	0.35	392	<1.0	<1.0	<0.250	4.07	0.19	<b>764</b>			0.0115		3.29	0.0196	0.325	-	0.0024	0.89	0.86		
CM CC1	CM CC1 WS 2022-11-01 N	2022-11-01	-	-	-	-	-	7.94	1030	1670	2.5	1400	<b>3.34</b>	362	<1.0	<1.0	<0.250	3.44	0.167	<b>802</b>			0.0388		3.54	0.0194	0.303	-	0.0027	1	0.97		
CM CC1	CM CC1 WS 2022-12-06 N	2022-12-06	-	-	-	-	-	8.235	1165	1680	1.95	1430	0.415	372	<1.0	<1.0	<0.250	4.93	0.139	<b>796</b>			0.0242		3.645	0.01445	0.1815	-	<0.0020	<0.50	<0.50		
CM CCOFF	CM CCOFF WS 2022-01-04 NP	2022-01-06	-	-	-	-	-	8.12	995	1720	1.2	1410	1.52	374	<1.0	<1.0	<0.250	1.07	0.165	<b>805</b>			0.0334		<b>5.28</b>	<b>0.0458</b>	0.644	-	0.0025	0.7	0.78		
CM CCOFF	CM CCOFF WS 2022-01-11 NP	2022-01-11	-	-	-	-	-	8.07	970	1760	<1.0	1490	1.12	38																			

APPENDIX C - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters					Physical Parameters					Dissolved Inorganics										Nutrients					
			Field Temperature	pH	Dissolved Oxygen	Field Conductivity	Field ORP	Hardness	Conductivity	Total Suspended Solids	Total Dissolved Solids	Turbidity	Bicarbonate	Carbonate	Hydroxide	Iodide	Chloride	Fluoride	Sulfate	Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Nitrogen-N	Ortho-Phosphate	Total Phosphorus	Total Organic Carbon	Dissolved Organic Carbon	
			Minimum Maximum	mg/L	mg/L	µS/cm	mV	mg/L	µS/cm	mg/L	mg/L	ntu	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
BC WQGF WAL Coal Mountain Mine			n/a	6.5	9	1	5	n/a	n/a	n/a	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum		
CM CCOFF	CM CCOFF WS 2022-01-19 NP	2022-01-19	-	-	-	-	-	8.11	1110	1760	6.3	1380	0.45	392	<1.0	<1.0	<0.250	6.34	0.162	863	0.094	5.14	0.0252	0.381	-	0.0024	0.79	0.82
CM CCOFF	CM CCOFF WS 2022-01-25 NP	2022-01-25	-	-	-	-	-	8.28	1160	1830	4.3	1520	0.28	319	<1.0	<1.0	<0.450	1.4	<0.180	1000	0.0631	5.68	0.0366	0.334	-	0.0027	0.52	0.51
CM CCOFF	CM CCOFF WS 2022-02-01 NP	2022-02-02	-	-	-	-	-	8.21	1110	1850	2.3	1680	0.28	403	<1.0	<1.0	<0.250	0.98	0.14	975	0.0628	5.59	0.0293	0.376	-	0.003	<0.50	<0.50
CM CCOFF	CM CCOFF WS 2022-02-08 NP	2022-02-08	-	-	-	-	-	8.19	1240	1860	2.5	1700	0.22	380	<1.0	<1.0	<0.250	1.27	0.17	915	0.0465	5.16	0.0189	0.255	-	0.0027	0.83	0.66
CM CCOFF	CM CCOFF WS 2022-02-15 NP	2022-02-15	-	-	-	-	-	8.25	1160	1870	1.2	1660	0.3	382	<1.0	<1.0	<0.250	0.89	0.109	924	0.0316	5.13	0.0229	0.365	-	0.003	0.6	0.52
CM CCOFF	CM CCOFF WS 2022-02-22 NP	2022-02-22	-	-	-	-	-	8.18	1170	1910	2.5	1640	0.29	393	<1.0	<1.0	<0.250	1.14	0.141	945	0.0285	5.22	0.0202	0.397	-	<0.0020	0.72	0.61
CM CCOFF	CM CCOFF WS 2022-03-01 NP	2022-03-01	-	-	-	-	-	8.23	1220	1900	2.2	1670	0.63	399	<1.0	<1.0	<0.250	0.9	0.127	958	0.0296	5.27	0.0241	0.527	-	0.0021	1.02	1.02
CM CCOFF	CM CCOFF WS 2022-03-08 NP	2022-03-08	-	-	-	-	-	8.16	1200	1880	2.9	1720	0.39	408	<1.0	<1.0	<0.250	1.3	0.153	948	0.0388	5.2	0.0254	0.405	-	0.0032	0.53	0.55
CM CCOFF	CM CCOFF WS 2022-03-15 NP	2022-03-15	-	-	-	-	-	8.03	1170	1920	3.8	1660	0.37	407	<1.0	<1.0	<0.250	1.22	0.122	969	0.0289	5.4	0.0222	0.329	-	0.0034	0.67	<0.50
CM CCOFF	CM CCOFF WS 2022-03-22 NP	2022-03-22	-	-	-	-	-	8.19	1240	1950	1.9	1620	0.34	414	<1.0	<1.0	<0.250	1.37	0.132	925	0.0242	5.29	0.0243	0.309	-	0.0022	<0.50	<0.50
CM CCOFF	CM CCOFF WS 2022-03-29 NP	2022-03-29	-	-	-	-	-	8.12	1140	1780	7.6	1460	0.57	375	<1.0	<1.0	<0.250	1.45	0.171	818	0.0662	4.8	0.0281	0.372	-	0.0046	0.75	<0.50
CM CCOFF	CM CCOFF WS 2022-04-05 NP	2022-04-05	-	-	-	-	-	8.13	1050	1840	4.8	1460	3.74	426	<1.0	<1.0	<0.250	1.71	0.165	818	0.304	4.56	0.0346	0.612	-	0.0026	0.75	0.73
CM CCOFF	CM CCOFF WS 2022-04-12 NP	2022-04-12	-	-	-	-	-	8.15	1070	1840	2.3	1500	1.88	437	<1.0	<1.0	<0.250	1.7	0.186	843	0.206	4.73	0.0383	0.524	-	0.0041	0.61	0.6
CM CCOFF	CM CCOFF WS 2022-04-19 NP	2022-04-19	-	-	-	-	-	7.99	1060	1810	6.2	1530	5.12	432	<1.0	<1.0	<0.250	2.66	0.167	844	0.202	5.14	0.0498	0.497	-	0.0044	0.67	0.62
CM CCOFF	CM CCOFF WS 2022-04-26 NP	2022-04-26	-	-	-	-	-	8.12	912	1690	13.8	1360	16.6	369	<1.0	<1.0	<0.250	1.54	0.186	796	0.164	4.91	0.0383	0.359	-	0.006	0.78	0.71
CM CCOFF	CM CCOFF WS 2022-05-03 NP	2022-05-03	-	-	-	-	-	7.99	878	1730	6.2	1340	4.88	438	<1.0	<1.0	<0.250	1.62	0.202	769	0.2	5.81	0.0465	0.31	-	0.0047	<0.50	<0.50
CM CCOFF	CM CCOFF 2022-05-06 NP1	2022-05-06	-	-	-	-	-	-	-	-	7.7	-	6.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM CCOFF	CM CCOFF 2022-05-07 NP1	2022-05-07	-	-	-	-	-	-	-	-	7.6	-	7.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM CCOFF	CM CCOFF WS 2022-05-10 NP	2022-05-10	-	-	-	-	-	8.2	825	1510	13.4	1220	11.5	376	<1.0	<1.0	<0.250	1.12	0.213	687	0.193	5.88	0.0292	0.528	-	0.0094	1.12	0.81
CM CCOFF	CM CCOFF WS 2022-05-17 NP	2022-05-17	-	-	-	-	-	8.16	776	1470	3.6	1210	5.05	339	<1.0	<1.0	<0.250	1.08	0.164	635	0.139	4.48	0.0219	0.917	-	0.0054	0.83	0.81
CM CCOFF	CM CCOFF WS 2022-05-24 NP	2022-05-24	-	-	-	-	-	8.23	750	1320	2.4	1020	1.8	308	<1.0	<1.0	<0.250	0.98	0.165	649	0.0564	3.9	0.0293	0.358	-	0.0039	0.83	0.68
CM CCOFF	CM CCOFF WS 2022-05-31 NP	2022-05-31	-	-	-	-	-	8.34	691	1170	9.1	942	4.64	290	4.2	<1.0	<0.250	1.81	0.157	490	0.0502	3.48	0.0136	0.382	-	0.0066	1.35	0.66
CM CCOFF	CM CCOFF WS 2022-06-07 NP	2022-06-07	-	-	-	-	-	8.08	642	1220	5.1	886	3.57	289	<1.0	<1.0	<0.250	0.56	0.172	492	0.0382	3.12	0.0108	<0.500	-	0.0072	1.41	1.13
CM CCOFF	CM CCOFF WS 2022-06-14 NP	2022-06-14	-	-	-	-	-	8.26	591	1160	6.4	876	6.36	281	2.3	<1.0	<0.250	3.08	0.14	458	0.0294	2.6	<0.0050	0.23	-	0.0064	0.94	0.79
CM CCOFF	CM CCOFF WS 2022-06-21 NP	2022-06-21	-	-	-	-	-	8.03	708	1080	<1.0	894	1.97	315	<1.0	<1.0	<0.250	0.51	0.131	418	0.042	2.31	0.0086	0.388	-	0.0035	1.02	0.98
CM CCOFF	CM CCOFF WS 2022-06-28 NP	2022-06-28	-	-	-	-	-	8.21	806	1420	1.8	1100	1.7	364	<1.0	<1.0	<0.250	0.54	0.134	455	0.0533	2.71	0.0159	0.356	-	0.0032	1.21	0.88
CM CCOFF	CM CCOFF WS 2022-07-05 NP	2022-07-05	-	-	-	-	-	8.05	988	1510	4.2	1230	4.04	401	<1.0	<1.0	<0.250	0.75	0.135	669	0.0498	3.08	0.0174	0.378	-	0.0052	1.25	0.97
CM CCOFF	CM CCOFF WS 2022-07-12 NP	2022-07-12	-	-	-	-	-	8.21	1170	1680	2.2	1490	1.48	441	<1.0	<1.0	<0.250	1.16	0.115	744	0.0059	3.52	0.0129	0.266	-	0.0034	0.84	1
CM CCOFF	CM CCOFF WS 2022-07-19 NP	2022-07-19	-	-	-	-	-	8.14	1100	1720	1.9	1470	1.51	458	<1.0	<1.0	<0.250	0.85	0.168	808	0.0255	3.55	0.0157	0.164	-	0.0034	<0.50	<0.50
CM CCOFF	CM CCOFF WS 2022-07-26 NP	2022-07-26	-	-	-	-	-	7.84	1180	1780	1.4	1530	1.06	462	<1.0	<1.0	<0.250	0.82	0.128	866	0.0281	3.7	0.0117	0.254	-	0.0029	<0.50	<0.50
CM CCOFF	CM CCOFF WS 2022-08-02 NP	2022-08-02	-	-	-	-	-	8.09	1180	1810	5.9	1560	4.58	461	<1.0	<1.0	<0.250	0.83	0.146	876	0.0257	3.83	0.0196	0.301	-	0.0051	<0.50	<0.50
CM CCOFF	CM CCOFF WS 2022-08-09 NP	2022-08-10	-	-	-	-	-	8.13	1310	1830	1.3	1460	1.07	447	<1.0	<1.0	<0.250	0.89	0.154	883	0.021	3.94	0.0183	0.416	-	0.0038	0.87	0.94
CM CCOFF	CM CCOFF WS 2022-08-16 NP	2022-08-16	-	-	-	-	-	7.95	1210	1870	4.1	1720	1.82	438	<1.0	<1.0	<0.250	1	0.153	873	0.0221	3.62	0.0153	0.442	-	0.005	<0.50	<0.50
CM CCOFF	CM CCOFF WS SEMP 2022-08 N	2022-08-16	-	-	-	-	-	8.08	1220	1840	42.4	1580	5.77	465	<1.0	<1.0	<0.250	1.01	0.199	904	0.023	4.1	0.0199	0.435	-	0.0028	0.86	0.72
CM CCOFF	CM CCOFF WS 2022-08-23 NP	2022-08-23	-	-	-	-	-	8.2	1340	1880	1.8	1720	0.5	485	<1.0	<1.0	<0.250	1.02	0.15	934	0.0259	4.13	0.0194	0.292	-	<0.0020	0.72	0.73
CM CCOFF	CM CCOFF 2022-08-25 NP1	2022-08-25	-	-	-	-	-	-	-	-	4.3	-	2.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM CCOFF	CM CCOFF 2022-08-25 NP2	2022-08-25	-	-	-	-	-	-	-	-	1460	-	2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM CCOFF	CM CCOFF 2022-08-25 NP3	2022-08-25	-	-	-	-	-	-	-	-	9.7	-	3.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM CCOFF	CM CCOFF WS 2022-08-30 NP	2022-08-30	-	-	-	-	-	8.05	1250	1880	3.2	1530	1.78	426	<1.0	<1.0	<0.250	0.99	0.124	921	0.029	4.17	0.0138	0.33	-	0.0087	0.84	0.76
CM CCOFF	CM CCOFF WS 2022-09-06 NP	2022-09-06	-	-	-	-	-	8.14	1350	1980	4.9	1620	2.21	483	<1.0													



APPENDIX C - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters					Physical Parameters					Dissolved Inorganics										Nutrients						
			Field Temperature	pH	Dissolved Oxygen	Field Conductivity	Field ORP	Hardness	Conductivity	Total Suspended Solids	Total Dissolved Solids	Turbidity	Bicarbonate	Carbonate	Hydroxide	Iodide	Chloride	Fluoride	Sulfate	Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Nitrate+Nitrite+Nitrogen-N	Ortho-Phosphate	Phosphorus, Total	Total Organic Carbon	Dissolved Organic Carbon		
			°C	Minimum Maximum	mg/L Chronic	µS/cm	mV	mg/L Minimum Maximum	µS/cm	mg/L	mg/L	ntu	mg/L	mg/L	mg/L	mg/L	mg/L Chronic	mg/L Acute	mg/L Chronic	mg/L Acute	mg/L Chronic	mg/L Acute	mg/L Chronic	mg/L Acute	mg/L Chronic	mg/L Chronic	mg/L Chronic	mg/L Chronic	mg/L Chronic
BC WQGF FWAL			n/a	6.5	9	1	5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
Elkview Operation																													
EV AQ6	EV AQ6 WS 2022-Q1 N	2022-01-07	-	-	-	-	-	8.39	370	683	8.6	407	1.32	338	12.6	<1.0	0.286	45.8	0.165	46.6		0.0076	0.158	<0.0010	0.073	-	0.0098	1.88	2.12
EV AQ6	EV AQ6 WS 2022-Q2 MON N	2022-02-07	-	-	-	-	-	8.34	346	685	2.4	365	1.15	322	5.9	<1.0	0.234	45.6	0.17	43.3		0.0059	0.127	<0.0010	0.074	-	0.0042	1.24	1.35
EV AQ6	EV AQ6 WS 2022-Q3 MON N	2022-03-16	-	-	-	-	-	8.32	413	727	1.3	429	1.38	332	2.5	<1.0	0.352	64	0.171	52		<0.0050	0.303	<0.0010	0.081	-	0.0084	2.47	2.54
EV AQ6	EV AQ6 WS 2022-Q3 WEK13 N	2022-03-22	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q3 WEK14 N	2022-03-28	-	-	-	-	-	-	-	-	3.3	2.86	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q4 WEK15 N	2022-04-04	-	-	-	-	-	-	-	-	1.1	1.48	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q2 N	2022-04-12	-	-	-	-	-	8.41	379	756	<1.0	468	0.87	321	8.3	<1.0	0.32	63.7	0.201	51.7		<0.0050	0.0068	<0.0010	0.117	-	0.0035	3.02	3.02
EV AQ6	EV MC6 WS 2022-Q2 N	2022-04-11	-	-	-	-	-	8.41	376	752	<1.0	466	0.77	335	7.8	<1.0	0.338	63.6	0.188	52.2		<0.0050	0.008	<0.0010	0.207	-	0.0038	3.01	3.03
EV AQ6	EV MC7 WS 2022-Q2 N	2022-04-13	-	-	-	-	-	5.35	<0.50	<2.0	<1.0	<1.0	<0.10	<1.0	<1.0	<1.0	<0.050	<0.10	<0.020	<0.30		<0.0050	<0.0050	<0.0010	<0.050	-	<0.0020	<0.50	<0.50
EV AQ6	EV AQ6 WS 2022-Q4 WEK17 N	2022-04-18	-	-	-	-	-	-	-	-	<1.0	0.73	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q4 WEK18 N	2022-04-26	-	-	-	-	-	-	-	-	1.7	0.72	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q5 MON N	2022-05-03	-	-	-	-	-	8.58	361	706	2.2	452	0.79	307	12.1	<1.0	0.339	58.5	0.196	52.9		0.0064	<0.0050	<0.0010	0.115	-	0.0035	2.4	2.42
EV AQ6	EV AQ6 WS 2022-Q5 WEK20 N	2022-05-11	-	-	-	-	-	-	-	-	1.4	0.48	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q5 WEK21 N	2022-05-16	-	-	-	-	-	-	-	-	1.3	0.44	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q5 WEK22 N	2022-05-24	-	-	-	-	-	-	-	-	<1.0	0.52	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q5 WEK23 N	2022-05-30	-	-	-	-	-	-	-	-	1.4	0.42	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV MC8 WS 2022-Q6 MON N	2022-06-07	-	-	-	-	-	5.47	<0.50	<2.0	<1.0	<1.0	0.1	<1.0	<1.0	<1.0	<0.050	<0.10	<0.020	<0.30		<0.0050	<0.0050	<0.0010	<0.050	-	<0.0020	<0.50	<0.50
EV AQ6	EV MC8 WS 2022-Q6 MON N	2022-06-07	-	-	-	-	-	8.45	394	695	<1.0	330	0.43	305	10.6	<1.0	0.256	48.6	0.187	57.5		<0.0050	0.0092	<0.0010	0.063	-	0.0032	2.85	2.47
EV AQ6	EV AQ6 WS 2022-Q6 MON N	2022-06-08	-	-	-	-	-	8.56	355	699	<1.0	369	0.5	291	11.9	<1.0	0.252	49.9	0.188	59		<0.0050	0.0097	<0.0010	0.057	-	0.0036	2.33	2.36
EV AQ6	EV AQ6 WS 2022-Q6-13 N 1743	2022-06-13	-	-	-	-	-	-	-	-	56.6	43.7	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q6 WEK25 N	2022-06-13	-	-	-	-	-	-	-	-	1	1.69	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q6-14 N 1725	2022-06-14	-	-	-	-	-	-	-	-	10.2	14.3	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q6-14 N 0650	2022-06-14	-	-	-	-	-	-	-	-	52.3	47.3	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q6 WEK26 N	2022-06-21	-	-	-	-	-	-	-	-	1.1	0.6	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q6 WEK27 N	2022-06-28	-	-	-	-	-	-	-	-	<1.0	0.62	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q3 N	2022-07-06	-	-	-	-	-	8.54	389	700	<1.0	483	0.54	305	14.5	<1.0	0.296	51.6	0.186	65.5		<0.0050	0.0299	<0.0010	0.126	-	0.0034	1.89	1.73
EV AQ6	EV MC6 WS 2022-Q3 N	2022-07-06	-	-	-	-	-	8.53	372	700	<1.0	490	0.51	297	13.9	<1.0	0.3	51.5	0.192	65.5		0.0209	0.0349	<0.0010	0.133	-	0.0042	1.95	1.72
EV AQ6	EV MC8 WS 2022-Q3 N	2022-07-06	-	-	-	-	-	5.47	<0.50	<2.0	<1.0	<1.0	<0.10	<1.0	<1.0	<1.0	<0.050	<0.10	<0.020	<0.30		<0.0050	<0.0050	<0.0010	<0.050	-	<0.0020	8.99	9.11
EV AQ6	EV AQ6 WS 2022-Q7 WEK29 N	2022-07-12	-	-	-	-	-	-	-	-	1.4	0.69	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-Q8 MON N	2022-08-10	-	-	-	-	-	8.52	318	619	<1.0	342	1.07	282	9	<1.0	0.23	36.7	0.159	41.4		0.0087	0.0624	<0.0010	0.154	-	0.0039	1.42	1.49
EV AQ6	EV AQ6 WS SESMP 2022 08 N	2022-08-11	-	-	-	-	-	8.37	305	576	8.5	352	1.1	303	9.4	<1.0	0.166	37	0.169	43.1		0.0057	0.0719	<0.0010	0.072	-	0.0047	1.06	0.97
EV AQ6	EV AQ6 WS 2022-Q9 MON N	2022-09-07	-	-	-	-	-	8.44	302	540	1	325	0.81	282	11.4	<1.0	0.187	34.6	0.196	38.5		<0.0050	0.0402	<0.0010	0.099	-	0.0051	1.9	1.36
EV AQ6	EV MC8 WS 2022-Q9 MON N	2022-09-07	-	-	-	-	-	5.48	<0.50	<2.0	<1.0	<1.0	<0.10	<1.0	<1.0	<1.0	<0.050	<0.10	<0.020	<0.30		<0.0050	<0.0050	<0.0010	<0.050	-	<0.0020	<0.50	<0.50
EV AQ6	EV AQ6 WS 2022-Q9-08 N	2022-09-08	-	-	-	-	-	8.38	305	554	<1.0	333	1	283	9	<1.0	0.157	34.8	0.195	38		<0.0050	0.0449	<0.0010	0.095	-	0.0041	1.49	1.6
EV AQ6	EV AQ6 WS 2022-Q9-09 N	2022-09-09	-	-	-	-	-	8.5	288	554	<1.0	314	0.86	266	11.5	<1.0	0.182	34.3	0.191	38.2		<0.0050	0.035	<0.0010	0.11	-	0.0042	1.37	1.42
EV AQ6	EV AQ6 WS 2022-Q9-10 N	2022-09-10	-	-	-	-	-	8.33	299	519	<1.0	346	1.11	271	6.1	<1.0	0.191	34.4	0.19	38.3		<0.0050	0.0447	<0.0010	0.097	-	0.0035	1.74	1.24
EV AQ6	EV AQ6 WS 2022-Q4 N	2022-10-07	-	-	-	-	-	8.55	294	548	<1.0	310	1.05	272	14	<1.0	0.166	32.8	0.184	35.4		<0.0050	0.0114	<0.0010	0.099	-	0.0054	1.61	1.86
EV AQ6	EV MC6 WS 2022-Q4 N	2022-10-07	-	-	-	-	-	8.57	300	537	<1.0	296	1.03	248	14.4	<1.0	0.17	32.8	0.18	35.4		0.0198	0.0099	<0.0010	0.094	-	0.0062	1.62	1.63
EV AQ6	EV MC8 WS 2022-Q4 N	2022-10-07	-	-	-	-	-	5.57	<0.50	<2.0	<1.0	<1.0	0.16	<1.0	<1.0	<1.0	<0.050	<0.10	<0.020	<0.30		<0.0050	<0.0050	<0.0010	<0.050	-	<0.0020	<0.50	<0.50
EV AQ6	EV AQ6 WS 2022-11 MON N	2022-11-09	-	-	-	-	-	8.31	386	660	1.1	402	0.85	354	2.4	<1.0	0.256	43.6	0.202	42.4		0.0052	0.0921	0.0011	0.071	-	0.0053	2.01	2.01
EV AQ6	EV MC6 WS 2022-11 MON N	2022-11-09	-	-	-	-	-	8.32	386	652	1.3	409	0.93	351	4.7	<1.0	0.253	43.3	0.201	42.1		<0.0050	0.0904	<0.0010	0.094	-	0.006	1.75	1.57
EV AQ6	EV MC8 WS 2022-11 MON N	2022-11-09	-	-	-																								













APPENDIX C - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters					Physical Parameters					Dissolved Inorganics											Nutrients						
			°C	pH	mg/L	µS/cm	mV	pH	Hardness	Conductivity	Total Suspended Solids	Total Dissolved Solids	Turbidity	Alcarbonate	Carbonate	Hydroxide	Bromide	Chloride	Fluoride	Sulfate	Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Nitrate+Nitrite+Nitrogen-N	Ortho-Phosphate	Phosphorus, Total	Total Organic Carbon	Dissolved Organic Carbon		
			Minimum/Maximum	Minimum/Maximum	Minimum/Maximum	Minimum/Maximum	Minimum/Maximum	mg/L	µS/cm	mg/L	mg/L	ntu	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
BC WQGF FWAL			n/a	6.5-9	1-5	n/a	n/a	n/a	25-5	n/a	8-2	n/a	n/a	n/a	n/a	n/a	0.4-4 <sup>a</sup>	128-429 <sup>b</sup>	0.681-28.7 <sup>c</sup>	0.102-2.08 <sup>d</sup>	32.8-3.7	0.06-0.60 <sup>e</sup>	0.02-0.20 <sup>f</sup>	n/a	n/a	0.015	n/a	n/a		
Elkview Operation			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-09 N-SRF	2022-09-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-10 N-SRF	2022-09-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-11 N-SRF	2022-09-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-12 N-SRF	2022-09-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-13 N-SRF	2022-09-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-14 N-SRF	2022-09-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-15 N-SRF	2022-09-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-16 N-SRF	2022-09-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-17 N-SRF	2022-09-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-18 N-SRF	2022-09-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-19 N-SRF	2022-09-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-20 N-SRF	2022-09-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-21 N-SRF	2022-09-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-22 N-SRF	2022-09-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-23 N-SRF	2022-09-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-24 N-SRF	2022-09-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-25 N-SRF	2022-09-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-26 N-SRF	2022-09-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-27 N-SRF	2022-09-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-28 N-SRF	2022-09-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-29 N-SRF	2022-09-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-09-30 N-SRF	2022-09-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-10-01 N-SRF	2022-10-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-10-02 N-SRF	2022-10-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-10-03 N-SRF	2022-10-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-10-04 N-SRF	2022-10-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-Q4 N	2022-10-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-10-06 N-SRF	2022-10-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-10-17 N-SRF	2022-10-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-10-31 N-SRF	2022-10-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-11-14 N-SRF	2022-11-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-11-15 MON N	2022-11-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV EC1	EV EC1 WS 2022-11-21 N-SRF	2022-11-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-Q1 N	2022-01-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-Q2 MON N	2022-02-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-Q3 MON N	2022-03-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-Q3 WEK13 N	2022-03-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-Q3 WEK14 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-Q4 WEK15 N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-Q2 N	2022-04-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-Q4 WEK17 N	2022-04-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-Q4 WEK18 N	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-05 MON N	2022-05-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-05 WEK20 N	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-05 WEK21 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-05 WEK22 N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-05 WEK23 N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-06 MON N	2022-06-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-06 WEK25 N	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV ER4	EV ER4 WS 2022-06 WEK26 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard  
<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL





APPENDIX C - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters					Physical Parameters						Dissolved Inorganics										Nutrients													
			Field Temperature	pH (field)	Dissolved Oxygen	Field Conductivity	Field ORP	pH	Hardness	Conductivity	Total Suspended Solids	Total Dissolved Solids	Turbidity	Bicarbonate	Carbonate	Hydroxide	Bromide	Chloride	Fluoride	Sulfate	Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Nitrate+Nitrite+Nitrogen-N	Ortho-Phosphate	Phosphorus, Total	Total Organic Carbon	Dissolved Organic Carbon									
			Minimum Maximum Chronic	Minimum Maximum Chronic	Minimum Maximum Chronic	Minimum Maximum Chronic	Minimum Maximum Chronic	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L									
<b>BC WQGF FWAL</b>			n/a	6.5	9	1	5	n/a	n/a	6.5	9	n/a	n/a	n/a	n/a	8	2	n/a	n/a	n/a	n/a	600	150	0.4	128-429 <sup>a</sup>	0.681-28.7 <sup>b</sup>	0.102-2.08 <sup>b</sup>	32.8	3.7	0.06-0.60 <sup>c</sup>	0.02-0.20 <sup>d</sup>	n/a	n/a	n/a	0.015	n/a	n/a
<b>Elkview Operation</b>			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-02 N 0830	2022-03-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-03 N 1310	2022-03-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-03 N 0735	2022-03-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-04 N 1316	2022-03-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-04 N 0751	2022-03-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-05 N 1357	2022-03-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-05 N 0755	2022-03-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-06 N 1437	2022-03-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-06 N 0725	2022-03-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-07 N 0735	2022-03-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-11 N	2022-03-11	-	-	-	-	-	-	8.08	586	1050	9.4	725	7.84	352	<1.0	<1.0	<0.250	21.2	0.145	327	0.0053	1.54	0.0153	0.206	-	-	-	-	0.0086	3.87	1.49	-	-	-	-	
EV GC2	EV GC2 WS 2022-03-16 N	2022-03-16	-	-	-	-	-	-	8.35	493	864	22	602	18.2	284	5	<1.0	0.57	22.4	0.162	230	0.247	1.09	0.016	0.292	-	-	0.0064	2.23	2.15	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-03-16 N 0005	2022-03-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03 MON N	2022-03-17	-	-	-	-	-	-	8.29	483	799	13.5	668	11.6	347	<1.0	<1.0	<0.250	20.6	0.145	254	0.0072	1.34	0.0153	0.477	-	-	0.0134	2.28	2.19	-	-	-	-	-	-	
EV GC2	EV MC6 WS 2022-03 MON N	2022-03-17	-	-	-	-	-	-	8.39	497	918	13.1	658	12.7	313	8.9	<1.0	<0.250	20.8	0.165	254	0.0058	1.24	0.0128	0.578	-	-	0.0113	1.65	2.46	-	-	-	-	-	-	
EV GC2	EV MC8 WS 2022-03 MON N	2022-03-17	-	-	-	-	-	-	<b>5.12</b>	<0.50	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.050	<0.10	<0.020	<0.30	<0.0050	<0.0050	<0.0010	<0.050	-	-	<0.0020	<0.50	<0.50	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-03 WEK13 N	2022-03-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-24 N 0634	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-24 N 1115	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-24 N 1251	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-25 N 0645	2022-03-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-25 N 0645	2022-03-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-26 N 1401	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-26 N 1557	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-26 N 0752	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-27 N	2022-03-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03 WEK14 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-28 N 0707	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-29 N 1543	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-29 N 0750	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-30 N 1602	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-30 N 0728	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-31 N 1357	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-31 N 0754	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-31 N 1210	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-01 N 1457	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-01 N 1556	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-01 N 0743	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-02 N 1554	2022-04-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-02 N 0807	2022-04-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04 WEK15 N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04 WEK16 N	2022-04-12	-	-	-	-	-	-	8.45	461	843	14.6	612	19.6	303	9.1	<1.0	0.081	20.6	0.137	198	0.0081	1.15	0.003	0.322	-	-	<b>0.0202</b>	6.66	3.12	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-04 WEK17 N	2022-04-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04 WEK18 N	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-25 N 0757	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-05 MON N	2022-05-05	-	-	-	-	-	-	8.51	435	790	8.6	580	14.6	280	12.2	<1.0	0.074	18.6	0.123	203	<0.0050	0.92	0.003	0.269	-	-	0.0082	5.74	3.0							



APPENDIX C - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters					Physical Parameters					Dissolved Inorganics							Nutrients									
			Field Temperature °C	pH (pH field)	Dissolved Oxygen mg/L	Field Conductivity µS/cm	Field ORP mV	Hardness mg/L	Conductivity µS/cm	Total Suspended Solids mg/L	Total Dissolved Solids mg/L	Turbidity ntu	Carbonate mg/L	Bicarbonate mg/L	Hydroxide mg/L	Bromide mg/L	Chloride mg/L	Fluoride mg/L	Sulfate mg/L	Ammonia Nitrogen mg/L	Nitrate Nitrogen mg/L	Nitrite Nitrogen mg/L	Nitrogen-N mg/L	Ortho-Phosphate mg/L	Total Phosphorus mg/L	Total Organic Carbon mg/L	Dissolved Organic Carbon mg/L		
			Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum			
BC WQGW FWAL			n/a	6.5 9	1 5	n/a	n/a	n/a	n/a	25 5	n/a	n/a	n/a	n/a	800 150	Acute Chronic	128-429 <sup>a</sup>	Acute Chronic	0.681-28.7 <sup>b</sup>	0.102-2.08 <sup>b</sup>	Acute Chronic	32.8 3.7	0.06-0.60 <sup>c</sup>	0.02-0.20 <sup>d</sup>	n/a	n/a	0.015	n/a	n/a
EV MC2	EV MC2 WS 2022-01-17 N-SRF	2022-01-17	-	-	-	-	8.31	273	516	7.6	332	1.72	209	3.1	<1.0	<0.050	2.79	0.105	118	0.0089	0.781	0.001	0.277	-	0.0088	0.97	0.76		
EV MC2	EV MC2 WS 2022 Q1 N	2022-01-18	-	-	-	-	8.18	292	541	1.5	402	0.51	215	<1.0	<1.0	<0.050	4.11	0.122	128	0.0064	0.964	0.001	0.291	-	0.0072	0.76	0.84		
EV MC2	EV MC2 WS 2022-01-31 N-SRF	2022-01-31	-	-	-	-	8.16	278	550	<1.0	398	0.99	222	<1.0	<1.0	<0.050	3.83	0.102	128	<0.0050	0.966	<0.0010	0.149	-	0.007	1.32	1.22		
EV MC2	EV MC2 WS 2022 Q1 WQW N	2022-02-01	-	-	-	-	8.12	325	599	<1.0	312	0.23	252	<1.0	<1.0	<0.050	4.45	0.112	151	0.006	1.65	0.001	0.142	-	0.0075	1	1.44		
EV MC2	EV MC2 WS 2022-02 MON N	2022-02-08	-	-	-	-	8.44	326	555	1.1	378	0.34	213	7.3	<1.0	<0.050	3.56	0.133	132	<0.0050	0.842	<0.0010	0.202	-	0.0051	0.77	0.87		
EV MC2	EV MC2 WS 2022-02-14 N-SRF	2022-02-14	-	-	-	-	8.4	299	592	<1.0	391	0.34	220	4.4	<1.0	<0.050	4.15	0.136	147	<0.0050	1.04	0.001	0.181	-	0.0028	0.54	0.57		
EV MC2	EV MC2 WS 2022 Q1 WK1 N	2022-02-15	-	-	-	-	8.29	347	626	1.1	416	0.42	225	1.1	<1.0	<0.050	6.29	0.124	152	0.0114	1.48	0.0012	0.331	-	0.0032	0.91	0.9		
EV MC2	EV MC2 WS 2022 Q1 WK2 N	2022-02-22	-	-	-	-	8.2	434	788	2.4	526	0.25	282	<1.0	<1.0	0.076	9.12	0.142	212	0.0052	1.78	0.0014	0.267	-	0.0035	0.86	0.63		
EV MC2	EV MC2 WS 2022-02-28 N-SRF	2022-03-01	-	-	-	-	8.14	332	570	2.4	391	0.45	229	<1.0	<1.0	<0.050	4.58	0.106	138	<0.0050	0.944	0.0012	0.257	-	0.004	<0.50	<0.50		
EV MC2	EV MC2 WS 2022 Q1 WK3 N	2022-03-01	-	-	-	-	8	307	568	2.6	380	2.98	224	<1.0	<1.0	<0.050	6.21	0.104	138	<0.0050	0.993	0.0011	0.121	-	0.0047	0.76	0.73		
EV MC2	EV MC2 WS 2022 Q1 WK4 N	2022-03-08	-	-	-	-	7.98	321	567	1.2	402	0.48	225	<1.0	<1.0	0.054	4.63	0.114	138	0.0333	0.904	0.0035	0.341	-	0.0053	<0.50	<0.50		
EV MC2	EV MC2 WS 2022-03-14 N-SRF	2022-03-14	-	-	-	-	8.04	286	599	2	436	0.55	227	<1.0	<1.0	<0.050	5.63	0.132	159	<0.0050	1.3	0.001	0.556	-	0.0028	0.7	0.73		
EV MC2	EV MC2 WS 2022 Q1 WK5 N	2022-03-15	-	-	-	-	8.21	316	598	1.4	385	0.77	234	<1.0	<1.0	<0.050	5.79	0.138	138	0.0148	1.02	0.0011	0.342	-	0.0035	0.93	0.85		
EV MC2	EV MC2 WS 2022-03 MON N	2022-03-16	-	-	-	-	8.13	331	583	1.9	383	0.88	235	<1.0	<1.0	<0.050	6.04	0.107	138	<0.0050	0.93	<0.0010	0.219	-	0.0027	0.98	0.85		
EV MC2	EV MC5 WS 2022-03 MON N	2022-03-16	-	-	-	-	8.16	324	588	2.3	366	0.91	228	<1.0	<1.0	<0.050	6.06	0.109	138	<0.0050	0.941	<0.0010	0.129	-	0.0046	1.02	0.94		
EV MC2	EV MC2 WS 2022-03-21 N-SRF	2022-03-21	-	-	-	-	8.31	321	592	2.6	343	0.97	218	1.4	<1.0	<0.050	6.48	0.147	144	<0.0050	0.942	0.0036	0.121	-	0.0026	0.84	0.78		
EV MC2	EV MC2 WS 2022-03 WEK13 N	2022-03-22	-	-	-	-	8.23	320	635	1.7	381	1.5	241	<1.0	<1.0	0.081	6.97	0.141	150	0.0054	0.983	0.0023	0.195	-	0.0086	1.1	0.99		
EV MC2	EV MC5 WS 2022-03 WEK13 N	2022-03-22	-	-	-	-	8.24	315	601	1.6	398	1.38	246	<1.0	<1.0	0.071	6.62	0.14	150	<0.0050	0.947	0.0022	0.13	-	0.0045	0.91	0.75		
EV MC2	EV MC2 WS 2022-03-28 N-SRF	2022-03-28	-	-	-	-	8.23	268	519	5.4	335	4.19	217	<1.0	<1.0	<0.050	4.4	0.102	104	<0.0050	1.12	0.0016	0.146	-	0.0058	1.73	1.41		
EV MC2	EV MC2 WS 2022-03-28 N-SRF 1	2022-03-28	-	-	-	-	8.25	308	522	6	333	3.71	213	<1.0	<1.0	<0.050	4.69	0.131	118	<0.0050	1.21	0.0011	-	-	0.0086	-	-		
EV MC2	EV MC2 WS 2022-03 WEK14 N	2022-03-29	-	-	-	-	7.98	265	506	7	345	6.29	221	<1.0	<1.0	<0.050	5.18	0.126	108	<0.0050	1.13	<0.0010	0.306	-	0.014	2.02	1.52		
EV MC2	EV MC5 WS 2022-03 WEK14 N	2022-03-29	-	-	-	-	7.96	275	506	6.9	330	5.84	216	<1.0	<1.0	<0.050	5.07	0.127	109	<0.0050	1.14	0.0012	0.242	-	0.0126	1.87	1.36		
EV MC2	EV MC2 WS 2022-04 N-SRF	2022-04-04	-	-	-	-	7.62	262	497	2.3	308	3.05	215	<1.0	<1.0	<0.050	3.71	0.103	100	<0.0050	0.81	0.0012	0.084	-	0.0071	1.72	1.78		
EV MC2	EV MC2 WS 2022-04 WEK15 N	2022-04-05	-	-	-	-	8.15	284	603	2.5	374	2.53	230	<1.0	<1.0	<0.050	8.83	0.103	128	<0.0050	1.5	0.0011	0.196	-	0.0062	1.7	1.74		
EV MC2	EV MC5 WS 2022-04 WEK15 N	2022-04-05	-	-	-	-	8.22	300	561	3	361	2.87	218	<1.0	<1.0	<0.050	6.26	0.09	116	<0.0050	1.18	0.0017	0.15	-	0.0065	1.88	1.8		
EV MC2	EV MC2 WS 2022-04-10 N-SRF	2022-04-10	-	-	-	-	8.2	272	526	3.4	330	1.77	233	<1.0	<1.0	<0.050	3.9	0.132	124	<0.0010	1.24	<0.0010	-	-	0.0035	-	-		
EV MC2	EV MC2 WS 2022-04-11 N-SRF	2022-04-11	-	-	-	-	8.17	287	513	<1.0	298	2.06	208	<1.0	<1.0	<0.050	3.64	0.127	109	<0.0050	1.2	<0.0010	0.203	-	0.0052	1.57	1.5		
EV MC2	EV MC2 WS 2022-04-11 N-SRF 1	2022-04-11	-	-	-	-	7.82	273	527	<1.0	345	1.05	219	<1.0	<1.0	<0.050	3.79	0.132	115	0.0077	1.23	0.002	-	-	0.0049	-	-		
EV MC2	EV MC2 WS 2022-04-12 N-SRF	2022-04-12	-	-	-	-	8.3	278	555	2.4	352	0.94	219	1.8	<1.0	<0.050	4.62	0.11	112	<0.0050	1.37	0.0013	0.219	-	0.0056	1.71	1.51		
EV MC2	EV MC2 WS 2022-04-12 N-SRF	2022-04-12	-	-	-	-	8.06	292	537	2.6	486	1.19	230	<1.0	<1.0	<0.050	4.41	0.14	119	<0.0050	1.34	<0.0010	-	-	0.0047	-	-		
EV MC2	EV MC2 WS 2022-04-13 N-SRF	2022-04-13	-	-	-	-	7.63	296	573	2.2	414	1.48	226	<1.0	<1.0	<0.050	7.75	0.122	133	<0.0050	1.76	<0.0010	-	-	0.0037	-	-		
EV MC2	EV MC2 WS 2022-04-14 N-SRF	2022-04-14	-	-	-	-	8.18	292	565	29.6	299	3.88	236	<1.0	<1.0	<0.050	4.59	0.122	118	<0.0050	1.35	<0.0010	-	-	0.0028	-	-		
EV MC2	EV MC2 WS 2022-04-15 N-SRF	2022-04-15	-	-	-	-	8.23	292	562	3.1	323	1.26	242	<1.0	<1.0	<0.050	3.48	0.131	124	<0.0050	1.36	<0.0010	-	-	0.0044	-	-		
EV MC2	EV MC2 WS 2022-04-16 N-SRF	2022-04-16	-	-	-	-	8.16	287	552	3.2	364	1.83	222	<1.0	<1.0	<0.050	3.39	0.126	125	0.005	1.33	0.001	-	-	0.0034	-	-		
EV MC2	EV MC2 WS 2022-04-17 N-SRF	2022-04-17	-	-	-	-	8.19	276	529	3.6	384	2.26	224	<1.0	<1.0	<0.050	3.11	0.124	114	0.0058	1.2	0.0011	-	-	0.0027	-	-		
EV MC2	EV MC2 WS 2022-04-18 N-SRF	2022-04-18	-	-	-	-	8.17	302	564	2.8	350	1.05	217	<1.0	<1.0	<0.050	3.95	0.131	130	0.0052	1.5	0.0011	0.399	-	0.0044	1.26	1.18		
EV MC2	EV MC2 WS 2022-04-18 N-SRF 1	2022-04-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04 WEK17 N	2022-04-19	-	-	-	-	8.16	288	559	2.7	375	1.95	224	<1.0	<1.0	<0.050	4.58	0.127	125	<0.0050	1.4	<0.0010	0.172	-	0.0043	1.5	1.97		
EV MC2	EV MC5 WS 2022-04 WEK17 N	2022-04-19	-	-	-	-	8.19	294	576	2.5	372	1.6	224	<1.0	<1.0	<0.050	4.93	0.126	127	<0.0050	1.43	0.0013	0.152	-	0.0051	1.47	1.87		
EV MC2	EV MC2 WS 2022-04-19 N-SRF	2022-04-19	-	-																									



APPENDIX C - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters					Physical Parameters					Dissolved Inorganics										Nutrients																
			Field Temperature	pH	Dissolved Oxygen	Field Conductivity	Field ORP	Hardness	Conductivity	Total Suspended Solids	Total Dissolved Solids	Turbidity	Bicarbonate	Carbonate	Hydroxide	Bromide	Chloride	Fluoride	Sulfate	Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Nitrate+Nitrite+Nitrogen-N	Ortho-Phosphate	Phosphorus, Total	Total Organic Carbon	Dissolved Organic Carbon												
			Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	Minimum Maximum	mg/L	µS/cm	mg/L	mg/L	ntu	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L											
<b>BC WQGW FWAL</b>			n/a	6.5	9	1	5	n/a	n/a	6.5	9	25	5	n/a	Acute Chronic	8	2	n/a	n/a	n/a	n/a	n/a	600	150	0.4	128-429 <sup>a</sup>	0.681-28.7 <sup>b</sup>	0.102-2.08 <sup>b</sup>	32.8	3.7	0.06-0.60 <sup>c</sup>	0.02-0.20 <sup>c</sup>	n/a	n/a	0.015	n/a	n/a		
<b>Elkview Operation</b>			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC5 WS 2022-04 WEK18 N	2022-04-26	-	-	-	-	-	8.18	245	462	<b>9.5</b>	282	<b>6.52</b>	202	<1.0	<1.0	<0.050	3.27	0.105	96.1	<0.0050	1.01	<0.0010	0.2	-	0.0127	2.27	2.21	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-27 N-SRF	2022-04-27	-	-	-	-	-	8.35	220	426	<b>10.4</b>	284	<b>7.94</b>	187	2.8	<1.0	<0.050	1.98	0.072	79	<0.0050	0.81	<0.0010	-	-	0.0075	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-04-27 N-SRF P	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-27 N-SRF UP	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-28 N-SRF	2022-04-28	-	-	-	-	-	8.1	228	423	<b>7.8</b>	291	<b>4.79</b>	186	<1.0	<1.0	<0.050	2.13	0.122	83.9	<0.0050	0.793	<0.0010	-	-	0.0075	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-04-29 N-SRF	2022-04-29	-	-	-	-	-	8.23	257	502	<b>13.6</b>	319	<b>4.84</b>	196	<1.0	<1.0	<0.050	5.4	0.098	89	<0.0050	1.22	<0.0010	-	-	0.0073	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-04-30 N-SRF	2022-04-30	-	-	-	-	-	7.99	261	487	<b>7.9</b>	325	<b>5.34</b>	211	<1.0	<1.0	<0.050	5.86	0.121	104	<0.0050	1.23	<0.0010	-	-	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-01 N-SRF	2022-05-01	-	-	-	-	-	7.98	268	501	<b>7.9</b>	322	<b>4.56</b>	203	<1.0	<1.0	<0.050	6.83	0.121	108	<0.0050	1.33	0.0011	-	-	0.0054	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-01 N-SRF P	2022-05-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-01 N-SRF UP	2022-05-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-02 N-SRF	2022-05-02	-	-	-	-	-	8.27	205	408	<b>7.1</b>	306	<b>6.48</b>	184	<1.0	<1.0	<0.050	2.12	0.109	78.3	<0.0050	0.734	0.0012	0.209	-	0.013	2.46	2.28	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-02 N-SRF 1	2022-05-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-03 N-SRF	2022-05-03	-	-	-	-	-	8.11	214	432	<b>28.2</b>	304	<b>12.8</b>	187	<1.0	<1.0	<0.050	4.17	0.111	84.8	<0.0050	0.965	<0.0010	-	-	0.0079	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05 MON N	2022-05-03	-	-	-	-	-	8.44	198	383	<b>20.6</b>	286	<b>9.21</b>	160	2.9	<1.0	<0.050	1.98	0.105	71.3	0.0081	0.64	<0.0010	0.27	-	<b>0.0287</b>	5.25	3.01	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-04 N-SRF	2022-05-04	-	-	-	-	-	8.19	171	333	<b>71.5</b>	210	<b>30.2</b>	153	<1.0	<1.0	<0.050	1.5	0.108	55.1	0.0115	0.526	0.001	-	-	0.0141	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-05 N-SRF	2022-05-05	-	-	-	-	-	7.98	184	354	<b>67.6</b>	275	<b>36.6</b>	156	<1.0	<1.0	<0.050	3.69	0.108	65.5	<0.0050	0.811	<0.0010	-	-	<b>0.0198</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-06 N-SRF	2022-05-06	-	-	-	-	-	8	113	229	<b>238</b>	179	<b>141</b>	128	<1.0	<1.0	<0.050	0.86	0.105	30.4	0.0055	0.314	0.0018	-	-	<b>0.389</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-07 N-SRF	2022-05-07	-	-	-	-	-	8.05	149	300	<b>71.7</b>	244	<b>39.3</b>	134	<1.0	<1.0	<0.050	2.81	0.084	46.5	<0.0050	0.624	<0.0010	-	-	<b>0.0361</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-08 N-SRF	2022-05-08	-	-	-	-	-	8.1	166	329	<b>39</b>	249	<b>21.7</b>	153	<1.0	<1.0	<0.050	3.1	0.087	52.5	<0.0050	0.683	<0.0010	-	-	<b>0.035</b>	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-09 N-SRF	2022-05-09	-	-	-	-	-	8.07	162	334	<b>22.9</b>	253	<b>7.92</b>	180	<1.0	<1.0	<0.050	2.69	0.102	55.5	0.0074	0.632	<0.0010	0.146	-	<b>0.0214</b>	3.47	3.3	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-10 N-SRF	2022-05-10	-	-	-	-	-	8.01	194	392	<b>12.3</b>	288	<b>8.56</b>	171	<1.0	<1.0	<0.050	4.78	0.111	73.7	<0.0050	0.96	0.0015	-	-	0.0142	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-11 N-SRF	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV MC2	EV MC2 WS 2022-05 WEK20 N	2022-05-11	-	-	-	-	-	8.16	179	340	<b>9.1</b>	274	<b>3.17</b>	165	<1.0	<1.0	<0.050	1.68	0.087	54.3	<0.0050	0.549	<0.0010	0.261	-	0.0149	3.13	3.26	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC5 WS 2022-05 WEK20 N	2022-05-11	-	-	-	-	-	8.19	179	338	<b>9.4</b>	288	<b>4.53</b>	158	<1.0	<1.0	<0.050	1.53	0.087	53.3	0.0216	0.546	<0.0010	0.24	-	<b>0.0181</b>	2.93	2.89	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-12 N-SRF	2022-05-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC10 WS 2022-05-12 N-SRF	2022-05-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-13 N-SRF	2022-05-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC10 WS 2022-05-13 N-SRF	2022-05-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-14 N-SRF	2022-05-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC10 WS 2022-05-14 N-SRF	2022-05-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-15 N-SRF	2022-05-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC10 WS 2022-05-15 N-SRF	2022-05-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-16 N-SRF	2022-05-16	-	-	-	-	-	8.13	171	335	<b>5.2</b>	198	<b>3.4</b>	159	<1.0	<1.0	<0.050	1.79	0.111	60	<0.0050	-	<0.0010	0.098	-	0.0135	2.95	3.14	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-16 N-SRF 1	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV MC2	EV MC10 WS 2022-05-16 N-SRF																																						

















APPENDIX C - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters						Physical Parameters						Dissolved Inorganics								Nutrients								
			Water Temperature	pH	Dissolved Oxygen	Field Conductivity	Field ORP	pH	Hardness	Conductivity	Total Suspended Solids		Total Dissolved Solids		Turbidity	Bicarbonate	Carbonate	Hydroxide	Iodide	Chloride	Fluoride	Sulfate	Ammonia Nitrogen		Nitrate Nitrogen	Nitrite Nitrogen	Nitrate Nitrogen-N	Ortho-Phosphate	Phosphorus, Total	Total Organic Carbon	Dissolved Organic Carbon
											mg/L	µS/cm	mg/L	mg/L									mg/L	mg/L							
Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic
<b>BC WQGFAL</b>																															
<b>Fording River Operation</b>																															
FR FR1	FR FR1 WEK 2022-07-11 NP	2022-07-11	-	-	-	-	-	7.27	132	264	2.7	173	0.61	147	<1.0	<1.0	<0.050	0.11	0.195	34.6	<0.0050		0.739	<0.0010	0.064	-	0.0039	0.54	0.65		
FR FR1	FR FR1 MON 2022-08-01 NP	2022-08-01	-	-	-	-	-	8.36	223	436	1.1	258	0.26	165	1.9	<1.0	<0.050	0.16	0.239	88	<0.0050		1.86	0.0021	0.112	-	0.0034	<0.50	<0.50		
FR FR1	FR FR1 MON 2022-09-05 NP	2022-09-05	-	-	-	-	-	8.33	261	468	<1.0	322	0.22	163	3.7	<1.0	<0.050	0.25	0.242	115	<0.0050		2.28	0.0018	0.236	-	<0.0020	<0.50	<0.50		
FR FR1	FR FR1 OTR 2022-10-03 NP	2022-10-12	-	-	-	-	-	8.32	296	527	<1.0	304	0.21	188	1.8	<1.0	<0.050	0.28	0.243	150	<0.0050		2.81	0.0031	0.213	-	<0.0020	1.14	0.71		
FR FR1	FR FR1 MON 2022-11-07 NP	2022-11-03	-	-	-	-	-	8.31	286	535	<1.0	372	0.18	193	2.4	<1.0	<0.050	0.27	0.231	168	<0.0050		2.78	0.0025	0.246	-	0.0031	<0.50	<0.50		
FR FR2	FR FR2 MON 2022-01-04 N	2022-01-08	-	-	-	-	-	8.25	660	1170	1	862	0.26	276	<1.0	<1.0	<0.050	1.79	0.13	383	<0.0050		29.7	0.0069	0.389	-	0.0028	0.96	1.01		
FR FR2	FR FR2 MON 2022-02-01 N	2022-02-09	-	-	-	-	-	8.26	727	1190	1.8	917	0.34	267	<1.0	<1.0	<0.050	1.96	0.238	375	<0.0050		28.6	0.007	<0.050	-	0.0026	0.53	0.58		
FR FR2	FR FR2 WS 2022-02-28 N	2022-02-28	-	-	-	-	-	8.12	714	1190	1.3	844	0.35	254	<1.0	<1.0	<0.050	2.22	0.14	404	0.0075		31	0.0107	0.217	-	0.003	0.78	0.82		
FR FR2	FR FR2 MON 2022-03-01 N	2022-03-03	-	-	-	-	-	8.22	702	1200	1.3	932	0.94	282	<1.0	<1.0	<0.050	2.19	0.125	406	<0.0050		30.1	0.0076	0.378	-	0.0032	0.75	<0.50		
FR FR2	FR FR2 WEK 2022-03-14 N	2022-03-14	-	-	-	-	-	8.11	759	1170	7	897	5.57	254	<1.0	<1.0	<0.050	3.78	0.156	413	0.109		30.3	0.0164	<0.050	-	0.0059	2.69	0.76		
FR FR2	FR FR2 WEK 2022-03-15 NP	2022-03-15	-	-	-	-	-	7.96	668	1170	4.5	931	2.13	259	<1.0	<1.0	<0.050	2.2	0.138	394	0.107		29.2	0.0089	<0.050	-	0.0064	1.38	0.89		
FR FR2	FR FR2 WS 2022-03-16 NP	2022-03-16	-	-	-	-	-	8.18	630	1180	13	841	7.06	266	<1.0	<1.0	<0.050	3.74	0.136	402	0.0115		28.2	0.0133	<0.050	-	0.035	6.15	1.06		
FR FR2	FR FR2 WEK 2022-03-16 NP	2022-03-16	-	-	-	-	-	8.04	676	1200	9.9	934	6.46	277	<1.0	<1.0	<0.050	2.3	0.144	401	0.199		30	0.01	<0.050	-	0.0087	2.83	0.52		
FR FR2	FR FR2 WS 2022-03-17 NP	2022-03-17	-	-	-	-	-	8.09	713	1180	24.4	906	16.5	254	<1.0	<1.0	<0.050	2.31	0.183	408	0.0071		27.6	0.0164	0.358	-	0.0303	12	0.92		
FR FR2	FR FR2 WEK 2022-03-17 NP	2022-03-17	-	-	-	-	-	8.01	618	1190	14.9	1150	10.3	276	<1.0	<1.0	<0.050	2.72	0.141	425	0.0068		29.3	0.0249	<0.050	-	0.0145	6.65	1.28		
FR FR2	FR FR2 WS 2022-03-18 NP	2022-03-18	-	-	-	-	-	8.17	681	1190	11	923	8.52	265	<1.0	<1.0	<0.050	2.5	0.132	403	<0.0050		28.1	0.014	<0.050	-	0.0112	1.13	0.59		
FR FR2	FR FR2 WEK 2022-18 NP	2022-03-18	-	-	-	-	-	8.08	680	1200	12.5	849	9.45	264	<1.0	<1.0	<0.050	2.49	0.185	428	0.0097		29.9	0.0129	0.391	-	0.0101	3.42	1.06		
FR FR2	FR FR2 WS 2022-03-19 NP	2022-03-19	-	-	-	-	-	8.19	666	1190	7.8	919	3.92	275	<1.0	<1.0	<0.050	6.27	0.133	418	0.0067		29.9	0.0195	0.276	-	0.0072	1.12	1.08		
FR FR2	FR FR2 WS 2022-03-20 NP	2022-03-20	-	-	-	-	-	8.19	645	1200	12.3	885	17.5	261	<1.0	<1.0	<0.050	2.69	0.137	389	0.009		28.3	0.0133	<0.050	-	0.0113	1.06	1.08		
FR FR2	FR FR2 WS 2022-03-21 NP	2022-03-21	-	-	-	-	-	8.08	646	1180	6.9	917	4.84	260	<1.0	<1.0	<0.050	2.68	0.182	412	0.0137		29.6	0.0187	<0.050	-	0.0059	1.61	0.86		
FR FR2	FR FR2 WS 2022-03-22 NP	2022-03-22	-	-	-	-	-	8.14	648	1160	4.3	918	4	266	<1.0	<1.0	<0.050	2.26	0.17	393	0.0207		28.5	0.0223	0.394	-	0.0057	1.26	<0.50		
FR FR2	FR FR2 WS 2022-03-23 NP	2022-03-23	-	-	-	-	-	8.15	656	1120	4.5	868	3.34	264	<1.0	<1.0	<0.050	2.23	0.176	394	0.0232		27.5	0.024	0.427	-	0.0173	1.35	0.542		
FR FR2	FR DC1 WEK 2022-03-28 N	2022-03-30	-	-	-	-	-	8.23	593.5	1015	6.8	739.5	6.305	244	<1.0	<1.0	<0.050	1.805	0.173	324.5	0.08795		23.3	0.06055	0.1485	-	0.01195	1.76	1.19		
FR FR2	FR FR2 MON 2022-04-01 N	2022-04-05	-	-	-	-	-	8.24	602	1100	4.3	761	1.95	251	<1.0	<1.0	<0.050	2.08	0.161	360	0.0856		26	0.0797	<0.050	-	0.0068	1.05	1.39		
FR FR2	FR FR2 WEK 2022-04-11 N	2022-04-12	-	-	-	-	-	8.28	634	1130	4.7	812	0.89	248	<1.0	<1.0	<0.050	1.86	0.165	394	0.0359		27.9	0.0385	0.391	-	0.0046	1.46	1.4		
FR FR2	FR DC1 WEK 2022-04-18 N	2022-04-18	-	-	-	-	-	8.195	635	1170	1.4	861.5	0.665	246.5	<1.0	<1.0	<0.050	2.17	0.1695	415.5	<0.0050		29.75	0.0152	0.457	-	0.0039	1.08	1.045		
FR FR2	FR DLD WEK 2022-04-18 N	2022-04-19	-	-	-	-	-	5.29	<0.50	<2.0	<1.0	<10	<10	<1.0	<1.0	<1.0	<1.0	<0.050	<0.10	0.0200	<0.30	<0.0050		<0.0050	<0.0010	<0.050	-	<0.0020	<0.50	<0.50	
FR FR2	FR DLD WEK 2022-04-25 N	2022-04-27	-	-	-	-	-	6.935	<0.50	<2.0	<1.0	<10	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<0.050	<0.10	0.0200	<0.30	<0.0050		<0.0050	<0.0010	<0.050	-	<0.0020	<0.50	<0.50
FR FR2	FR FR2 MON 2022-05-01 N	2022-05-04	-	-	-	-	-	8.27	442	790	14.4	529	2.01	204	<1.0	<1.0	<0.050	0.76	0.167	221	<0.0050		16.1	0.0067	0.089	-	0.018	2.88	1.7		
FR FR2	FR FR2 WEK 2022-05-09 N	2022-05-10	-	-	-	-	-	8.34	434	898	6.6	425	1.32	207	1.9	<1.0	<1.0	<0.050	0.79	0.117	233	<0.0050		17.9	0.0119	0.050	-	0.0121	2.09	1.58	
FR FR2	FR FR2 WEK 2022-05-16 N	2022-05-19	-	-	-	-	-	8.33	380	713	2.8	511	0.7	198	3.5	<1.0	<1.0	<0.050	0.6	0.145	187	<0.0050		13.9	0.0053	0.488	-	0.0051	1.64	1.54	
FR FR2	FR DLD WEK 2022-05-23 N	2022-05-26	-	-	-	-	-	6.945	<0.50	<2.0	<1.0	<10	<10	<1.0	<1.0	<1.0	<1.0	<0.050	<0.10	0.0200	<0.30	<0.0050		<0.0050	<0.0010	<0.050	-	<0.0020	<0.50	<0.50	
FR FR2	FR FR2 WS 2022-05-27 NP	2022-05-27	-	-	-	-	-	8.43	286	546	8.7	375	2.06	164	4	<1.0	<1.0	<0.050	0.32	0.139	109	<0.0050		6.5	0.003	0.502	-	0.0116	1.83	1.58	
FR FR2	FR FR2 WEK 2022-05-30 N	2022-06-01	-	-	-	-	-	8.12	250	421	3.2	333	1.29	178	<1.0	<1.0	<0.050	0.68	0.152	105	<0.0050		6.59	<0.0050	0.525	-	0.0084	1.74	1.66		
FR FR2	FR DC3 MON 2022-06-01 N	2022-06-08	-	-	-	-	-	8.18	211.5	395	14.45	235	1.705	160	<1.0	<1.0	<0.050	0.265	0.1415	66.1	<0.0050		3.98	0.0155	0.3975	-	0.02565	1.765	1.5		
FR FR2	FR DC1 WEK 2022-06-13 N	2022-06-13	-	-	-	-	-	8.14	183	342	13	219	3.085	146	<1.0	<1.0	<0.050	0.23	0.1345	57.8	<0.0050		3.625	0.0018	0.3885	-	0.0163	1.685	1.765		
FR FR2	FR FR2 WEK 2022-06-20 N	2022-06-21	-	-	-	-	-	8.17	186	367	16.6	239	5.72	159	<1.0	<1.0	<0.050	0.25	0.126	59.3	<0.0050		3.8	0.0025							



APPENDIX C - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters						Physical Parameters				Dissolved Inorganics							Nutrients												
			Water Temperature	pH (field)	Dissolved Oxygen	Field Conductivity	Field ORP	pH	Hardness	Conductivity	Total Suspended Solids	Total Dissolved Solids	Turbidity	Bicarbonate	Carbonate	Hydroxide	Iodide	Chloride	Fluoride	Sulfate	Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Nitrate+Nitrite+Nitrogen-N	Ortho-Phosphate	Phosphorus, Total	Total Organic Carbon	Dissolved Organic Carbon				
			°C	Minimum Maximum	mg/L	µS/cm	mV	mg/L	mg/L	ntu	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L					
BC WQGF WAL			n/a	6.5 9	1 5	n/a	n/a	6.5 9	n/a	n/a	25 5	n/a	Acute Chronic	8 2	n/a	n/a	n/a	n/a	800 150	0.4 *	128-429 <sup>6</sup>	Acute Chronic	0.681-28.7 <sup>5</sup>	0.102-2.08 <sup>6</sup>	32.8 3.7	0.06-0.60 <sup>6</sup>	0.02-0.20 <sup>6</sup>	n/a	n/a	0.015	n/a	n/a
Fording River Operation																																
FR LP1	FR LP1 WS 2022-05-24 N	2022-05-24	-	-	-	-	8.32	494	847	4.8	581	<b>5.29</b>	250	1.6	<1.0	<0.050	0.83	0.156	294	<0.0050	<b>7.16</b>	0.0135	0.362	-	<b>0.0164</b>	3.2	2.94					
FR LP1	FR LP1 WS 2022-05-25 N	2022-05-25	-	-	-	-	8.31	494	840	<b>5.2</b>	618	<b>4.22</b>	242	3.5	<1.0	<0.050	1.18	0.146	280	<0.0050	<b>6.66</b>	0.0141	0.539	-	0.0148	2.98	2.61					
FR LP1	FR LP1 WS 2022-05-26 N	2022-05-26	-	-	-	-	8.31	480	829	4.9	590	<b>3.64</b>	238	7.3	<1.0	<0.050	0.62	0.135	255	<0.0050	<b>6.46</b>	0.0132	0.397	-	<b>0.0155</b>	1.95	2.02					
FR LP1	FR LP1 WS 2022-05-27 N	2022-05-27	-	-	-	-	8.30	456	827	<b>6.2</b>	581	<b>3.75</b>	233	3.5	<1.0	<0.050	0.86	0.141	254	<0.0050	<b>6.2</b>	0.0133	0.432	-	0.0144	2.7	2.48					
FR LP1	FR LP1 WS 2022-05-28 N	2022-05-28	-	-	-	-	8.34	443	787	4.5	540	<b>4.96</b>	237	2.2	<1.0	<0.050	0.61	0.136	253	<0.0050	<b>6.02</b>	0.012	0.548	-	0.013	2.42	2.13					
FR LP1	FR LP1 WS 2022-05-29 N	2022-05-29	-	-	-	-	8.21	441	782	<b>5.2</b>	584	<b>4.92</b>	230	<1.0	<1.0	<0.050	0.62	0.141	257	<0.0050	<b>6.13</b>	0.0107	0.356	-	<b>0.0192</b>	2.82	2.56					
FR LP1	FR LP1 WS 2022-05-30 N	2022-05-30	-	-	-	-	8.35	436	785	7	570	<b>4.95</b>	235	<1.0	<1.0	<0.050	0.59	0.141	252	<0.0050	<b>6.08</b>	0.011	0.378	-	<b>0.0177</b>	2.8	2.99					
FR LP1	FR LP1 WS 2022-06-07 NP	2022-06-07	-	-	-	-	8.42	460	816	<b>5.4</b>	590	<b>3.72</b>	214	6.2	<1.0	<0.050	0.94	0.127	237	<0.0050	<b>6.53</b>	0.0076	0.444	-	0.0136	3.31	2.74					
FR LP1	FR LP1 WS 2022-06-08 NP	2022-06-08	-	-	-	-	8.36	513	941	6.8	688	<b>4.19</b>	255	4.7	<1.0	<0.050	0.75	0.164	333	<0.0050	<b>8.6</b>	0.0112	0.555	-	<b>0.0173</b>	3.35	2.75					
FR LP1	FR LP1 MON 2022-06-01 NP	2022-06-01	-	-	-	-	8.3	517	885	<b>8.2</b>	464	<b>4.49</b>	249	2.5	<1.0	<0.250	1.4	0.144	256	<0.0050	<b>7.13</b>	0.0136	0.605	-	0.0124	3.98	2.68					
FR LP1	FR LP1 WS 2022-06-10 NP	2022-06-10	-	-	-	-	8.31	444	812	<b>6.8</b>	538	<b>4.68</b>	233	1.9	<1.0	<0.050	0.59	0.125	246	<0.0050	<b>5.98</b>	0.0095	0.462	-	<b>0.022</b>	3.53	2.48					
FR LP1	FR LP1 WS 2022-06-11 NP	2022-06-11	<1.0	-	-	-	8.26	432	787	<b>5.4</b>	546	<b>4.29</b>	238	<1.0	<1.0	<0.250	0.95	0.127	226	<0.0050	<b>6.05</b>	0.0162	0.578	-	<b>0.0185</b>	3.24	2.7					
FR LP1	FR LP1 WS 2022-06-12 NP	2022-06-12	-	-	-	-	8.37	424	760	3.7	546	<b>2.13</b>	221	4.3	<1.0	<0.050	0.49	0.119	220	<0.0050	<b>5.68</b>	0.0056	0.541	-	0.0087	2.71	2.4					
FR LP1	FR LP1 MON 2022-06-13 NP	2022-06-13	-	-	-	-	8.5	434	791	9.3	910	<b>3.59</b>	235	<1.0	<1.0	<0.050	0.61	0.132	248	<0.0050	<b>8.17</b>	0.0107	0.555	-	<b>0.0173</b>	3.35	2.75					
FR LP1	FR LP1 WS 2022-06-20 NP	2022-06-20	-	-	-	-	8.37	382	669	<b>12.3</b>	452	<b>12.1</b>	215	6.7	<1.0	<0.050	0.67	0.112	178	0.0054	<b>4.73</b>	0.0094	0.473	-	<b>0.0542</b>	3.46	3.07					
FR LP1	FR LP1 WS 2022-06-28 NP	2022-06-28	-	-	-	-	8.16	436	762	5	550	<b>4.53</b>	259	<1.0	<1.0	<0.050	0.64	0.147	228	0.0054	<b>5.47</b>	0.0187	0.649	-	<b>0.0165</b>	2.95	2.29					
FR LP1	FR LP1 WS 2022-07-05 NP	2022-07-05	-	-	-	-	8.28	485	814	<b>6.2</b>	629	<b>6.78</b>	265	<1.0	<1.0	<0.050	0.61	0.136	250	0.0125	<b>5.52</b>	<b>0.0376</b>	0.404	-	<b>0.016</b>	4.03	4.59					
FR LP1	FR LP1 WS 2022-07-12 N	2022-07-12	-	-	-	-	8.49	540	890	4.3	698	<b>3.26</b>	258	10.4	<1.0	<0.250	0.88	0.154	291	0.0293	<b>5.89</b>	<b>0.0242</b>	0.588	-	0.0121	3.08	2.62					
FR LP1	FR LP1 WEK 2022-07-11 N	2022-07-11	-	-	-	-	-	-	-	4.1	-	<b>2.96</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FR LP1	FR LP1 WS 2022-08-18 N	2022-08-18	-	-	-	-	8.5	680	1100	5.9	892	<b>2.13</b>	249	14.3	<1.0	<0.250	1.7	0.207	<b>449</b>	0.0289	<b>7.94</b>	<b>0.0377</b>	0.533	-	0.0112	2.45	2.04					
FR LP1	FR LP1 WS 2022-08-24 N	2022-08-24	-	-	-	-	8.25	752	1160	2.7	935	<b>2.04</b>	292	<1.0	<1.0	<0.250	1.19	0.164	<b>480</b>	0.0327	<b>8.49</b>	<b>0.0356</b>	0.19	-	0.0118	1.62	1.45					
FR LP1	FR LP1 WS 2022-09-01 N	2022-09-01	-	-	-	-	8.3	733	1220	1.2	961	0.87	301	4.1	<1.0	<0.250	1.26	0.178	<b>492</b>	0.0126	<b>8.66</b>	<b>0.0363</b>	0.386	-	0.0049	2.34	2.58					
FR LP1	FR LP1 WS 2022-09-05 N	2022-09-05	-	-	-	-	8.43	800	1220	1.6	992	0.87	271	9.8	<1.0	<0.250	1.51	0.194	<b>517</b>	0.0075	<b>9.14</b>	<b>0.0255</b>	0.442	-	0.0042	2.13	2.04					
FR LP1	FR LP1 WS SEPT-2022 N	2022-09-06	-	-	-	-	8.42	772	1220	<1.0	1040	0.84	261	10.8	<1.0	<0.250	1.31	0.171	<b>528</b>	0.0061	<b>9.59</b>	<b>0.0298</b>	0.348	-	0.0025	1.84	1.74					
FR LP1	FR LP1 MON 2022-10-01 N	2022-10-12	-	-	-	-	8.2	886	1330	2.6	1050	1.38	312	<1.0	<1.0	<0.250	1.56	0.171	<b>631</b>	0.0185	<b>12.7</b>	<b>0.0228</b>	0.528	-	0.0028	1.8	1.85					
FR LP1	FR LP1 MON 2022-11-01 N	2022-11-03	-	-	-	-	8.29	877	1410	1.4	1180	1.23	301	5.2	<1.0	<0.250	1.53	0.188	<b>646</b>	0.0195	<b>12.6</b>	<b>0.0255</b>	0.341	-	0.0032	2.12	2.03					
FR PP1	FR PP1 MON 2022-01-04 N	2022-01-07	-	-	-	-	8.19	1400	2190	<1.0	1970	0.26	422	<1.0	<1.0	<0.250	0.92	<0.100	<b>794</b>	0.0301	<b>81.8</b>	0.0134	<0.050	-	0.009	3.48	3.08					
FR PP1	FR PP1 MON 2022-02-01 N	2022-02-06	-	-	-	-	8.02	1630	2370	3	2180	0.22	454	<1.0	<1.0	<0.250	1.49	<0.100	<b>902</b>	0.0326	<b>95.4</b>	0.017	<0.050	-	0.01	3.73	3.8					
FR PP1	FR PP1 WS MON 2022-03-01 N	2022-03-08	-	-	-	-	8.04	1560	2380	<1.0	2000	0.17	439	<1.0	<1.0	<0.250	1.35	<0.100	<b>890</b>	0.0139	<b>91.2</b>	0.0156	<0.050	-	0.0101	3.32	3.49					
FR PP1	FR PP1 WEK 2022-03-14 N	2022-03-14	-	-	-	-	8.1	1450	2280	1.2	1900	<b>2.69</b>	437	<1.0	<1.0	<0.250	1.34	<0.100	<b>909</b>	0.0151	<b>88.3</b>	0.0187	-	-	0.012	-	-					
FR PP1	FR DC WEK 2022-03-28 N	2022-03-28	-	-	-	-	-	-	-	3.6	-	<b>5.52</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FR PP1	FR DC WEK 2022-03-28 N	2022-03-28	-	-	-	-	-	-	-	13.85	-	<b>28</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FR PP1	FR PP1 MON 2022-04-01 N	2022-04-04	-	-	-	-	8.1	672	1190	<b>10.3</b>	898	<b>15.9</b>	248	<1.0	<1.0	<0.250	0.75	<0.100	372	0.0131	<b>36</b>	0.0105	0.816	-	<b>0.0582</b>	7.19	6.87					
FR PP1	FR PP1 WEK 2022-04-11 N	2022-04-11	-	-	-	-	-	-	-	2.7	-	<b>8.83</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FR PP1	FR DC WEK 2022-04-18 N	2022-04-19	-	-	-	-	-	-	-	12.65	-	<b>10.16</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FR PP1	FR PP1 WEK 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	5.7	-	<b>7.9</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FR PP1	FR PP1 MON 2022-05-01 N	2022-05-05	-	-	-	-	8.03	744	1240	2.7	942	<b>4.52</b>	307	<1.0	<1.0	<0.250	0.59	0.116	360	0.007	<b>36.7</b>	0.0086	<0.050	-	0.0137	4.06	4.04					
FR PP1	FR PP1 WEK 2022-05-09 N	2022-05-11	-	-	-	-	-	-	-	2.3	-	<b>5.27</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FR PP1	FR PP1 WEK 2022-05-16 N	2022-05-18	-	-	-	-	-	-	-	3	-	<b>2.98</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FR PP1	FR DC WEK 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	3.85	-	<b>1.885</b>	-	-	-	-	-															





APPENDIX C - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters					Physical Parameters					Dissolved Inorganics							Nutrients									
			Field Temperature	pH	Dissolved Oxygen	Field Conductivity	Field ORP	pH	Hardness	Conductivity	Total Suspended Solids	Total Dissolved Solids	Turbidity	Carbonate	Carbonate	Hydroxide	Bromide	Chloride	Fluoride	Sulfate	Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Nitrogen-N	Ortho-Phosphate	Total Phosphorus	Total Organic Carbon	Dissolved Organic Carbon	
			(°C)	(Minimum/Maximum)	(mg/L/Ac/Ch)	(µS/cm)	(mV)	(Minimum/Maximum)	(mg/L)	(µS/cm)	(mg/L)	(mg/L)	(ntu)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L/150)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
			n/a	6.5 9	1 5	n/a	n/a	6.5 9	n/a	n/a	25 5	n/a	8 2	n/a	n/a	n/a	n/a	800 150	0.4 - <sup>a</sup>	128-429 <sup>b</sup>	0.681-28.7 <sup>b</sup>	0.102-2.08 <sup>b</sup>	32.8 3.7	0.06-0.60 <sup>b</sup>	0.02-0.20 <sup>b</sup>	n/a	n/a	0.015	n/a
<b>BC WQG FWAL</b>																													
<b>Greenhills Operation</b>																													
GH GH1	GH GH1 WS 2022-06-21 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-06-22 N	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-06-27 N	2022-06-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-07-04 N	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH FOX3 WS 2022-07-04 N	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-07-11 N	2022-07-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-08-01 N	2022-08-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-08-05 N	2022-08-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-10-03 N	2022-10-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-11-07 N	2022-11-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-11-07 N_CALC	2022-11-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-11-10 N	2022-11-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH FOX1 WS 2022-11-17 FD	2022-11-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH LC1	GH LC1 WS 2022-06-08 N	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH LC1	GH LC1 WS 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH PC1	GH PC1 WS 2022-08-01 N	2022-08-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH PC1	GH PC1 WS SESMP 2022-08-17	2022-08-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH PC1	GH PC1 DS WS 2022-08-24 NP	2022-08-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH PC1	GH PC1 DS WS 2022-08-25 NP	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH PC1	GH PC1 DS WS 2022-08-26 NP	2022-08-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH PC1	GH PC1 DS WS 2022-08-27 NP	2022-08-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH PC1	GH PC1 DS WS 2022-08-28 NP	2022-08-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-01-03 N	2022-01-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-02-07 N	2022-02-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-03-07 N	2022-03-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-03-14 N	2022-03-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-03-20 N	2022-03-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-03-21 N	2022-03-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-03-28 N	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-04-04 N	2022-04-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-04-11 N	2022-04-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-04-18 N	2022-04-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-04-25 N	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-05-02 N	2022-05-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-05-09 N	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-05-16 N	2022-05-18	5.7	8.37	11.56	-	205	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-05-23 N	2022-05-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-06-06 N	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-06-13 N	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-06-20 N	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-06-27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-07-04 N	2022-07-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-07-11 N	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-08-01 N	2022-08-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS SESMP 2022-08-20 N	2022-08-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-09-05 N	2022-09-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-09-14 N	2022-09-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-09-21 N	2022-09-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-09-22 N	2022-09-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-09-23 N	2022-09-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-09-24 N	2022-09-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

< - Denotes concentration less than indicated detection limit  
 - - Denotes analysis not conducted  
 n/a - denotes no applicable standard  
<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters					Physical Parameters					Dissolved Inorganics								Nutrients									
			Field Temperature	pH	Dissolved Oxygen	Field Conductivity	Field ORP	pH	Hardness	Conductivity	Total Suspended Solids	Total Dissolved Solids	Turbidity	Carbonate	Carbonate	Hydroxide	Bromide	Chloride	Fluoride	Sulfate	Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Nitrate+Nitrite+Nitrogen-N	Ortho-Phosphate	Phosphorus, Total	Total Organic Carbon	Dissolved Organic Carbon		
				Minimum	Maximum	Acute	Chronic		mg/L	µS/cm	mg/L	mg/L	ntu	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
			n/a	6.5	9	1	5	n/a	n/a	n/a	25	5	n/a	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute
<b>BC WQG FWAL</b>			n/a	6.5	9	1	5	n/a	n/a	25	5	n/a	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic
<b>Greenhills Operation</b>			n/a	6.5	9	1	5	n/a	n/a	25	5	n/a	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic
GH TC2	GH TC2_WS_2022-09-25_N	2022-09-25	-	-	-	-	-	8.26	1310	1880	<1.0	1750	0.77	272	<1.0	<1.0	<0.250	11.9	<0.100	<b>1040</b>		0.0104	<b>12.5</b>	0.0119	0.247	-	0.0051	2.25	2.24	
GH TC2	GH TC2_WS_2022-09-26_N	2022-09-26	-	-	-	-	-	8.26	1260	1870	2.1	1770	0.9	275	<1.0	<1.0	<0.250	12	<0.100	<b>1070</b>		0.0977	<b>12.9</b>	0.0112	0.617	-	0.0061	2.3	2.19	
GH TC2	GH TC2_WS_2022-09-27_N	2022-09-27	-	-	-	-	-	8.23	1430	1880	3.5	1680	0.96	274	<1.0	<1.0	<0.250	11.8	<0.100	<b>1030</b>		0.0074	<b>12.5</b>	0.0097	0.316	-	0.004	2.22	2.27	
GH TC2	GH TC2_WS_2022-10-03_N	2022-10-03	-	-	-	-	-	8.24	1350	1940	1.9	1750	0.88	294	<1.0	<1.0	<0.250	12.1	<0.100	<b>1040</b>		<0.0050	<b>12.6</b>	0.0102	0.234	-	0.0063	2.65	2.71	
GH TC2	GH TC2_WS_2022-11-07_N	2022-11-09	-	-	-	-	-	8.35	1300	1920	1.8	1640	0.62	288	6.2	<1.0	<0.250	13.5	<0.100	<b>1070</b>		0.0081	<b>13.1</b>	0.0068	0.368	-	0.0036	2.93	2.77	
GH WC1	GH FOX1_WS_2022-01-03_N	2022-01-11	-	-	-	-	-	7.1533	1113.5	1697.333	2.5333	1530	0.1267	208.33	<1.0	<1.0	<0.250	3.25667	<0.100	<b>853.43</b>	0.009166667	<b>42.935</b>	0.004433333	<0.050	-	0.002633	1.43333	1.3967		
GH WC1	GH FOX2_WS_2022-02-07_N	2022-02-07	-	-	-	-	-	7.2733	1086.83	1727.333	3	1510	<0.10	219.67	<1.0	<1.0	<0.250	2.34	<0.100	<b>866.77</b>	0.007166667	<b>43.035</b>	<0.0050	0.151	-	0.0028	1.79333	1.76		
GH WC1	GH FOX2_WS_2022-03-07_N	2022-03-09	-	-	-	-	-	7.2033	1073.5	1677.333	1.1333	1480	0.1	223.67	<1.0	<1.0	<0.250	2.84333	<0.100	<b>836.77</b>	<0.0050	<b>40.10167</b>	0.0036	0.3873	-	0.002633	1.72	1.5667		
GH WC1	GH WC1_WS_2022-03-14_N	2022-03-16	-	-	-	-	-	8.2	1500	2320	2.5	1940	0.17	233	<1.0	<1.0	<0.250	3.25	<0.100	<b>1140</b>	<0.0050	<b>54.2</b>	<0.0050	<0.050	-	0.0034	2.77	3.04		
GH WC1	GH WC1_WS_2022-03-21_N	2022-03-23	-	-	-	-	-	8.32	1400	2280	2.1	2080	0.62	306	5.3	<1.0	<0.250	3.7	<0.100	<b>1040</b>	<0.0050	<b>51.6</b>	0.0112	1.46	-	0.0041	2.58	2.57		
GH WC1	GH WC1_WS_2022-03-28_N	2022-03-30	-	-	-	-	-	8.29	792	1340	1.3	1030	<b>2.03</b>	270	<1.0	<1.0	<0.250	1.56	0.109	<b>533</b>	<0.0050	<b>23.5</b>	<0.0050	0.144	-	0.0052	4.05	4.02		
GH WC1	GH WC1_WS_2022-04-04_N	2022-04-05	-	-	-	-	-	8.35	891	1470	2.3	1170	0.76	271	4.8	<1.0	<0.250	1.68	0.114	<b>616</b>	<0.0050	<b>27</b>	<0.0050	0.128	-	0.004	4.93	4.67		
GH WC1	GH WC1_WS_2022-04-11_N	2022-04-13	-	-	-	-	-	8.3	1060	1700	1.2	1320	0.8	316	<1.0	<1.0	<0.250	1.86	0.103	<b>704</b>	<0.0050	<b>32.2</b>	<0.0050	<0.050	-	0.0046	3.51	3.63		
GH WC1	GH WC1_WS_2022-04-18_N	2022-04-20	-	-	-	-	-	8.34	1200	1960	<1.0	1810	0.36	289	4.1	<1.0	<0.250	2.12	<0.100	<b>863</b>	<0.0050	<b>42.7</b>	0.011	2.48	-	0.004	3.13	3.19		
GH WC1	GH WC1_WS_2022-04-25_N	2022-04-26	-	-	-	-	-	8.38	1120	1890	4.4	1680	1.48	280	8.6	<1.0	<0.250	2.35	0.11	<b>870</b>	0.0052	<b>39.4</b>	0.0175	1.32	-	0.0034	4.15	3.99		
GH WC1	GH WC1_WS_2022-05-02_N	2022-05-03	-	-	-	-	-	8.47	1260	2090	4.6	1660	0.48	291	13.9	<1.0	<0.250	2.22	<0.100	<b>980</b>	<0.0050	<b>43.1</b>	0.0097	<0.050	-	0.0034	3.33	3.49		
GH WC1	GH WC1_WS_2022-05-09_N	2022-05-10	-	-	-	-	-	8.38	1280	2010	2.7	1800	0.73	284	6.8	<1.0	<0.250	2.3	<0.100	<b>979</b>	0.008	<b>42.8</b>	0.0128	<0.050	-	0.0054	3.56	3.57		
GH WC1	GH WC1_WS_2022-05-16_N	2022-05-17	-	-	-	-	-	8.4	1620	2290	3.6	2060	0.4	309	7.2	<1.0	<0.250	2.64	0.102	<b>1160</b>	0.0114	<b>49.2</b>	0.0189	<0.050	-	0.0036	2.75	2.96		
GH WC1	GH WC1_WS_2022-05-23_N	2022-05-25	-	-	-	-	-	8.42	1660	2510	1.2	2500	0.32	299	14	<1.0	<0.250	2.72	<0.100	<b>1280</b>	<0.0050	<b>54.4</b>	0.0329	<0.050	-	0.0036	2.72	2.8		
GH WC1	GH WC1_WS_2022-05-30_N	2022-05-31	-	-	-	-	-	8.4	1720	2620	2.6	2410	0.24	309	11.8	<1.0	<0.250	2.63	0.102	<b>1330</b>	<0.0050	<b>57.4</b>	0.0397	<0.050	-	0.0032	2.97	2.92		
GH WC1	GH WC1_WS_2022-06-06_N	2022-06-07	-	-	-	-	-	8.37	1770	2630	4.3	2300	0.36	324	7.9	<1.0	<0.250	2.6	<0.100	<b>1330</b>	0.0076	<b>57</b>	<b>0.0461</b>	0.738	-	0.0034	2.75	2.74		
GH WC1	GH WC1_WS_2022-06-13_N	2022-06-14	-	-	-	-	-	8.32	1450	2190	3.8	1970	1.23	300	5.4	<1.0	<0.250	2.16	<0.100	<b>1120</b>	<0.0050	<b>43.2</b>	0.0154	2.63	-	0.0048	2.84	3.07		
GH WC1	GH WC1_WS_2022-06-20_N	2022-06-22	-	-	-	-	-	8.41	1230	1850	1.4	1520	0.26	310	6.6	<1.0	<0.250	1.61	<0.100	<b>762</b>	<0.0050	<b>32.5</b>	0.0172	0.434	-	0.004	2.82	2.95		
GH WC1	GH WC1_WS_2022-06-27_N	2022-06-29	-	-	-	-	-	8.35	1570	2330	2.4	2060	0.29	342	<1.0	<1.0	<0.250	2.19	<0.100	<b>1130</b>	0.0057	<b>45.2</b>	0.0223	<0.050	-	0.0046	3.22	3.36		
GH WC1	GH FOX2_WS_2022-07-04_N	2022-07-05	-	-	-	-	-	7.3567	953.5	1434	<b>9.7333</b>	<b>1356.7</b>	<b>10.9</b>	216	<b>8.66667</b>	<1.0	<0.250	1.34667	<0.100	<b>700.1</b>	<0.0050	<b>28.335</b>	0.009796667	<0.050	-	0.011267	2.86	2.8233		
GH WC1	GH WC1_WS_2022-07-11_N	2022-07-12	-	-	-	-	-	8.2	1630	2590	4.2	2580	0.18	382	<1.0	<1.0	<0.250	2.43	0.106	<b>1330</b>	<0.0050	<b>55</b>	<b>0.047</b>	<0.050	-	0.0038	2.78	2.76		
GH WC1	GH WC1_WS_2022-08-01_N	2022-08-03	-	-	-	-	-	8.28	1950	2940	2.7	3050	0.22	379	<1.0	<1.0	<0.250	3.03	0.11	<b>1600</b>	0.012	<b>68</b>	<b>0.0762</b>	0.086	-	0.0041	2.37	2.37		
GH WC1	GH FOX2_WS_2022-09-05_N	2022-09-07	-	-	-	-	-	7.3067	1436.83	1994	2.9333	1843.3	0.2833	257.33	<1.0	<1.0	<0.250	2.08	<0.100	<b>1073.4</b>	0.0055	<b>46.56833</b>	<b>0.050533333</b>	3.8727	-	0.002567	1.51	1.51		
GH WC1	GH WC1_WS_2022-09-12_N	2022-09-12	-	-	-	-	-	8.32	2170	2950	2.3	3000	0.28	363	5.2	<1.0	<0.250	3.25	0.108	<b>1640</b>	<0.0050	<b>71.8</b>	<b>0.0617</b>	4.71	-	0.003	2.43	2.39		
GH WC1	GH WC1_WS_2022-10-03_N	2022-10-04	-	-	-	-	-	8.27	2340	2780	3.7	2930	0.2	382	<1.0	<1.0	<0.250	3.4	<0.100	<b>1740</b>	<0.0050	<b>74.6</b>	<b>0.0538</b>	2.14	-	0.0031	2.24	2.11		
GH WC1	GH FOX2_WS_2022-11-07_N	2022-11-08	-	-	-	-	-	7.3967	1293.5	1927.333	1.5333	1830	0.2333	239	<1.0	<1.0	<0.250	2.39	<0.100	<b>1123.4</b>	0.006533333	<b>44.50167</b>	0.009066667	2.2633	-	<0.0020	2.3233	2.21		

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL





APPENDIX C - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters					Physical Parameters						Dissolved Inorganics								Nutrients																					
			°C	pH	mg/L	µS/cm	mV	mg/L	µS/cm	mg/L	mg/L	ntu	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L																	
BC WQGW FWAL			n/a	6.5	9	1	5	n/a	n/a	6.5	9	n/a	n/a	25	5	n/a	n/a	n/a	n/a	n/a	600	150	Acute	Chronic	128-429 <sup>3</sup>	0.681-28.7 <sup>3</sup>	0.102-2.08 <sup>3</sup>	32.8	3.7	0.06-0.60 <sup>3</sup>	0.02-0.20 <sup>3</sup>	n/a	n/a	n/a	0.015	n/a	n/a	n/a					
Line Creek Operation																																											
LC DCD5	LC C03 WS 2022-10-31 N	2022-11-01	-	-	-	-	-	-	8.29	589	1090	2.1	838	0.35	172	2.3	<1.0	<0.250	19.7	<0.100	283				0.0074		<b>45.8</b>	0.006	<0.500	-				<b>0.0216</b>	1.47	1.48							
LC DCD5	LC DCD5 MNT 2022-11-08 N	2022-11-08	-	-	-	-	-	-	8.23	610	1090	<1.0	814	0.51	196	<1.0	<1.0	<0.250	20.9	<0.100	297				<0.0050		<b>48.5</b>	<0.0050	<0.500	-					<b>0.0189</b>	1.67	1.79						
LC DCD5	LC DCD5 WS 2022-11-14 N	2022-11-15	-	-	-	-	-	-	8.17	674	1200	1.6	925	0.77	181	<1.0	<1.0	<0.250	22.6	0.1	314				0.009		<b>52.4</b>	0.0055	0.774	-				<b>0.024</b>	1.69	1.57							
LC DCD5	LC DCD5 WS 2022-11-21 N	2022-11-22	-	-	-	-	-	-	8.26	658	1210	<1.0	924	0.77	182	<1.0	<1.0	<0.250	24.7	<0.100	334				0.0189		<b>57.2</b>	0.0083	2.54	-					<b>0.0269</b>	1.7	1.5						
LC LC12	LC LC12 MNT 2022-05-03 N	2022-05-02	-	-	-	-	-	-	8.25	504	285	<1.0	180	0.74	152	<1.0	<1.0	<0.050	0.2	0.281	35.2				<0.0050	0.173		<0.0010	0.69	-					<b>0.0049</b>	0.74	0.75						
LC LC12	LC LC12 WS 2022-05-09 N	2022-05-09	-	-	-	-	-	-	-	-	-	<1.0	-	-	0.39	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LC12	LC LC12 WS 2022-05-16 N	2022-05-18	-	-	-	-	-	-	-	-	-	1.6	-	-	0.3	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LC12	LC LC12 WS 2022-05-23 N	2022-05-24	-	-	-	-	-	-	-	-	-	3.6	-	-	0.17	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LC12	LC LC12 WS 2022-05-30 N	2022-05-30	-	-	-	-	-	-	-	-	-	<1.0	-	-	0.12	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LC12	LC LC12 MNT 2022-06-07 N	2022-06-06	-	-	-	-	-	-	8.23	284	547	<1.0	312	0.21	198	<1.0	<1.0	<0.050	0.2	0.226	134				<0.0050		2.41	0.001	<0.500	-					<b>0.0039</b>	0.9	1.02						
LC LC12	LC LC12 WS 2022-06-13 N	2022-06-13	-	-	-	-	-	-	-	-	-	<1.0	-	-	0.21	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LC12	LC LC12 WS 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	1.3	-	-	0.48	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LC12	LC LC12 WS 2022-06-27 N	2022-06-27	-	-	-	-	-	-	-	-	-	<1.0	-	-	0.31	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LC12	LC LC12 WS 03-2022 N	2022-07-05	-	-	-	-	-	-	8.09	266	518	<1.0	378	0.12	196	<1.0	<1.0	<0.050	0.18	0.187	136				<0.0050		1.58		<0.0010	<0.500	-				<b>0.0026</b>	1.19	1.05						
LC LC12	LC LC12 WS 2022-07-11 N	2022-07-13	-	-	-	-	-	-	-	-	-	1.4	-	-	0.12	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LCDSLLCC	LC LCDSLLCC WS_Q1-2022 N	2022-01-04	-	-	-	-	-	-	8.15	536	947	<1.0	707	0.15	244	<1.0	<1.0	<0.250	16.1	0.162	302				<0.0050		<b>10.2</b>	<0.0050	0.346	-					<b>0.003</b>	<0.50	<0.50						
LC LCDSLLCC	LC LCDSLLCC WS 2022-01-10 N	2022-01-10	-	-	-	-	-	-	8.26	527	977	1	725	<0.10	265	<1.0	<1.0	<0.050	18.2	0.176	319				<0.0050		<b>9.27</b>	0.0018	0.305	-					<b>0.003</b>	0.64	0.55						
LC LCDSLLCC	LC LCDSLLCC WS 2022-01-17 N	2022-01-17	-	-	-	-	-	-	8.23	536	989	<1.0	742	<0.10	255	<1.0	<1.0	<0.250	18.2	0.176	330				<b>0.0068</b>		<b>9.88</b>	<0.0050	0.311	-					<b>0.0022</b>	0.5	0.57						
LC LCDSLLCC	LC LCDSLLCC WS 2022-01-24 N	2022-01-25	-	-	-	-	-	-	8.16	552	997	<1.0	644	0.13	260	<1.0	<1.0	<0.450	18.3	<0.180	353				<0.0050		<b>10.7</b>	<0.0090	0.387	-					<b>0.0029</b>	<0.50	<0.50						
LC LCDSLLCC	LC LCDSLLCC WS 2021-01-31 N	2022-02-01	-	-	-	-	-	-	8.34	572	979	2	563	0.22	244	4.1	<1.0	<0.250	19.2	0.316	326				<0.0050		<b>9.6</b>	<0.0050	<0.050	-					<b>0.0026</b>	0.76	0.88						
LC LCDSLLCC	LC LCDSLLCC MNT 2021-02-08 N	2022-02-08	-	-	-	-	-	-	8.28	554	1040	1.5	723	<0.10	258	<1.0	<1.0	<0.050	20.7	0.201	325				<0.0050		<b>9.64</b>	<0.0010	0.313	-					<b>0.0029</b>	<0.50	<0.50						
LC LCDSLLCC	LC LCDSLLCC WS 2021-02-14 N	2022-02-15	-	-	-	-	-	-	8.27	562	1030	<1.0	612	0.12	262	<1.0	<1.0	<0.050	21.6	0.158	339				0.0052		<b>9.77</b>	0.001	0.368	-					<b>0.0021</b>	<0.50	<0.50						
LC LCDSLLCC	LC LCDSLLCC WS 2022-02-21 N	2022-02-22	-	-	-	-	-	-	8.24	632	1080	<1.0	815	<0.10	264	<1.0	<1.0	<0.250	22.4	0.174	361				<0.0050		<b>10.6</b>	<0.0050	0.37	-					<b>0.0025</b>	<0.50	<0.50						
LC LCDSLLCC	LC C01 WS 2022-02-28 N	2022-03-01	-	-	-	-	-	-	8.27	626.5	1012	<1.0	777.5	-	-	<1.0	<1.0	<0.250	23.3	0.186	350				<0.0050		<b>10.25</b>	<0.0050	<0.050	-					<b>0.0025</b>	<0.50	<0.50						
LC LCDSLLCC	LC LCDSLLCC WS 2022-02-28 N	2022-03-01	-	-	-	-	-	-	-	-	-	<1.0	-	-	0.10	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LCDSLLCC	LC LCDSLLCC MNT 2021-03-07 N	2022-03-08	-	-	-	-	-	-	8.12	577	1070	1.7	770	0.14	259	<1.0	<1.0	<0.250	23.8	0.17	342				0.0051		<b>10.2</b>	<0.0050	0.369	-					<b>0.0023</b>	<0.50	<0.50						
LC LCDSLLCC	LC LCDSLLCC WS 2022-03-14 N	2022-03-15	-	-	-	-	-	-	8.14	569	1080	<1.0	780	<0.10	264	<1.0	<1.0	<0.250	24.5	0.167	356				<0.0050		<b>10.8</b>	<0.0050	<0.050	-					<b>0.0029</b>	0.52	0.58						
LC LCDSLLCC	LC LCDSLLCC WS 2022-03-21 N	2022-03-22	-	-	-	-	-	-	8.21	588	1110	<1.0	770	0.24	297	<1.0	<1.0	<0.250	25.5	0.18	384				<0.0050		<b>11.4</b>	<0.0050	0.388	-					<b>0.0034</b>	0.56	0.50						
LC LCDSLLCC	LC LCDSLLCC WS 2022-03-28 N	2022-03-28	-	-	-	-	-	-	8.25	666	1050	1.2	814	0.46	294	<1.0	<1.0	<0.250	24.1	0.202	357				<0.0050		<b>12</b>	0.0083	-	-					<b>0.0034</b>	<0.50	<0.50						
LC LCDSLLCC	LC LCDSLLCC WS_Q2-2022 N	2022-04-07	-	-	-	-	-	-	8.35	566	1040	1.1	770	0.25	248	4.1	<1.0	<0.250	20.3	0.176	316				<0.0050		<b>12.4</b>	<0.0050	<0.050	-					<b>0.0031</b>	<0.50	<0.50						
LC LCDSLLCC	LC LCDSLLCC WS 2022-04-11 N	2022-04-11	-	-	-	-	-	-	8.15	589	1020	1.7	678	0.2	303	<1.0	<1.0	<0.250	20.1	0.24	342				<0.0050		<b>12.7</b>	<0.0050	0.367	-					<b>0.0022</b>	<0.50	<0.50						
LC LCDSLLCC	LC LCDSLLCC WS 2022-04-18 N	2022-04-19	-	-	-	-	-	-	8.2	527	1000	3.1	744	0.28	262	<1.0	<1.0	<0.250	17.8	0.208	333				<0.0050		<b>11.4</b>	<0.0050	0.459	-					<b>0.0029</b>	0.63	0.64						
LC LCDSLLCC	LC LCDSLLCC WS 2022-04-25 N	2022-04-25	-	-	-	-	-	-	8.28	528	1000	<1.0	750	0.29	258	<1.0	<1.0	<0.250	19.3	0.215	338				<0.0050		<b>11.5</b>	<0.0050	<0.050	-					<b>0.0026</b>	0.84	0.73						
LC LCDSLLCC	LC LCDSLLCC MNT 2022-05-03 N	2022-05-04	-	-	-	-	-	-	8.29	485	852	1.9	624	0.22	240	3	<1.0	<0.050	10.2	0.173	228				<0.0050		<b>8.85</b>	0.002	1.86	-					<0.0020	1.15	0.86						
LC LCDSLLCC	LC LCDSLLCC WS 2022-05-09 N	2022-05-09	-	-	-	-	-	-	8.22	341	684	1.1	512	0.34	216	<1.0	<1.0	<0.050	7.21	0.221	185				<0.0050		<b>7.68</b>	0.0016	0.92	-					<b>0.0032</b>	0.95	0.99						
LC LCDSLLCC	LC LCDSLLCC WS 2022-05-16 N	2022-05-17	-	-	-	-	-	-	8.37	368	684	2.7	452	1.15	217	5.3	<1.0	<0.050	7.58	0.219	179				<0.0050																		



APPENDIX C - TABLE 1: Summary of Analytical Results for Dissolved Organics, Nutrients and Organics

Sample Location	Sample ID	Sample Date (yyyy-mm-dd)	Field Parameters					Physical Parameters					Dissolved Inorganics							Nutrients																												
			Field Temperature	pH (field)	Dissolved Oxygen	Field Conductivity	Field ORP	Hardness	Conductivity	Total Suspended Solids	Total Dissolved Solids	Turbidity	Bicarbonate	Carbonate	Hydroxide	Bromide	Chloride	Fluoride	Sulfate	Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Nitrate Nitrogen-N	Ortho-Phosphate	Phosphorus, Total	Total Organic Carbon	Dissolved Organic Carbon																					
			Minimum	Maximum	Acute	Chronic	Minimum	Maximum	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic																				
<b>BC WQGW FWAL</b>			n/a	6.5	9	1	5	n/a	n/a	n/a	6.5	9	n/a	n/a	25	5	n/a	n/a	8	2	n/a	n/a	n/a	n/a	n/a	600	150	0.4 - <sup>a</sup>	128-429 <sup>b</sup>	0.681-28.7 <sup>b</sup>	0.102-2.08 <sup>b</sup>	32.8	3.7	0.06-0.60 <sup>c</sup>	0.02-0.20 <sup>c</sup>	n/a	n/a	0.015	n/a	n/a								
<b>Line Creek Operation</b>																																																
LC WLC	LC WLC WS_Q3-2022_N	2022-07-05	-	-	-	-	-	8.22	824	1350	< 1.0	1150	< 0.10	433	< 1.0	< 1.0	< 0.050	1.51	0.108	<b>518</b>	< 0.0050	<b>7.79</b>	< 0.0010	1.55	-	0.0028	1.08	1.17																				
LC WLC	LC CCI WS_2022-07-11_N	2022-07-11	-	-	-	-	-	8.08	938	1495	< 1.0	1230	0.115	455.5	< 1.0	< 1.0	< 0.250	2.57	0.1435	<b>594</b>	< 0.0050	<b>8.5</b>	< 0.0050	0.467	-	0.0039	0.635	0.71																				
LC WLC	LC WLC WS_2022-07-18_N	2022-07-19	-	-	-	-	-	8.08	1020	1550	2.8	1330	< 0.10	479	< 1.0	< 1.0	< 0.250	2.08	0.14	<b>626</b>	< 0.0050	<b>8.38</b>	< 0.0050	< 0.500	-	0.0047	1	0.93																				
LC WLC	LC MT1 WS_2022-07-25_N	2022-07-26	-	-	-	-	-	6.65	< 0.50	< 2.0	< 1.0	< 10	< 0.10	< 1.0	< 1.0	< 0.050	< 1.0	< 0.020	< 0.30	-	-	< 0.0050	< 0.0010	< 0.050	-	-	< 0.50	< 0.50																				
LC WLC	LC WLC_MNT_2022-08-02_N	2022-08-03	-	-	-	-	-	8.03	1110	1730	< 1.0	1540	< 0.10	512	< 1.0	< 1.0	< 0.250	2.75	0.102	<b>736</b>	< 0.0050	<b>9.78</b>	< 0.0050	< 0.500	-	0.0043	0.62	0.6																				
LC WLC	LC WLC WS_2022-08-08_N	2022-08-08	-	-	-	-	-	8.23	1250	1780	2.8	1530	0.13	475	< 1.0	< 1.0	< 0.250	2.72	0.142	<b>799</b>	< 0.0050	<b>10.1</b>	< 0.0050	0.553	-	0.0049	1.07	1.08																				
LC WLC	LC MT1 WS_2022-08-15_N	2022-08-15	-	-	-	-	-	6.63	< 0.50	< 2.0	< 1.0	< 10	< 0.10	< 1.0	< 1.0	< 0.050	< 0.10	< 0.020	< 0.30	-	-	< 0.0050	< 0.0010	< 0.050	-	< 0.0020	< 0.50	< 0.50																				
LC WLC	LC WLC WS_2022-08-22_N	2022-08-22	-	-	-	-	-	8.03	1260	1850	< 1.0	1750	0.14	513	< 1.0	< 1.0	< 0.250	3.27	0.136	<b>886</b>	< 0.0050	<b>10.9</b>	< 0.0050	1.61	-	0.0046	0.74	0.75																				
LC WLC	LC WLC WS_2022-08-29_N	2022-08-29	-	-	-	-	-	8.11	1460	2000	4.2	1620	0.11	548	< 1.0	< 1.0	< 0.250	4.94	0.13	<b>923</b>	< 0.0050	<b>11.3</b>	< 0.0050	2.53	-	0.005	< 0.50	< 0.50																				
LC WLC	LC WLC_MNT_2022-09-06_N	2022-09-06	-	-	-	-	-	7.99	1320	2040	1.5	1770	< 0.10	524	< 1.0	< 1.0	< 0.250	3.17	0.111	<b>1020</b>	< 0.0050	<b>11.6</b>	< 0.0050	1.12	-	0.0036	< 0.50	0.51																				
LC WLC	LC WLC WS_2022-09-12_N	2022-09-13	-	-	-	-	-	8.08	1470	2010	1.6	1820	< 0.10	504	< 1.0	< 1.0	< 0.250	3.42	0.132	<b>965</b>	< 0.0050	<b>12</b>	< 0.0050	0.888	-	0.0048	0.99	0.72																				
LC WLC	LC WLC WS_2022-09-19_N	2022-09-19	-	-	-	-	-	8.3	1470	2070	1.2	1890	0.13	496	5.2	< 1.0	< 0.250	3.69	0.128	<b>1020</b>	< 0.0050	<b>12.5</b>	< 0.0050	< 0.500	-	0.0041	0.59	0.51																				
LC WLC	LC WLC WS_2022-09-29_N	2022-09-29	-	-	-	-	-	8.16	1530	2010	1.7	1930	< 0.10	533	< 1.0	< 1.0	< 0.250	3.59	0.148	<b>1030</b>	< 0.0050	<b>12.7</b>	< 0.0050	3.76	-	0.0054	1.22	1.09																				
LC WLC	LC WLC WS_Q4-2022_N	2022-10-03	-	-	-	-	-	8.2	1560	1990	< 1.0	1890	0.12	534	< 1.0	< 1.0	< 0.250	3.64	0.128	<b>1070</b>	< 0.0050	<b>13</b>	< 0.0050	0.776	-	0.0031	< 0.50	< 0.50																				
LC WLC	LC WLC WS_2022-10-10_N	2022-10-12	-	-	-	-	-	8.08	1620	2060	< 1.0	1920	< 0.10	535	< 1.0	< 1.0	< 0.250	3.36	0.112	<b>936</b>	< 0.0050	<b>12.3</b>	< 0.0050	1.17	-	0.0035	1.47	1.4																				
LC WLC	LC WLC WS_2022-10-17_N	2022-10-17	-	-	-	-	-	7.94	1680	2080	2.1	1840	< 0.10	547	< 1.0	< 1.0	< 0.250	4.49	0.141	<b>1090</b>	< 0.0050	<b>13.5</b>	< 0.0050	1.21	-	0.0051	0.93	0.97																				
LC WLC	LC CCI WS_2022-10-24_N	2022-10-24	-	-	-	-	-	7.2767	1163.5	1254	1.5667	1180	< 0.10	350.67	< 1.0	< 1.0	< 0.250	2.58	0.1323	<b>763.43</b>	< 0.0050	<b>9.501667</b>	< 0.0050	0.7173	-	0.004067	0.8	0.8133																				
LC WLC	LC WLC WS_2022-10-31_N	2022-10-31	-	-	-	-	-	8.27	1550	2060	< 1.0	2080	0.29	425	< 1.0	< 1.0	< 0.250	3.74	0.197	<b>1120</b>	< 0.0050	<b>14</b>	< 0.0050	0.93	-	0.0039	0.99	1.17																				
LC WLC	LC WLC_MNT_2022-11-08_N	2022-11-07	-	-	-	-	-	8.24	1540	2190	< 1.0	2090	< 0.10	450	< 1.0	< 1.0	< 0.250	3.8	0.223	<b>1140</b>	< 0.0050	<b>14.1</b>	< 0.0050	1.86	-	0.0046	1.1	0.93																				
LC WLC	LC MT1 WS_2022-11-14_N	2022-11-14	-	-	-	-	-	7.025	< 0.50	< 2.0	< 1.0	< 10	< 0.10	< 1.0	< 1.0	< 0.050	< 0.10	< 0.020	< 0.30	-	-	< 0.0050	< 0.0010	< 0.050	-	< 0.0020	< 0.50	< 0.50																				
LC WLC	LC WLC WS_2022-11-21_N	2022-11-21	-	-	-	-	-	8.22	1570	2150	4.1	2040	0.19	418	< 1.0	< 1.0	< 0.250	4.26	0.257	<b>1200</b>	< 0.0050	<b>15.1</b>	< 0.0050	0.813	-	0.0055	0.7	0.65																				

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals													
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL		n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>d</sup>
<b>Coal Mountain Mine</b>																	
CM CC1	CM CC1 WS 2022-01-04 N	2022-01-06	922	0.0038	0.00038	0.00017	0.0362	< 0.020	< 0.000050	0.103		0.000128		201	< 0.00030	0.0106	0.00024
CM CC1	CM CC1 WS 2022-01-11 N	2022-01-11	913	0.0027	0.00034	0.00015	0.0348	< 0.020	< 0.000050	0.086		0.000102		199	< 0.00010	0.0097	< 0.00020
CM CC1	CM CC1 WS 2022-02-01 N	2022-02-01	1050	0.0037	0.00052	0.00017	0.0361	< 0.020	< 0.000050	0.084		0.000117		231	0.00012	0.0127	0.00386
CM CC1	CM CC1 WS 2022-03-01 N	2022-03-01	978	0.0024	0.00029	0.00017	0.045	< 0.020	< 0.000050	0.054		0.0000764		202	0.00011	0.00368	< 0.00020
CM CC1	CM CC1 WS 2022-03-15 N	2022-03-15	988	0.0011	0.00028	0.00019	0.0511	< 0.020	< 0.000050	0.05		0.0000556		211	0.00013	0.00311	< 0.00020
CM CC1	CM CC1 WS 2022-03-22 N	2022-03-22	1030	0.0018	0.00028	0.0002	0.054	< 0.020	< 0.000050	0.06		0.0000476		221	0.00013	0.00304	< 0.00020
CM CC1	CM CC1 WS 2022-03-29 N	2022-03-29	970	0.0018	0.00028	0.00018	0.0489	< 0.020	< 0.000050	0.055		0.0000491		212	< 0.00010	0.00412	< 0.00020
CM CC1	CM CC1 WS 2022-04-05 N	2022-04-05	898	0.0034	0.00026	0.00016	0.0452	< 0.020	< 0.000050	0.078		0.0000305		195	0.00014	0.00369	0.0002
CM CC1	CM CC1 WS 2022-04-12 N	2022-04-12	889	0.003	0.00028	0.00016	0.0461	< 0.020	< 0.000050	0.071		0.00005		191	0.00016	0.0035	< 0.00020
CM CC1	CM CC1 WS 2022-04-19 N	2022-04-19	872	0.003	0.0003	0.0002	0.0498	0.00021	< 0.000050	0.074		0.0000419		187	0.00014	0.00339	0.00024
CM CC1	CM CC1 WS 2022-04-26 N	2022-04-26	819	< 0.0040	0.00027	0.00015	0.0407	< 0.020	< 0.000050	0.062		0.00003535		178	0.0001	0.003875	< 0.00020
CM CC1	CM CC1 WS 2022-05-03 N	2022-05-03	772	0.0042	0.00034	0.00016	0.041	< 0.020	< 0.000050	0.08		0.0000676		171	< 0.00010	0.00919	< 0.00020
CM CC1	CM CC1 2022-05-06 N2	2022-05-06	-	-	-	-	-	-	-	-		-		-	-	-	-
CM CC1	CM CC1 2022-05-06 N1	2022-05-06	-	-	-	-	-	-	-	-		-		-	-	-	-
CM CC1	CM CC1 2022-05-07 N1	2022-05-07	-	-	-	-	-	-	-	-		-		-	-	-	-
CM CC1	CM CC1 WS 2022-05-10 N	2022-05-10	694	0.0092	0.00034	0.00016	0.0372	< 0.020	< 0.000050	0.079		0.000131		153	0.0001	0.00591	0.00023
CM CC1	CM CC1 WS 2022-05-17 N	2022-05-17	731	0.0062	0.00039	0.00016	0.0298	< 0.020	< 0.000050	0.075		0.0001575		162.5	0.000125	0.009135	0.00028
CM CC1	CM NNP WS 2022-05-17 N	2022-05-17	-	-	-	-	-	-	-	-		-		-	-	-	-
CM CC1	CM CC1 WS 2022-05-24 N	2022-05-24	-	0.0064	0.00034	0.00016	0.0284	< 0.020	< 0.000050	0.054		0.000172		153	0.00014	0.00734	0.0002
CM CC1	CM CC1 WS 2022-05-31 N	2022-05-31	-	0.0038	0.00032	0.00018	0.0237	< 0.020	< 0.000050	0.044		0.000242		139	0.00013	0.00485	0.00021
CM CC1	CM CC1 WS 2022-06-07 N	2022-06-07	-	0.0021	0.00032	0.00016	0.0206	< 0.020	< 0.000050	0.042		0.000357		150	0.00014	0.0058	0.00024
CM CC1	CM CC1 WS 2022-06-14 N	2022-06-14	-	0.0025	0.00027	0.00018	0.0245	< 0.020	< 0.000050	0.027		0.00039		122	0.00011	0.00441	0.00027
CM CC1	CM CC1 WS 2022-06-21 N	2022-06-21	-	0.003	0.000315	0.0002	0.02525	< 0.020	< 0.000050	0.0435		0.000485		129	0.00014	0.00625	0.000315
CM CC1	CM CC1 WS 2022-06-28 N	2022-06-28	-	0.0022	0.00041	0.00014	0.0272	< 0.020	< 0.000050	0.054		0.000436		176	0.00011	0.00896	0.00025
CM CC1	CM CC1 WS 2022-07-05 N	2022-07-05	-	0.0021	0.00041	0.0002	0.0271	< 0.020	< 0.000050	0.07		0.00027		178	< 0.00010	0.00945	0.00022
CM CC1	CM NNP WS 2022-07-12 N	2022-07-12	-	< 0.0010	-	-	-	-	-	-		-		-	-	-	-
CM CC1	CM NNP WS 2022-07-12 N	2022-07-12	-	0.00049	0.000195	0.000275	< 0.020	< 0.000050	0.073		0.000122		211.5	0.0001	0.0108	-	-
CM CC1	CM CC1 WS 2022-08-02 N	2022-08-02	-	< 0.0010	0.00063	0.0002	0.0302	< 0.020	< 0.000050	0.0915		0.00008485		212.5	< 0.00010	0.0102	< 0.00020
CM CC1	CM NNP WS 2022-08-02 N	2022-08-02	-	-	-	-	-	-	-	-		-		-	-	-	-
CM CC1	CM CC1 2022-08-25 N1	2022-08-25	-	-	-	-	-	-	-	-		-		-	-	-	-
CM CC1	CM CC1 WS 2022-09-06 N	2022-09-06	-	< 0.0010	0.00055	0.00023	0.04185	< 0.020	< 0.000050	0.085		0.000065		216	< 0.00010	0.005875	< 0.00020
CM CC1	CM CC1 WS SEPT-2022 N	2022-09-08	-	0.0035	0.00059	0.00019	0.0399	< 0.020	< 0.000050	0.094		0.0000793		210	< 0.00010	0.0062	0.00028
CM CC1	CM CC1 WS 2022-10-04 N	2022-10-04	-	0.0019	0.00039	0.00018	0.0503	< 0.020	< 0.000050	0.068		0.000034		213	0.00017	0.00265	< 0.00020
CM CC1	CM CC1 WS 2022-11-01 N	2022-11-01	-	0.0021	0.00032	< 0.00020	0.0466	< 0.040	< 0.000100	0.074		0.0000303		219	< 0.00020	0.00364	< 0.00040
CM CC1	CM CC1 WS 2022-12-06 N	2022-12-06	-	0.00145	0.00026	0.000225	0.0641	< 0.020	< 0.000050	0.0595		0.0000299		241.5	0.000155	0.003015	< 0.00020
CM_CCOFF	CM_CCOFF_WS 2022-01-04_NP	2022-01-06	-	0.0038	0.0003	0.00018	0.0272	< 0.020	< 0.000050	0.125		0.000364		209	< 0.00030	0.00525	0.00022
CM_CCOFF	CM_CCOFF_WS 2022-01-11_NP	2022-01-11	-	0.0036	0.00027	0.00014	0.0256	< 0.020	< 0.000050	0.088		0.00035		207	< 0.00010	0.00298	< 0.00020
CM_CCOFF	CM_CCOFF_WS 2022-01-18_NP	2022-01-18	-	0.0043	0.00028	0.00017	0.0252	< 0.020	< 0.000050	0.067		0.0004		225	0.00012	0.00132	0.00023
CM_CCOFF	CM_CCOFF_WS 2022-01-19_NP	2022-01-19	-	0.0029	0.00027	0.00018	0.0281	< 0.020	< 0.000050	0.061		0.000416		229	< 0.00010	0.00113	< 0.00020
CM_CCOFF	CM_CCOFF_WS 2022-01-25_NP	2022-01-25	-	0.0037	0.00031	0.00018	0.0254	< 0.020	< 0.000050	0.066		0.000401		244	< 0.00010	0.0007	0.00027
CM_CCOFF	CM_CCOFF_WS 2022-02-01_NP	2022-02-02	-	0.0046	0.00028	< 0.00020	0.0246	< 0.040	< 0.000100	0.064		0.000359		228	< 0.00020	0.00048	< 0.00040
CM_CCOFF	CM_CCOFF_WS 2022-02-08_NP	2022-02-08	-	0.0038	0.00028	< 0.00020	0.0248	< 0.040	< 0.000100	0.07		0.000348		262	< 0.00020	0.00044	< 0.00040
CM_CCOFF	CM_CCOFF_WS 2022-02-15_NP	2022-02-15	-	0.0024	0.00029	0.00016	0.0252	< 0.020	< 0.000050	0.062		0.000297		239	< 0.00010	0.00035	0.00024
CM_CCOFF	CM_CCOFF_WS 2022-02-22_NP	2022-02-22	-	0.0036	0.00027	< 0.00020	0.0283	< 0.040	< 0.000100	0.06		0.000326		242	< 0.00020	0.00038	< 0.00040
CM_CCOFF	CM_CCOFF_WS 2022-03-01_NP	2022-03-01	-	0.0105	0.00026	0.00017	0.026	< 0.020	< 0.000050	0.059		0.0003		250	0.00017	0.00032	0.00022
CM_CCOFF	CM_CCOFF_WS 2022-03-08_NP	2022-03-08	-	< 0.0050	0.00027	< 0.00020	0.0265	< 0.040	< 0.000100	0.069		0.000252		240	< 0.00020	0.00037	< 0.00040
CM_CCOFF	CM_CCOFF_WS 2022-03-15_NP	2022-03-15	-	0.0033	0.00027	0.0002	0.0256	< 0.020	< 0.000050	0.08		0.000208		242	< 0.00010	0.00034	< 0.00020
CM_CCOFF	CM_CCOFF_WS 2022-03-22_NP	2022-03-22	-	0.0025	0.00027	0.0002	0.028	< 0.020	< 0.000050	0.069		0.00022		253	0.00011	0.00038	< 0.00020
CM_CCOFF	CM_CCOFF_WS 2022-03-29_NP	2022-03-29	-	0.0036	0.00028	0.00017	0.0288	< 0.020	< 0.000050	0.067		0.00024		239	0.00011	0.00071	0.0002
CM_CCOFF	CM_CCOFF_WS 2022-04-05_NP	2022-04-05	-	0.0058	0.00031	0.00012	0.0283	0.000027	< 0.000050	0.125		0.000244		225	< 0.00010	0.00604	0.00034

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
				Acute																
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Coal Mountain Mine																				
CM CC1	CM CC1 WS 2022-01-04 N	2022-01-06	922	0.01	< 0.000050	0.0576	102	0.0744	0.0612	3.52	19.3	< 0.000010	49.6	1.02	0.000046	< 0.000010	< 0.000030	0.00611	0.014	
CM CC1	CM CC1 WS 2022-01-11 N	2022-01-11	913	< 0.010	< 0.000050	0.0501	101	0.0692	0.0569	3.34	17.8	< 0.000010	39.6	0.898	0.00004	< 0.000010	< 0.000030	0.00592	0.0118	
CM CC1	CM CC1 WS 2022-02-01 N	2022-02-01	1050	< 0.010	< 0.000050	0.0477	115	0.0727	0.0795	3.91	17.8	< 0.000010	37	1.01	0.000046	< 0.000010	< 0.000030	0.00645	0.0182	
CM CC1	CM CC1 WS 2022-03-01 N	2022-03-01	978	< 0.010	< 0.000050	0.0328	115	0.0269	0.0348	3.04	21	< 0.000010	25.9	0.695	0.000031	< 0.000010	< 0.000030	0.00606	0.0067	
CM CC1	CM CC1 WS 2022-03-15 N	2022-03-15	968	< 0.010	< 0.000050	0.0342	112	0.0255	0.03	3.2	23.3	< 0.000010	26.7	0.738	0.000033	< 0.000010	< 0.000030	0.00667	0.0058	
CM CC1	CM CC1 WS 2022-03-22 N	2022-03-22	1030	< 0.010	< 0.000050	0.0359	116	0.0259	0.0304	3.29	32.5	< 0.000010	29.6	0.768	0.000031	< 0.000010	< 0.000030	0.0063	0.0056	
CM CC1	CM CC1 WS 2022-03-29 N	2022-03-29	970	< 0.010	< 0.000050	0.0348	107	0.0348	0.0314	3.12	17.6	< 0.000010	26.1	0.73	0.00003	< 0.000010	< 0.000030	0.0055	0.006	
CM CC1	CM CC1 WS 2022-04-05 N	2022-04-05	899	< 0.010	< 0.000050	0.0444	100	0.0279	0.0283	2.79	16	< 0.000010	41.4	0.879	0.000032	< 0.000010	< 0.000030	0.00545	0.0057	
CM CC1	CM CC1 WS 2022-04-12 N	2022-04-12	889	< 0.010	< 0.000050	0.0464	100	0.0264	0.0287	3.05	18.8	< 0.000010	38.5	0.844	0.000032	< 0.000010	< 0.000030	0.00512	0.006	
CM CC1	CM CC1 WS 2022-04-19 N	2022-04-19	872	< 0.010	< 0.000050	0.0446	98.5	0.0269	0.0281	3.06	15	< 0.000010	43.5	0.882	0.000031	< 0.000010	< 0.000030	0.00526	0.0055	
CM CC1	CM CC1 WS 2022-04-26 N	2022-04-26	819	< 0.010	< 0.000050	0.0385	90.8	0.02985	0.0296	2.725	13.2	< 0.000010	37.1	0.776	0.000028	< 0.000010	< 0.000030	0.00487	0.00535	
CM CC1	CM CC1 WS 2022-05-03 N	2022-05-03	772	< 0.010	< 0.000050	0.0507	83.7	0.0864	0.0492	3.15	12.2	< 0.000010	43.2	0.857	0.000036	< 0.000010	< 0.000030	0.00461	0.0078	
CM CC1	CM CC1 2022-05-06 N2	2022-05-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CC1	CM CC1 2022-05-06 N1	2022-05-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CC1	CM CC1 2022-05-07 N1	2022-05-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CC1	CM CC1 WS 2022-05-10 N	2022-05-10	694	< 0.010	< 0.000050	0.0534	75.8	0.042	0.0377	2.81	16.9	< 0.000010	50.3	0.745	0.000035	< 0.000010	< 0.000030	0.00416	0.0146	
CM CC1	CM CC1 WS 2022-05-17 N	2022-05-17	731	< 0.010	< 0.000050	0.04445	78.85	0.062	0.0527	2.87	15.15	< 0.000010	35.65	0.7915	0.000038	< 0.000010	< 0.000030	0.004685	0.01695	
CM CC1	CM NNP WS 2022-05-17 N	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CC1	CM CC1 WS 2022-05-24 N	2022-05-24	-	< 0.010	< 0.000050	0.0369	82.3	0.0471	0.0454	2.94	18.8	< 0.000010	31	0.686	0.000034	< 0.000010	< 0.000030	0.00489	0.0171	
CM CC1	CM CC1 WS 2022-05-31 N	2022-05-31	-	< 0.010	< 0.000050	0.0286	70.4	0.0309	0.0357	2.64	21.1	< 0.000010	21.2	0.492	0.000032	< 0.000010	< 0.000030	0.004	0.0236	
CM CC1	CM CC1 WS 2022-06-07 N	2022-06-07	-	< 0.010	< 0.000050	0.0263	67.8	0.0374	0.0398	2.39	21.2	< 0.000010	16.8	0.476	0.000031	< 0.000010	< 0.000030	0.00389	0.0286	
CM CC1	CM CC1 WS 2022-06-14 N	2022-06-14	-	< 0.010	< 0.000050	0.0185	56.6	0.0289	0.0308	2.16	14.4	< 0.000010	10	0.361	0.000023	< 0.000010	< 0.000030	0.00338	0.0286	
CM CC1	CM CC1 WS 2022-06-21 N	2022-06-21	-	< 0.010	< 0.000050	0.026	67.95	0.0382	0.04105	2.505	16.1	< 0.000010	18.35	0.4755	0.0000325	< 0.000010	< 0.000030	0.00361	0.0333	
CM CC1	CM CC1 WS 2022-06-28 N	2022-06-28	-	< 0.010	< 0.000050	0.0364	87	0.0515	0.0583	3.1	17.6	< 0.000010	26.1	0.648	0.00004	< 0.000010	< 0.000030	0.00506	0.0332	
CM CC1	CM CC1 WS 2022-07-05 N	2022-07-05	-	< 0.010	< 0.000050	0.0385	94.5	0.0527	0.0626	3.25	19.2	< 0.000010	27.7	0.688	0.000041	< 0.000010	< 0.000030	0.00522	0.0205	
CM CC1	CM NNP WS 2022-07-12 N	2022-07-12	-	< 0.010	< 0.000050	0.04345	107.5	0.0529	0.07375	3.495	20.75	< 0.000010	26.65	0.76	0.0000475	< 0.000010	< 0.000030	0.00636	0.0107	
CM CC1	CM CC1 WS 2022-08-02 N	2022-08-02	-	< 0.010	< 0.000050	0.0512	107	0.0393	0.07805	3.69	16.35	< 0.000010	32.85	0.9295	0.0000565	< 0.000010	< 0.000030	0.006915	0.0031	
CM CC1	CM NNP WS 2022-08-02 N	2022-08-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CC1	CM CC1 2022-08-25 N1	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CC1	CM CC1 WS 2022-09-06 N	2022-09-06	-	< 0.010	< 0.000050	0.04225	118	0.0219	0.06755	3.88	17.95	< 0.000010	34.85	0.899	0.0000485	< 0.000010	< 0.000030	0.005895	0.003	
CM CC1	CM CC1 WS SEPT-2022 N	2022-09-08	-	< 0.010	< 0.000050	0.0502	124	0.0235	0.0694	4.02	17.2	< 0.000010	34.8	0.803	0.000047	< 0.000010	< 0.000030	0.00618	0.0031	
CM CC1	CM CC1 WS 2022-10-04 N	2022-10-04	-	< 0.010	< 0.000050	0.0384	118	0.0121	0.0474	3.58	22	< 0.000010	27.8	0.796	0.000036	< 0.000010	< 0.000030	0.00562	0.0027	
CM CC1	CM CC1 WS 2022-11-01 N	2022-11-01	-	< 0.020	< 0.000100	0.0366	118	0.0203	0.0446	3.46	17.3	< 0.000020	26.4	0.807	0.000036	< 0.000020	< 0.000060	0.00602	0.003	
CM CC1	CM CC1 WS 2022-12-06 N	2022-12-06	-	< 0.010	< 0.000050	0.0426	136	0.02805	0.03135	3.64	21.75	< 0.000010	34	0.81	0.000031	< 0.000010	< 0.000030	0.00609	0.0036	
CM_CCOFF	CM_CCOFF_WS 2022-01-04 NP	2022-01-06	-	0.011	< 0.000050	0.0626	115	0.0349	0.038	3.36	29.5	< 0.000010	61.4	1.14	0.000051	< 0.000010	< 0.000030	0.0064	0.034	
CM_CCOFF	CM_CCOFF_WS 2022-01-11 NP	2022-01-11	-	< 0.010	< 0.000050	0.0511	110	0.0207	0.0297	3.12	29.3	< 0.000010	43	0.955	0.000048	< 0.000010	< 0.000030	0.00674	0.0272	
CM_CCOFF	CM_CCOFF_WS 2022-01-18 NP	2022-01-18	-	< 0.010	< 0.000050	0.0351	125	0.0115	0.0276	3.39	32.8	< 0.000010	30.7	0.777	0.000044	< 0.000010	< 0.000030	0.00773	0.0237	
CM_CCOFF	CM_CCOFF_WS 2022-01-19 NP	2022-01-19	-	< 0.010	< 0.000050	0.0357	130	0.0106	0.0274	3.51	33.6	< 0.000010	31	0.806	0.000042	< 0.000010	< 0.000030	0.00736	0.0241	
CM_CCOFF	CM_CCOFF_WS 2022-01-25 NP	2022-01-25	-	< 0.010	< 0.000050	0.0366	134	0.00834	0.0256	3.59	36.5	< 0.000010	27	0.771	0.000044	< 0.000010	< 0.000030	0.00806	0.0221	
CM_CCOFF	CM_CCOFF_WS 2022-02-01 NP	2022-02-02	-	< 0.020	< 0.000100	0.0341	132	0.00734	0.0245	3.23	30.5	< 0.000020	26	0.718	0.00004	< 0.000020	< 0.000060	0.00799	0.0195	
CM_CCOFF	CM_CCOFF_WS 2022-02-08 N	2022-02-08	-	< 0.020	< 0.000100	0.0366	142	0.00744	0.0248	3.39	32	< 0.000020	26.3	0.768	0.000043	< 0.000020	< 0.000060	0.00784	0.0176	
CM_CCOFF	CM_CCOFF_WS 2022-02-15 NP	2022-02-15	-	< 0.010	< 0.000050	0.0363	138	0.00688	0.0251	3.45	35.9	< 0.000010	26.5	0.732	0.000043	< 0.000010	< 0.000030	0.00861	0.017	
CM_CCOFF	CM_CCOFF_WS 2022-02-22 NP	2022-02-22	-	< 0.020	< 0.000100	0.0326	137	0.0064	0.026	3.38	31	< 0.000020	25.1	0.751	0.000042	< 0.000020	< 0.000060	0.00881	0.0169	
CM_CCOFF	CM_CCOFF_WS 2022-03-01 NP	2022-03-01	-	< 0.010	< 0.000050	0.0341	146	0.00667	0.0243	3.77	32.3	< 0.000010	25.5	0.735	0.00004	< 0.000010	< 0.000030	0.00819	0.0151	
CM_CCOFF	CM_CCOFF_WS 2022-03-08 NP	2022-03-08	-	< 0.020	< 0.000100	0.038	146	0.00856	0.0256	3.7	31.3	< 0.000020	29.5	0.837	0.000041	< 0.000020	< 0.000060	0.00888	0.0148	
CM_CCOFF	CM_CCOFF_WS 2022-03-15 NP	2022-03-15	-	< 0.010	< 0.000050	0.0353	137	0.00756	0.0234	3.52	38.45	< 0.000010	26.1	0.764	0.000042	< 0.000010	< 0.000030	0.00876	0.013	
CM_CCOFF																				

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum mg/L		Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L		Calcium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	
				Acute	Chronic							Acute	Chronic				Acute	Chronic
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>e</sup>
Coal Mountain Mine	CM_CCOFF_WS_2022-04-12_NP	2022-04-12	-	0.0056	0.00032	0.00014	0.0263	< 0.020	< 0.000050	0.111		0.000202	228	0.00014	0.00392	0.00025		
	CM_CCOFF_WS_2022-04-19_NP	2022-04-19	-	0.0052	0.00031	0.00015	0.0276	< 0.020	< 0.000050	0.112		0.000147	221	0.00011	0.0029	0.00023		
	CM_CCOFF_WS_2022-04-26_NP	2022-04-26	-	0.0056	0.00029	0.00014	0.0276	< 0.020	< 0.000050	0.092		0.000151	187	< 0.00010	0.00234	0.00021		
	CM_CCOFF_WS_2022-05-03_NP	2022-05-03	-	0.0136	0.00034	0.00016	0.0275	< 0.020	< 0.000050	0.118		0.0000432	185	< 0.00010	0.00366	0.00022		
	CM_CCOFF_WS_2022-05-06_NP1	2022-05-06	-	-	-	-	-	-	-	-		-	-	-	-	-		
	CM_CCOFF_WS_2022-05-07_NP1	2022-05-07	-	-	-	-	-	-	-	-		-	-	-	-	-		
	CM_CCOFF_WS_2022-05-10_NP	2022-05-10	-	0.0194	0.00035	0.00018	0.0281	< 0.020	< 0.000050	0.111		0.00023	174	0.00011	0.00385	0.00026		
	CM_CCOFF_WS_2022-05-17_NP	2022-05-17	-	0.0127	0.00029	0.00014	0.0216	< 0.020	< 0.000050	0.071		0.000295	164	0.00014	0.00151	0.00029		
	CM_CCOFF_WS_2022-05-24_NP	2022-05-24	-	0.009	0.00027	0.00017	0.0206	< 0.020	< 0.000050	0.042		0.000365	151	0.00018	0.00075	0.00029		
	CM_CCOFF_WS_2022-05-31_NP	2022-05-31	-	0.0052	0.00029	0.00016	0.017	< 0.020	< 0.000050	0.037		0.000375	146	0.00012	0.00069	0.00023		
	CM_CCOFF_WS_2022-06-07_NP	2022-06-07	-	0.0028	0.0003	0.00014	0.0148	< 0.020	< 0.000050	0.028		0.000604	136	0.00012	0.0006	0.00028		
	CM_CCOFF_WS_2022-06-14_NP	2022-06-14	-	0.0029	0.00031	0.0002	0.0165	< 0.020	< 0.000050	0.027		0.000561	120	0.0001	0.00073	0.00027		
	CM_CCOFF_WS_2022-06-21_NP	2022-06-21	-	0.0031	0.00033	0.00011	0.0172	< 0.020	< 0.000050	0.038		0.000819	146	0.00012	0.00175	0.00041		
	CM_CCOFF_WS_2022-06-28_NP	2022-06-28	-	0.0029	0.0003	0.00017	0.0226	< 0.020	< 0.000050	0.044		0.000774	169	0.00011	0.00125	0.00037		
	CM_CCOFF_WS_2022-07-05_NP	2022-07-05	-	0.0025	0.0003	0.00016	0.0236	< 0.020	< 0.000050	0.053		0.000929	201	0.00013	0.00081	0.00032		
	CM_CCOFF_WS_2022-07-12_NP	2022-07-12	-	0.0018	0.00029	0.00017	0.0243	< 0.020	< 0.000050	0.044		0.000949	244	0.00014	0.00048	0.00033		
	CM_CCOFF_WS_2022-07-19_NP	2022-07-19	-	0.0029	0.00028	< 0.00020	0.0251	< 0.040	< 0.000100	0.068		0.000843	226	< 0.00020	0.00049	< 0.00040		
	CM_CCOFF_WS_2022-07-26_NP	2022-07-26	-	0.002	0.00037	0.00017	0.0254	< 0.020	< 0.000050	0.07		0.00078	255	< 0.00010	0.00041	0.00029		
	CM_CCOFF_WS_2022-08-02_NP	2022-08-02	-	< 0.0020	0.0003	< 0.00020	0.0257	< 0.040	< 0.000100	0.058		0.000581	240	< 0.00020	0.00052	< 0.00040		
	CM_CCOFF_WS_2022-08-09_NP	2022-08-09	-	0.0017	0.00033	0.0002	0.0279	< 0.020	< 0.000050	0.064		0.000568	260	< 0.00010	0.00043	0.00022		
	CM_CCOFF_WS_2022-08-16_NP	2022-08-16	-	0.0025	0.00029	< 0.00020	0.0254	< 0.040	< 0.000100	0.06		0.000524	235	< 0.00020	0.00042	< 0.00040		
	CM_CCOFF_WS_SESMP_2022-08_N	2022-08-16	-	0.0022	0.00034	0.00019	0.025	< 0.020	< 0.000050	0.057		0.000542	245	0.00012	0.00039	0.00026		
	CM_CCOFF_WS_2022-08-23_NP	2022-08-23	-	0.0018	0.0003	0.00024	0.0252	< 0.020	< 0.000050	0.067		0.000539	274	< 0.00010	0.0003	0.00027		
	CM_CCOFF_WS_2022-08-25_NP1	2022-08-25	-	-	-	-	-	-	-	-		-	-	-	-	-		
	CM_CCOFF_WS_2022-08-25_NP2	2022-08-25	-	-	-	-	-	-	-	-		-	-	-	-	-		
	CM_CCOFF_WS_2022-08-25_NP3	2022-08-25	-	-	-	-	-	-	-	-		-	-	-	-	-		
	CM_CCOFF_WS_2022-08-30_NP	2022-08-30	-	0.0017	0.0003	0.00019	0.0257	< 0.020	< 0.000050	0.064		0.000481	253	< 0.00010	0.00033	0.00021		
	CM_CCOFF_WS_2022-09-06_NP	2022-09-06	-	< 0.0020	0.00031	0.00021	0.0305	< 0.040	< 0.000100	0.067		0.000457	274	< 0.00020	0.00041	< 0.00040		
	CM_CCOFF_WS_2022-09-13_NP	2022-09-13	-	0.0027	0.00032	< 0.00020	0.0244	< 0.040	< 0.000100	0.062		0.000423	252	< 0.00020	0.00031	< 0.00040		
	CM_CCOFF_WS_2022-09-20_NP	2022-09-20	-	< 0.0020	0.00028	< 0.00020	0.0237	< 0.040	< 0.000100	0.067		0.000468	252	< 0.00020	0.0003	0.00025		
	CM_CCOFF_WS_2022-09-27_NP	2022-09-27	-	0.0016	0.00029	0.00019	0.026	< 0.020	< 0.000050	0.06		0.000453	273	0.00012	0.00028	0.00029		
	CM_CCOFF_WS_2022-10-04_NP	2022-10-04	-	< 0.0010	0.00028	0.0002	0.0262	< 0.020	< 0.000050	0.053		0.00047	278	< 0.00010	0.00027	0.00021		
	CM_CCOFF_WS_2022-10-11_NP	2022-10-11	-	0.0018	0.00029	0.00014	0.0263	< 0.020	< 0.000050	0.04		0.000535	290	0.00012	0.00027	0.00021		
	CM_CCOFF_WS_2022-10-18_NP	2022-10-18	-	0.003	0.00027	< 0.00020	0.026	< 0.040	< 0.000100	0.056		0.000437	294	< 0.00020	0.00033	0.0004		
	CM_CCOFF_WS_2022-10-25_NP	2022-10-25	-	< 0.0010	0.00027	0.0002	0.0248	< 0.020	< 0.000050	0.045		0.000463	275	< 0.00010	0.00029	< 0.00020		
	CM_CCOFF_WS_2022-11-01_NP	2022-11-01	-	0.0025	0.00027	< 0.00020	0.027	< 0.040	< 0.000100	0.078		0.000111	257	< 0.00020	0.00053	< 0.00040		
	CM_CCOFF_WS_2022-11-08_NP	2022-11-08	-	0.0039	0.00026	< 0.00020	0.0245	< 0.040	< 0.000100	0.09		0.000167	230	< 0.00020	0.00243	< 0.00040		
	CM_CCOFF_WS_2022-11-15_NP	2022-11-15	-	0.0049	0.0003	< 0.00020	0.0256	< 0.040	< 0.000100	0.109		0.000195	275	< 0.00020	0.00042	0.00082		
	CM_CCOFF_WS_2022-11-22_NP	2022-11-22	-	0.004	0.0003	0.00022	0.0273	< 0.040	< 0.000100	0.103		0.000176	251	< 0.00020	0.00345	< 0.00040		
	CM_CCOFF_WS_2022-11-29_NP	2022-11-29	-	0.0036	0.00034	0.00019	0.0257	< 0.020	< 0.000050	0.106		0.000169	311	< 0.00010	0.00275	0.00023		
	CM_CCOFF_WS_2022-12-06_NP	2022-12-07	-	0.0026	0.0003	0.00021	0.0222	< 0.040	< 0.000100	0.057		0.000185	274	< 0.00020	0.00133	< 0.00040		
	CM_CCOFF_WS_2022-12-13_NP	2022-12-13	-	0.0033	0.00032	0.00021	0.0254	< 0.020	< 0.000050	0.104		0.000178	295	0.00011	0.00137	0.0003		
	CM_CCOFF_WS_2022-12-28_NP	2022-12-28	-	< 0.0010	0.00026	0.00014	0.0251	< 0.020	< 0.000050	0.113		0.000128	266	< 0.00010	0.00098	< 0.00020		
	CM_SPD_WS_2022-01-04_N	2022-01-06	-	0.0175	0.00046333	< 0.00020	0.02063333	< 0.040	< 0.000100	0.081		0.000147667	166.4	< 0.00020	0.021167	< 0.00040		
	CM_SPD_WS_2022-01-11_N	2022-01-11	-	0.0054	0.00052	0.00017	0.0279	< 0.020	< 0.000050	0.094		0.000179	233	< 0.00010	0.024	< 0.00020		
	CM_SPD_WS_2022-02-01_N	2022-02-01	-	0.0051	0.0009	0.00015	0.023	< 0.020	< 0.000050	0.128		0.000329	261	< 0.00010	0.0318	< 0.00020		
	CM_SPD_WS_2022-02-01_N	2022-02-01	-	0.0029	0.000495	0.00012	0.0135	< 0.020	< 0.000050	0.088		0.000167	130.5	< 0.00010	0.0133	< 0.00020		
	CM_SPD_WS_2022-03-01_N	2022-03-01	-	0.0044	0.0005	< 0.00020	0.0277	< 0.040	< 0.000100	0.072		0.000108	235	< 0.00020	0.0182	< 0.00040		
	CM_SPD_WS_2022-03-15_N	2022-03-15	-	0.0034	0.00042	0.00015	0.0297	< 0.020	< 0.000050	0.056		0.000087	243	< 0.00010	0.0132	0.00022		
	CM_SPD_WS_2022-03-22_N	2022-03-22	-	0.0027	0.00044	0.00014	0.0312	< 0.020	< 0.000050	0.068		0.0000627	256	< 0.00010	0.0136	< 0.00020		

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
				Acute																
BC WQG FWAL			n/a	0.35																
Coal Mountain Mine																				
	CM_CCOFF_WS_2022-04-12_NP	2022-04-12	-	< 0.010	< 0.000050	0.0679	121	0.0318	0.0352	3.47	31.4	< 0.000010	59.3	1.2	0.000049	< 0.000010	< 0.000030	0.00738	0.0199	
	CM_CCOFF_WS_2022-04-19_NP	2022-04-19	-	< 0.010	< 0.000050	0.072	124	0.0272	0.0317	3.33	25.1	< 0.000010	69.3	1.2	0.000047	< 0.000010	< 0.000030	0.00718	0.0145	
	CM_CCOFF_WS_2022-04-26_NP	2022-04-26	-	< 0.010	< 0.000050	0.0625	108	0.0234	0.0273	3.1	22.3	< 0.000010	61.8	0.985	0.000037	< 0.000010	< 0.000030	0.00626	0.0141	
	CM_CCOFF_WS_2022-05-03_NP	2022-05-03	-	< 0.010	< 0.000050	0.0912	101	0.0246	0.0335	3.18	20.7	< 0.000010	91.6	1.19	0.000051	< 0.000010	< 0.000030	0.00557	0.0072	
	CM_CCOFF_WS_2022-05-06_NP1	2022-05-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	CM_CCOFF_WS_2022-05-07_NP1	2022-05-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	CM_CCOFF_WS_2022-05-10_NP	2022-05-10	-	< 0.010	< 0.000050	0.0662	94.8	0.0286	0.0322	3.13	25.5	< 0.000010	81.9	0.88	0.000045	< 0.000010	< 0.000030	0.00488	0.0256	
	CM_CCOFF_WS_2022-05-17_NP	2022-05-17	-	< 0.010	< 0.000050	0.0483	89.1	0.014	0.0221	2.76	26.5	< 0.000010	46.1	0.73	0.000035	< 0.000010	< 0.000030	0.00452	0.0233	
	CM_CCOFF_WS_2022-05-24_NP	2022-05-24	-	< 0.010	< 0.000050	0.033	90.7	0.00717	0.0201	2.76	28.8	< 0.000010	32	0.547	0.000032	< 0.000010	< 0.000030	0.00466	0.0237	
	CM_CCOFF_WS_2022-05-31_NP	2022-05-31	-	< 0.010	< 0.000050	0.0266	79.3	0.00712	0.0218	2.71	28.4	< 0.000010	20.6	0.41	0.000032	< 0.000010	< 0.000030	0.00411	0.0304	
	CM_CCOFF_WS_2022-06-07_NP	2022-06-07	-	0.011	< 0.000050	0.0212	73.4	0.00411	0.0237	2.32	30.3	< 0.000010	14.7	0.358	0.00003	< 0.000010	< 0.000030	0.00382	0.0424	
	CM_CCOFF_WS_2022-06-14_NP	2022-06-14	-	< 0.010	< 0.000050	0.0189	70.8	0.00475	0.0248	2.42	25.5	< 0.000010	14.8	0.315	0.000028	< 0.000010	< 0.000030	0.00333	0.0461	
	CM_CCOFF_WS_2022-06-21_NP	2022-06-21	-	< 0.010	< 0.000050	0.0256	83.4	0.00938	0.0309	2.73	27.6	< 0.000010	20.1	0.44	0.000041	< 0.000010	< 0.000030	0.00399	0.0529	
	CM_CCOFF_WS_2022-06-28_NP	2022-06-28	-	< 0.010	< 0.000050	0.0276	93.2	0.00832	0.03	2.68	25	< 0.000010	22.3	0.494	0.00004	< 0.000010	< 0.000030	0.00456	0.0552	
	CM_CCOFF_WS_2022-07-05_NP	2022-07-05	-	< 0.010	< 0.000050	0.0324	118	0.00802	0.0351	3.21	33.4	< 0.000010	26	0.59	0.000044	< 0.000010	< 0.000030	0.00588	0.0541	
	CM_CCOFF_WS_2022-07-12_NP	2022-07-12	-	< 0.010	< 0.000050	0.0288	137	0.00421	0.0356	3.28	38.2	< 0.000010	16.9	0.536	0.000046	< 0.000010	< 0.000030	0.00708	0.0544	
	CM_CCOFF_WS_2022-07-19_NP	2022-07-19	-	< 0.020	< 0.000100	0.0275	131	0.00504	0.0354	3.2	30.9	< 0.000020	22.7	0.582	0.000044	< 0.000020	< 0.000060	0.00682	0.0509	
	CM_CCOFF_WS_2022-07-26_NP	2022-07-26	-	< 0.010	< 0.000050	0.0398	132	0.00491	0.0357	3.48	36.4	< 0.000010	25	0.845	0.000066	< 0.000010	< 0.000030	0.00934	0.0485	
	CM_CCOFF_WS_2022-08-02_NP	2022-08-02	-	< 0.020	< 0.000100	0.0337	140	0.00526	0.0352	3.44	30.2	< 0.000020	23.8	0.679	0.000053	< 0.000020	< 0.000060	0.00779	0.0403	
	CM_CCOFF_WS_2022-08-09_NP	2022-08-09	-	< 0.010	< 0.000050	0.0355	161	0.0047	0.037	3.81	40.4	< 0.000010	24.7	0.708	0.00006	< 0.000010	< 0.000030	0.00889	0.0427	
	CM_CCOFF_WS_2022-08-16_NP	2022-08-16	-	< 0.020	< 0.000100	0.0342	151	0.00423	0.0361	3.51	32.4	< 0.000020	23.3	0.64	0.000052	< 0.000020	< 0.000060	0.00804	0.0344	
	CM_CCOFF_WS_SESMP_2022-08_N	2022-08-16	-	< 0.010	< 0.000050	0.0348	149	0.00435	0.0362	3.56	39.2	< 0.000010	22.8	0.691	0.000059	< 0.000010	< 0.000030	0.00824	0.0322	
	CM_CCOFF_WS_2022-08-23_NP	2022-08-23	-	< 0.010	< 0.000050	0.0367	160	0.0049	0.0381	3.83	38.4	< 0.000010	25.2	0.722	0.000055	< 0.000010	< 0.000030	0.00823	0.0364	
	CM_CCOFF_WS_2022-08-25_NP1	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	CM_CCOFF_WS_2022-08-25_NP2	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	CM_CCOFF_WS_2022-08-25_NP3	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	CM_CCOFF_WS_2022-08-30_NP	2022-08-30	-	< 0.010	< 0.000050	0.0438	150	0.00478	0.0373	3.69	36	< 0.000010	24.4	0.747	0.000056	< 0.000010	< 0.000030	0.00868	0.033	
	CM_CCOFF_WS_2022-09-06_NP	2022-09-06	-	< 0.020	< 0.000100	0.0326	162	0.00499	0.0389	3.92	34.8	< 0.000020	27.4	0.786	0.000056	< 0.000020	< 0.000060	0.00806	0.032	
	CM_CCOFF_WS_2022-09-13_NP	2022-09-13	-	< 0.020	< 0.000100	0.0371	158	0.00451	0.0364	3.76	31.5	< 0.000020	25.3	0.743	0.000054	< 0.000020	< 0.000060	0.00833	0.0277	
	CM_CCOFF_WS_2022-09-20_NP	2022-09-20	-	< 0.020	< 0.000100	0.0349	150	0.00451	0.0369	3.77	37	< 0.000020	22.2	0.676	0.00005	< 0.000020	< 0.000060	0.00774	0.0353	
	CM_CCOFF_WS_2022-09-27_NP	2022-09-27	-	< 0.010	< 0.000050	0.0361	167	0.00476	0.0394	3.75	37.8	< 0.000010	25.2	0.8	0.000054	< 0.000010	< 0.000030	0.00851	0.0312	
	CM_CCOFF_WS_2022-10-04_NP	2022-10-04	-	< 0.010	< 0.000050	0.0315	161	0.00497	0.0397	3.98	44.4	< 0.000010	20.2	0.697	0.000054	< 0.000010	< 0.000030	0.00814	0.0281	
	CM_CCOFF_WS_2022-10-11_NP	2022-10-11	-	< 0.010	< 0.000050	0.0294	157	0.00662	0.0398	3.93	40.3	< 0.000010	15.9	0.614	0.000054	< 0.000010	< 0.000030	0.00857	0.0387	
	CM_CCOFF_WS_2022-10-18_NP	2022-10-18	-	< 0.020	< 0.000100	0.0295	165	0.00701	0.0373	3.78	32.9	< 0.000020	19.7	0.696	0.000054	< 0.000020	< 0.000060	0.00862	0.0336	
	CM_CCOFF_WS_2022-10-25_NP	2022-10-25	-	< 0.010	< 0.000050	0.0287	161	0.00601	0.0386	3.67	35.1	< 0.000010	16.5	0.588	0.000051	< 0.000020	< 0.000030	0.00821	0.0343	
	CM_CCOFF_WS_2022-11-01_NP	2022-11-01	-	< 0.020	< 0.000100	0.0351	150	0.00956	0.0342	3.73	32.8	< 0.000020	26	0.824	0.000046	< 0.000020	< 0.000060	0.00795	0.0141	
	CM_CCOFF_WS_2022-11-08_NP	2022-11-08	-	< 0.020	< 0.000100	0.0424	145	0.0207	0.0348	3.48	32.9	< 0.000020	30.9	0.921	0.000048	< 0.000020	< 0.000060	0.00745	0.0153	
	CM_CCOFF_WS_2022-11-15_NP	2022-11-15	-	< 0.020	< 0.000100	0.0476	161	0.0318	0.0423	3.72	31.1	< 0.000020	43.2	1.06	0.000053	< 0.000020	< 0.000060	0.00883	0.0204	
	CM_CCOFF_WS_2022-11-22_NP	2022-11-22	-	< 0.020	< 0.000100	0.0541	143	0.0312	0.0384	3.9	30.8	< 0.000020	46	1.13	0.00005	< 0.000020	< 0.000060	0.00826	0.0161	
	CM_CCOFF_WS_2022-11-29_NP	2022-11-29	-	< 0.010	< 0.000050	0.0533	167	0.0304	0.0387	3.98	35	< 0.000010	43.5	1.19	0.000059	< 0.000010	< 0.000030	0.00978	0.0149	
	CM_CCOFF_WS_2022-12-06_NP	2022-12-07	-	< 0.020	< 0.000100	0.0406	164	0.019	0.032	3.81	31.3	< 0.000020	27	0.812	0.000063	< 0.000020	< 0.000060	0.00929	0.0142	
	CM_CCOFF_WS_2022-12-13_NP	2022-12-13	-	< 0.010	< 0.000050	0.0485	162	0.019	0.0283	3.64	34.7	< 0.000010	40.1	1.14	0.000054	< 0.000010	< 0.000030	0.00967	0.0108	
	CM_CCOFF_WS_2022-12-28_NP	2022-12-28	-	< 0.010	< 0.000050	0.0505	160	0.017	0.0259	3.52	39.5	< 0.000010	39.9	1	0.000045	< 0.000010	< 0.000030	0.00853	0.0088	
	CM_SPD_CM_NNP_WS_2022-01-04_N	2022-01-06	-	< 0.020	< 0.000100	0.0463333333	75.68833333	0.1547	0.1008333333	3.266666667	4.786666667	< 0.000020	29.91666667	0.830066667	3.96667E-05	< 0.000020	0.000416667	0.00523	0.022	
	CM_SPD_CM_SPD_WS_2022-01-11_N	2022-01-11	-	< 0.010	< 0.000050	0.0606	109	0.172	0.116	4.25	7.87	< 0.000010	39	1.11	0.000051	< 0.000010	< 0.000030	0.00691	0.0213	
	CM_SPD_CM_SPD_WS_2022-02-01_N	2022-02-01	-	< 0.010	< 0.000050	0.0765	111	0.171	0.111	5.12	5.88	< 0.000010	50.9	1.42	0.000078	< 0.000010	< 0.000030	0.00727	0.0374	
	CM_SPD_CM_NNP_WS_2022-02-01_N	2022-02-01	-	< 0.010	< 0.000050	0.03795	55.0025	0.08755	0.08425	2.535										

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper	
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Acute	Chronic								Acute	Chronic				Acute	Chronic		
<b>BC WQG FWAL</b>			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>g</sup>
<b>Coal Mountain Mine</b>																		
CM SPD	CM SPD_WS_2022-03-29_N	2022-03-29	-	0.0033	0.00037	0.00014	0.0322	< 0.020	< 0.000050	0.05		0.000067	213	< 0.00010	0.0119	< 0.00020		
CM SPD	CM SPD_WS_2022-04-05_N	2022-04-05	-	0.006	0.00039	0.00016	0.0308	< 0.020	< 0.000050	0.051		0.0000699	221	< 0.00010	0.0107	< 0.00020		
CM SPD	CM SPD_WS_2022-04-12_N	2022-04-12	-	0.0058	0.00038	0.00013	0.0312	< 0.020	< 0.000050	0.055		0.0000639	217	< 0.00010	0.0117	0.00023		
CM SPD	CM SPD_WS_2022-04-19_N	2022-04-19	-	0.0065	0.00043	0.00018	0.0346	< 0.020	< 0.000050	0.058		0.0000537	219	< 0.00010	0.0118	< 0.00020		
CM SPD	CM SPD_WS_2022-04-26_N	2022-04-26	-	0.0036	0.00034	0.00014	0.0281	< 0.020	< 0.000050	0.051		0.000053	195	< 0.00010	0.0102	< 0.00020		
CM SPD	CM SPD_WS_2022-04-27_N	2022-04-27	-	0.0036	0.00032	0.00012	0.0286	< 0.020	< 0.000050	0.052		0.0000649	195	< 0.00010	0.00984	< 0.00020		
CM SPD	CM SPD_WS_2022-04-28_N	2022-04-28	-	0.0042	0.00037	0.00015	0.0314	< 0.020	< 0.000050	0.062		0.0000787	200	< 0.00010	0.0127	0.0003		
CM SPD	CM SPD_WS_2022-04-29_N	2022-04-29	-	0.0045	0.00042	0.00013	0.0328	< 0.020	< 0.000050	0.073		0.0000962	206	< 0.00010	0.0166	0.00028		
CM SPD	CM SPD_WS_2022-05-03_N	2022-05-03	-	0.0049	0.00043	0.00014	0.0318	< 0.020	< 0.000050	0.075		0.000125	185	< 0.00010	0.018	0.0002		
CM SPD	CM SPD_2022-05-06_N2	2022-05-06	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
CM SPD	CM SPD_2022-05-06_N1	2022-05-06	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
CM SPD	CM SPD_2022-05-07_N1	2022-05-07	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
CM SPD	CM NNP_WS_2022-05-10_N	2022-05-10	-	0.003566667	0.00033333	0.00011333	0.02453333	< 0.020	< 0.000050	0.051333		0.000129667	110.4	< 0.00010	0.0103	0.000226667		
CM SPD	CM SPD_WS_2022-05-17_N	2022-05-17	-	0.004	0.00059	0.00012	0.0286	< 0.020	< 0.000050	0.091		0.000292	193	< 0.00010	0.0215	0.00028		
CM SPD	CM NNP_WS_2022-05-24_N	2022-05-24	-	0.0033	0.00042	0.00013333	0.01906667	< 0.020	< 0.000050	0.069		0.000167333	127.7	< 0.00010	0.015267	< 0.00020		
CM SPD	CM NNP_WS_2022-05-31_N	2022-05-31	-	0.0028	0.00043333	0.00014333	0.01846667	< 0.020	< 0.000050	0.062667		0.000165	130.4	< 0.00010	0.016433	0.000246667		
CM SPD	CM NNP_WS_2022-06-07_N	2022-06-07	-	0.002266667	0.00039667	< 0.00020	0.01556667	< 0.040	< 0.000100	0.058333		0.000125667	131.4	< 0.00020	0.020333	< 0.00040		
CM SPD	CM SPD_WS_2022-06-14_N	2022-06-14	-	0.0032	0.00046	0.00015	0.0358	< 0.020	< 0.000050	0.073		0.000137	164	< 0.00010	0.0224	0.00025		
CM SPD	CM SPD_2022-06-15_N1	2022-06-15	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
CM SPD	CM SPD_WS_2022-06-21_N	2022-06-21	-	0.0037	0.00061	0.00019	0.0297	< 0.020	< 0.000050	0.1		0.000208	199	< 0.00010	0.0309	< 0.00020		
CM SPD	CM SPD_WS_2022-06-28_N	2022-06-28	-	0.0022	0.00081	0.00018	0.0236	< 0.020	< 0.000050	0.096		0.000193	234	< 0.00010	0.0356	< 0.00020		
CM SPD	CM NNP_WS_2022-07-05_N	2022-07-05	-	0.002066667	0.00056333	0.00017333	0.01373333	< 0.020	< 0.000050	0.079667		0.000073	141.7	< 0.00010	0.020533	< 0.00020		
CM SPD	CM SPD_WS_2022-07-12_N	2022-07-12	-	0.0017	0.00092	0.00018	0.0188	< 0.020	< 0.000050	0.138		0.0000601	247	< 0.00010	0.0336	< 0.00020		
CM SPD	CM SPD_WS_2022-07-26_N	2022-07-26	-	0.0021	0.00101	0.00019	0.0187	< 0.020	< 0.000050	0.137		0.0000847	220	< 0.00010	0.0285	< 0.00020		
CM SPD	CM SPD_WS_2022-08-02_N	2022-08-02	-	< 0.0010	0.00113	0.00022	0.0162	< 0.020	< 0.000050	0.147		0.000132	244	< 0.00010	0.0264	< 0.00020		
CM SPD	CM SPD_WS_2022-08-09_N	2022-08-09	-	0.0023	0.00107	0.00024	0.0163	< 0.020	< 0.000050	0.152		0.000169	222	< 0.00010	0.0262	0.00022		
CM SPD	CM SPD_WS_2022-08-10_N	2022-08-10	-	0.0018	0.001	0.00019	0.0168	< 0.020	< 0.000050	0.15		0.000144	230	< 0.00010	0.0273	< 0.00020		
CM SPD	CM SPD_WS_2022-08-11_N	2022-08-11	-	0.0022	0.00105	0.00018	0.0168	< 0.020	< 0.000050	0.161		0.00018	235	< 0.00010	0.0263	< 0.00020		
CM SPD	CM SPD_WS_SESMP_2022-08_N	2022-08-16	-	0.003	0.00106	0.00019	0.0152	< 0.020	< 0.000050	0.151		0.000182	218	< 0.00010	0.0236	< 0.00020		
CM SPD	CM SPD_2022-08-25_N1	2022-08-25	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
CM SPD	CM SPD_WS_2022-09-06_N	2022-09-06	-	0.002	0.00098	0.00022	0.0211	< 0.020	< 0.000050	0.126		0.0000744	217	< 0.00010	0.0158	< 0.00020		
CM SPD	CM SPD_WS_2022-10-04_N	2022-10-04	-	0.001166667	0.00053	0.00021667	0.01526667	< 0.020	< 0.000050	0.074		1.85333E-05	155.7	< 0.00010	0.0071	< 0.00020		
CM SPD	CM SPD_WS_2022-11-01_N	2022-11-01	-	< 0.0020	0.00054	< 0.00020	0.0252	< 0.040	< 0.000100	0.1		0.000022	238	< 0.00020	0.0121	< 0.00040		
CM SPD	CM SPD_WS_2022-11-17_N	2022-11-17	-	0.0022	0.00047	0.00019	0.0346	< 0.020	< 0.000050	0.074		0.0000292	240	< 0.00010	0.0117	< 0.00020		

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL



APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
				Acute																
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Coal Mountain Mine</b>																				
CM SPD	CM SPD_WS_2022-03-29_N	2022-03-29	-	< 0.010	< 0.000050	0.0427	108	0.0917	0.0639	3.38	8.18	< 0.000010	28.4	0.74	0.000028	< 0.00010	< 0.00030	0.00493	0.0101	
CM SPD	CM SPD_WS_2022-04-05_N	2022-04-05	-	< 0.010	< 0.000050	0.0374	111	0.0809	0.0596	3.31	9.75	< 0.000010	28.1	0.786	0.000029	< 0.00010	< 0.00030	0.00561	0.0108	
CM SPD	CM SPD_WS_2022-04-12_N	2022-04-12	-	< 0.010	< 0.000050	0.0435	109	0.0854	0.0628	3.67	10.9	< 0.000010	28.7	0.804	0.000028	< 0.00010	< 0.00030	0.0049	0.0116	
CM SPD	CM SPD_WS_2022-04-19_N	2022-04-19	-	< 0.010	< 0.000050	0.0395	111	0.0894	0.063	3.77	9.14	< 0.000010	31	0.883	0.000028	< 0.00010	< 0.00030	0.00536	0.0117	
CM SPD	CM SPD_WS_2022-04-26_N	2022-04-26	-	< 0.010	< 0.000050	0.0372	101	0.0721	0.0565	3.2	9.27	< 0.000010	28.2	0.729	0.000026	< 0.00010	< 0.00030	0.00511	0.0084	
CM SPD	CM SPD_WS_2022-04-27_N	2022-04-27	-	< 0.010	< 0.000050	0.0366	97.5	0.0697	0.055	2.9	8.85	< 0.000010	25.8	0.691	0.000028	< 0.00010	< 0.00030	0.00448	0.0091	
CM SPD	CM SPD_WS_2022-04-28_N	2022-04-28	-	< 0.010	< 0.000050	0.0403	97	0.09	0.0652	3.43	9.62	< 0.000010	27.4	0.794	0.000033	< 0.00010	< 0.00030	0.00513	0.0113	
CM SPD	CM SPD_WS_2022-04-29_N	2022-04-29	-	< 0.010	< 0.000050	0.0465	96.2	0.122	0.0808	3.92	9.17	< 0.000010	31	0.857	0.000038	< 0.00010	< 0.00030	0.00539	0.0122	
CM SPD	CM SPD_WS_2022-05-03_N	2022-05-03	-	< 0.010	< 0.000050	0.0433	87	0.133	0.082	3.63	8.84	< 0.000010	28.1	0.878	0.000039	< 0.00010	< 0.00030	0.0052	0.0139	
CM SPD	CM SPD_2022-05-06_N2	2022-05-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM SPD	CM SPD_2022-05-06_N1	2022-05-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM SPD	CM SPD_2022-05-07_N1	2022-05-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM SPD	CM NNP_WS_2022-05-10_N	2022-05-10	-	< 0.010	< 0.000050	0.026666667	49.06833333	0.073033333	0.049266667	2.163333333	8.016666667	< 0.000010	16.28333333	0.506733333	2.76667E-05	< 0.00010	< 0.00030	0.003103333	0.013733333	
CM SPD	CM SPD_WS_2022-05-17_N	2022-05-17	-	< 0.010	< 0.000050	0.0523	86.4	0.146	0.106	3.73	9.63	< 0.000010	31.8	1.01	0.000052	< 0.00010	< 0.00030	0.00607	0.0295	
CM SPD	CM NNP_WS_2022-05-24_N	2022-05-24	-	< 0.010	< 0.000050	0.035533333	59.80166667	0.093666667	0.074166667	2.623333333	6.403333333	< 0.000010	23.25	0.716733333	3.86667E-05	< 0.00010	< 0.00030	0.004363333	0.018	
CM SPD	CM NNP_WS_2022-05-31_N	2022-05-31	-	< 0.010	< 0.000050	0.036233333	56.96833333	0.093666667	0.079166667	2.676666667	6.266666667	< 0.000010	22.48333333	0.642066667	4.13333E-05	< 0.00010	< 0.00030	0.00411	0.019466667	
CM SPD	CM NNP_WS_2022-06-07_N	2022-06-07	-	< 0.020	< 0.000100	0.040733333	55.50166667	0.128033333	0.0885	2.546666667	4.033333333	< 0.000020	21.91666667	0.6934	3.66667E-05	< 0.00020	< 0.00060	0.004436667	0.015633333	
CM SPD	CM SPD_WS_2022-06-14_N	2022-06-14	-	< 0.010	< 0.000050	0.0448	73.4	0.154	0.0959	3.48	6.13	< 0.000010	27.7	0.821	0.00004	< 0.00010	< 0.00030	0.00499	0.0164	
CM SPD	CM SPD_2022-06-15_N1	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM SPD	CM SPD_WS_2022-06-21_N	2022-06-21	-	< 0.010	< 0.000050	0.0564	87.6	0.195	0.133	4.06	8.25	< 0.000010	33.9	1.04	0.000052	< 0.00010	< 0.00030	0.00639	0.0229	
CM SPD	CM SPD_WS_2022-06-28_N	2022-06-28	-	< 0.010	< 0.000050	0.0685	98.4	0.202	0.162	4.69	5.82	< 0.000010	41.5	1.18	0.000057	< 0.00010	< 0.00030	0.0074	0.0263	
CM SPD	CM NNP_WS_2022-07-05_N	2022-07-05	-	< 0.010	< 0.000050	0.045533333	60.50166667	0.114366667	0.1005	2.953333333	3.463333333	< 0.000010	26.65	0.766733333	4.46667E-05	< 0.00010	< 0.00030	0.004556667	0.010433333	
CM SPD	CM SPD_WS_2022-07-12_N	2022-07-12	-	< 0.010	< 0.000050	0.0803	105	0.166	0.171	4.9	5.08	< 0.000010	47.7	1.3	0.000072	< 0.00010	< 0.00030	0.00775	0.0098	
CM SPD	CM SPD_WS_2022-07-26_N	2022-07-26	-	< 0.010	< 0.000050	0.0782	94	0.128	0.164	4.89	4.41	0.000011	46.7	1.4	0.00008	< 0.00010	< 0.00030	0.00836	0.0063	
CM SPD	CM SPD_WS_2022-08-02_N	2022-08-02	-	< 0.010	< 0.000050	0.0839	100	0.102	0.162	4.89	4.14	< 0.000010	49.2	1.38	0.000078	< 0.00010	< 0.00030	0.00781	0.0038	
CM SPD	CM SPD_WS_2022-08-09_N	2022-08-09	-	< 0.010	< 0.000050	0.0898	98.9	0.0866	0.173	5.46	4.5	< 0.000010	52	1.35	0.000075	< 0.00010	< 0.00030	0.00722	0.0054	
CM SPD	CM SPD_WS_2022-08-10_N	2022-08-10	-	< 0.010	< 0.000050	0.08	108	0.114	0.178	5.46	4.5	< 0.000010	53.5	1.33	0.000078	< 0.00010	< 0.00030	0.0075	0.0058	
CM SPD	CM SPD_WS_2022-08-11_N	2022-08-11	-	< 0.010	< 0.000050	0.0797	113	0.109	0.164	5.18	5.1	< 0.000010	54.7	1.35	0.00008	< 0.00010	< 0.00030	0.00785	0.0089	
CM SPD	CM SPD_WS_SESMP_2022-08_N	2022-08-16	-	0.011	< 0.000050	0.0816	103	0.093	0.165	5.08	4.37	< 0.000010	49.8	1.32	0.000078	< 0.00010	< 0.00030	0.00756	0.0059	
CM SPD	CM SPD_2022-08-25_N1	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM SPD	CM SPD_WS_2022-09-06_N	2022-09-06	-	< 0.010	< 0.000050	0.0872	103	0.0546	0.133	4.88	5.13	< 0.000010	49.1	1.24	0.000065	< 0.00010	< 0.00030	0.00834	0.0035	
CM SPD	CM SPD_WS_2022-10-04_N	2022-10-04	-	< 0.010	< 0.000050	0.044933333	79.335	0.023866667	0.078166667	3.296666667	4.676666667	< 0.000010	30.05	0.790066667	3.36667E-05	< 0.00010	< 0.00030	0.004416667	0.0014	
CM SPD	CM SPD_WS_2022-11-01_N	2022-11-01	-	< 0.020	< 0.000100	0.0568	112	0.0555	0.0992	4.47	5.91	< 0.000020	36.2	1.06	0.000038	< 0.00020	< 0.00060	0.0065	0.0028	
CM SPD	CM SPD_WS_2022-11-17_N	2022-11-17	-	< 0.010	< 0.000050	0.0542	121	0.0766	0.0819	4.41	9.41	< 0.000010	36.4	1.09	0.000034	< 0.00010	< 0.00030	0.00668	0.0072	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper		
				Acute mg/L	Chronic mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Acute mg/L	Chronic mg/L	mg/L	mg/L	mg/L	mg/L	Acute mg/L
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	n/a	BLM <sup>d</sup>
<b>Elkview Operation</b>																			
EV AQ6	EV AQ6 WS 2022-01 N	2022-01-07	-	0.0015		0.00013	0.00016	0.197	< 0.020	< 0.000050	0.017		0.0000081		85	0.0001	< 0.00010		0.00021
EV AQ6	EV AQ6 WS 2022-02 MON N	2022-02-07	-	< 0.0010		0.00012	0.00015	0.181	< 0.020	< 0.000050	0.017		0.0000052		78	< 0.00010	< 0.00010		< 0.00020
EV AQ6	EV AQ6 WS 2022-03 MON N	2022-03-16	-	0.0022		0.00015	0.0002	0.217	< 0.020	< 0.000050	0.015		0.0000081		100	< 0.00010	< 0.10		0.00031
EV AQ6	EV AQ6 WS 2022-03 WEK13 N	2022-03-22	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-03 WEK14 N	2022-03-28	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-04 WEK15 N	2022-04-04	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-02 N	2022-04-12	-	0.0023		0.00016	0.00016	0.247	< 0.020	< 0.000050	0.016		0.0000109		89	< 0.00010	< 0.10		< 0.00060
EV AQ6	EV MC5 WS 2022-02 N	2022-04-13	-	0.0033		0.00017	0.00016	0.26	< 0.020	< 0.000050	0.016		0.0000108		89.5	< 0.00010	< 0.10		< 0.00060
EV AQ6	EV MC7 WS 2022-02 N	2022-04-13	< 0.50	< 0.0010		< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010		< 0.0050		< 0.050	< 0.00010	< 0.10		< 0.00020
EV AQ6	EV AQ6 WS 2022-04 WEK17 N	2022-04-18	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-04 WEK18 N	2022-04-26	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-05 MON N	2022-05-03	-	0.0047		0.00014	0.00015	0.228	< 0.020	< 0.000050	0.017		< 0.0050		84.6	< 0.00010	< 0.10		0.0003
EV AQ6	EV AQ6 WS 2022-05 WEK20 N	2022-05-11	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-05 WEK21 N	2022-05-16	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-05 WEK22 N	2022-05-24	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-05 WEK23 N	2022-05-30	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV MC8 WS 2022-06 MON N	2022-06-07	-	< 0.0010		< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010		< 0.0050		< 0.050	< 0.00010	< 0.10		< 0.00020
EV AQ6	EV MC6 WS 2022-06 MON N	2022-06-07	-	0.0018		0.00014	0.00017	0.178	< 0.020	< 0.000050	0.018		< 0.0050		93.7	< 0.00010	< 0.10		0.00022
EV AQ6	EV AQ6 WS 2022-06 MON N	2022-06-08	-	0.0019		0.00013	0.00013	0.172	< 0.020	< 0.000050	0.018		< 0.0050		86.4	< 0.00010	< 0.10		0.00021
EV AQ6	EV AQ6 WS 2022-06-13 N 1743	2022-06-13	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-06 WEK25 N	2022-06-13	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-06-14 N 1725	2022-06-14	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-06-14 N 0650	2022-06-14	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-06 WEK26 N	2022-06-21	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-06 WEK27 N	2022-06-28	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-03 N	2022-07-06	-	0.002		0.00014	0.0002	0.247	< 0.020	< 0.000050	0.017		0.0000059		86.5	< 0.00010	< 0.10		0.00034
EV AQ6	EV MC8 WS 2022-03 N	2022-07-08	-	0.0014		0.00014	0.00019	0.242	< 0.020	< 0.000050	0.017		< 0.0050		82.4	< 0.00010	< 0.10		0.00028
EV AQ6	EV MC8 WS 2022-03 N	2022-07-08	-	< 0.0010		< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010		< 0.0050		< 0.050	< 0.00010	< 0.10		< 0.00020
EV AQ6	EV AQ6 WS 2022-07 WEK29 N	2022-07-12	-	-		-	-	-	-	-	-		-		-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-08 MON N	2022-08-10	-	0.0024		0.00013	0.00025	0.174	< 0.020	< 0.000050	0.02		< 0.0050		63	0.00015	< 0.10		0.00029
EV AQ6	EV AQ6 WS SESMP 2022_08_N	2022-08-11	-	0.002		0.00013	0.00023	0.184	< 0.020	< 0.000050	0.019		< 0.0050		62.9	< 0.00010	< 0.10		0.00028
EV AQ6	EV AQ6 WS 2022-09 MON N	2022-09-07	-	0.0048		0.00012	0.0002	0.173	< 0.020	< 0.000050	0.018		< 0.0050		57.7	< 0.00010	< 0.10		0.00041
EV AQ6	EV MC8 WS 2022-09 MON N	2022-09-07	-	< 0.0010		< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010		< 0.0050		< 0.050	< 0.00010	< 0.10		< 0.00020
EV AQ6	EV AQ6 WS 2022-09-08 N	2022-09-08	-	0.0017		0.00013	0.00024	0.196	< 0.020	< 0.000050	0.018		< 0.0050		57.4	< 0.00010	< 0.10		< 0.00020
EV AQ6	EV AQ6 WS 2022-09-09 N	2022-09-09	-	< 0.0010		0.00012	0.00024	0.193	< 0.020	< 0.000050	0.017		< 0.0050		55	< 0.00010	< 0.10		< 0.00020
EV AQ6	EV AQ6 WS 2022-09-10 N	2022-09-10	-	0.0012		0.00012	0.00024	0.189	< 0.020	< 0.000050	0.018		< 0.0050		58.7	< 0.00010	< 0.10		0.0003
EV AQ6	EV AQ6 WS 2022-04 N	2022-10-07	-	< 0.0010		0.00012	0.00018	0.177	< 0.020	< 0.000050	0.02		< 0.0050		58.8	< 0.00010	< 0.10		< 0.00020
EV AQ6	EV MC6 WS 2022-04 N	2022-10-07	-	< 0.0010		0.00012	0.00021	0.179	< 0.020	< 0.000050	0.021		< 0.0050		59.2	< 0.00010	< 0.10		0.0002
EV AQ6	EV MC8 WS 2022-04 N	2022-10-07	-	< 0.0010		< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010		< 0.0050		< 0.050	< 0.00010	< 0.10		< 0.00020
EV AQ6	EV AQ6 WS 2022-11 MON N	2022-11-09	-	0.0032		0.00012	0.00017	0.204	< 0.020	< 0.000050	0.016		0.0000082		78.9	< 0.00010	< 0.10		< 0.00020
EV AQ6	EV MC6 WS 2022-11 MON N	2022-11-09	-	0.0038		0.00012	0.0002	0.195	< 0.020	< 0.000050	0.016		0.000009		79.4	< 0.00010	0.0001		0.0002
EV AQ6	EV MC8 WS 2022-11 MON N	2022-11-09	-	< 0.0010		< 0.00010	< 0.00010	0.00035	< 0.020	< 0.000050	< 0.010		< 0.0050		< 0.050	< 0.00010	< 0.10		0.00065
EV BC1	EV BC1 WS 2022-01-03_N-SRF	2022-01-03	-	< 0.0020		0.00054	0.00024	0.0567	< 0.040	< 0.000100	0.074		0.0000954		243	< 0.00020	0.00053		0.00063
EV BC1	EV BC1 WS 2022_Q1_N	2022-01-18	-	0.0031		0.00058	0.00023	0.0512	< 0.040	< 0.000100	0.07		0.000112		267	< 0.00020	0.00038		< 0.00040
EV BC1	EV BC1 WS 2022-01-18_N-SRF	2022-01-18	-	0.0035		0.00057	0.00023	0.0573	< 0.040	< 0.000100	0.068		0.000118		271	< 0.00020	0.00044		< 0.00040
EV BC1	EV BC1 WS 2022-02-01_N-SRF	2022-02-01	-	0.0038		0.00057	0.00024	0.0558	< 0.040	< 0.000100	0.062		0.000116		301	< 0.00020	0.00039		< 0.00040
EV BC1	EV BC1 WS 2022-02 MON N	2022-02-08	-	0.0029		0.00098	< 0.00020	0.0832	< 0.040	< 0.000100	0.045		0.0000554		233	< 0.00020	0.00021		0.00048
EV BC1	EV BC1 WS 2022-02-15_N-SRF	2022-02-15	-	0.0048		0.00099	0.00026	0.0964	< 0.040	< 0.000100	0.041		0.0000344		237	< 0.00020	< 0.00020		< 0.00040
EV BC1	EV BC1 WS 2022-03-01_N-SRF	2022-03-01	-	< 0.0020		0.00093	< 0.00020	0.0829	< 0.040	< 0.000100	0.042		0.0000454		231	< 0.00020	0.00025		< 0.00040
EV BC1	EV BC1 WS 2022-03-15_N-SRF	2022-03-15	-	0.0041		0.00093	0.0002	0.0828	< 0.040	< 0.000100	0.04		0.0000407		209	< 0.00020	0.0002		< 0.00040

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Elkview Operation																				
EV AQ6	EV AQ6 WS 2022-Q1 N	2022-01-07	-	< 0.010	< 0.000050	0.0168	38.4	0.00378	0.00077	1.49	5.94	< 0.000010	5.67	0.254	< 0.000010	< 0.000010	< 0.00030	0.0012	0.0049	
EV AQ6	EV AQ6 WS 2022-02 MON N	2022-02-07	-	< 0.010	< 0.000050	0.0162	36.7	0.0012	0.00066	1.39	5.58	< 0.000010	4.8	0.238	< 0.000010	< 0.000010	< 0.00030	0.00109	0.0082	
EV AQ6	EV AQ6 WS 2022-03 MON N	2022-03-16	-	< 0.010	< 0.000050	0.0165	39.7	0.00187	0.00076	1.59	7.81	< 0.000010	8.39	0.283	< 0.000010	< 0.000010	< 0.00030	0.00118	0.0042	
EV AQ6	EV AQ6 WS 2022-03 WEK13 N	2022-03-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-03 WEK14 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-04 WEK15 N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-Q2 N	2022-04-12	-	< 0.010	< 0.000050	0.0154	38	0.00072	0.0009	1.53	8.26	< 0.000010	9.27	0.294	< 0.000010	< 0.000010	< 0.00030	0.00122	0.0035	
EV AQ6	EV MC5 WS 2022-Q2 N	2022-04-13	-	< 0.010	< 0.000050	0.0155	37.5	0.00086	0.00089	1.53	8.15	< 0.000010	9.21	0.288	< 0.000010	< 0.000010	< 0.00030	0.0012	0.0037	
EV AQ6	EV MC7 WS 2022-Q2 N	2022-04-13	< 0.50	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.000010	< 0.00030	< 0.00010	< 0.010	
EV AQ6	EV AQ6 WS 2022-04 WEK17 N	2022-04-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-04 WEK18 N	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-05 MON N	2022-05-03	-	< 0.010	< 0.000050	0.0157	36.4	0.00102	0.00078	1.55	6.74	< 0.000010	7.41	0.27	< 0.000010	< 0.000010	< 0.00030	0.00109	0.0033	
EV AQ6	EV AQ6 WS 2022-05 WEK20 N	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-05 WEK21 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-05 WEK22 N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-05 WEK23 N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV MC8 WS 2022-06 MON N	2022-06-07	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.000010	< 0.00030	< 0.00010	< 0.010	
EV AQ6	EV AQ6 WS 2022-06 MON N	2022-06-07	-	< 0.010	< 0.000050	0.0183	38.8	0.00102	< 0.00050	1.43	4.74	< 0.000010	6.07	0.282	< 0.000010	< 0.000010	< 0.00030	0.00116	0.0026	
EV AQ6	EV AQ6 WS 2022-06 MON N	2022-06-08	-	< 0.010	< 0.000050	0.0164	33.9	0.00091	< 0.00050	1.3	4.97	< 0.000010	5.59	0.268	< 0.000010	< 0.000010	< 0.00030	0.00115	0.0023	
EV AQ6	EV AQ6 WS 2022-06-13 N 1743	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-06 WEK25 N	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-06-14 N 1725	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-06-14 N 0650	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-06 WEK26 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-06 WEK27 N	2022-06-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-Q3 N	2022-07-06	-	< 0.010	< 0.000050	0.0164	42	0.00227	0.00082	1.58	5.42	< 0.000010	8.14	0.284	< 0.000010	< 0.000010	< 0.00030	0.000957	0.002	
EV AQ6	EV MC8 WS 2022-Q3 N	2022-07-06	-	< 0.010	< 0.000050	0.0155	40.4	0.00201	0.00078	1.52	5.18	< 0.000010	7.91	0.287	< 0.000010	< 0.000010	< 0.00030	0.00102	0.0018	
EV AQ6	EV MC8 WS 2022-Q3 N	2022-07-06	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.000010	< 0.00030	< 0.00010	< 0.010	
EV AQ6	EV AQ6 WS 2022-07 WEK29 N	2022-07-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-08 MON N	2022-08-10	-	0.016	< 0.000050	0.0172	39.1	0.00909	0.0007	1.48	5.51	< 0.000010	3.83	0.238	< 0.000010	< 0.000010	< 0.00030	0.000915	0.0028	
EV AQ6	EV AQ6 WS SEMP 2022_08 N	2022-08-11	-	0.014	< 0.000050	0.0151	35.9	0.0095	0.00072	1.36	4.66	< 0.000010	3.52	0.237	< 0.000010	< 0.000010	< 0.00030	0.000918	0.0027	
EV AQ6	EV AQ6 WS 2022-09 MON N	2022-09-07	-	0.016	< 0.000050	0.0174	38.3	0.00466	0.00064	1.41	4.69	< 0.000010	3.45	0.228	< 0.000010	< 0.000010	< 0.00030	0.000848	0.0022	
EV AQ6	EV MC8 WS 2022-09 MON N	2022-09-07	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.000010	< 0.00030	< 0.00010	< 0.010	
EV AQ6	EV AQ6 WS 2022-09-08 N	2022-09-08	-	0.012	< 0.000050	0.0161	39.2	0.00698	0.0008	1.49	5.45	< 0.000010	3.62	0.223	< 0.000010	< 0.000010	< 0.00030	0.000759	0.0022	
EV AQ6	EV AQ6 WS 2022-09-09 N	2022-09-09	-	0.012	< 0.000050	0.0169	36.7	0.00512	0.00087	1.41	4.95	< 0.000010	3.4	0.216	< 0.000010	< 0.000010	< 0.00030	0.000742	0.0017	
EV AQ6	EV AQ6 WS 2022-09-10 N	2022-09-10	-	0.011	< 0.000050	0.0173	37.1	0.00511	0.0008	1.46	5.1	< 0.000010	3.43	0.228	< 0.000010	< 0.000010	< 0.00030	0.000792	0.0022	
EV AQ6	EV AQ6 WS 2022-Q4 N	2022-10-07	-	< 0.010	< 0.000050	0.0163	35.8	0.00365	0.00058	1.52	4.98	< 0.000010	3.14	0.223	< 0.000010	< 0.000010	< 0.00030	0.000763	0.0021	
EV AQ6	EV MC6 WS 2022-Q4 N	2022-10-07	-	0.011	< 0.000050	0.0158	37	0.00389	0.00061	1.58	5.15	< 0.000010	3.26	0.225	< 0.000010	< 0.000010	< 0.00030	0.00078	0.0023	
EV AQ6	EV MC8 WS 2022-Q4 N	2022-10-07	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.000010	< 0.00030	< 0.00010	< 0.010	
EV AQ6	EV AQ6 WS 2022-11 MON N	2022-11-09	-	0.024	< 0.000050	0.019	45.8	0.00877	0.00076	1.82	6.02	< 0.000010	3.77	0.269	< 0.000010	< 0.000010	< 0.00030	0.00101	0.0024	
EV AQ6	EV MC6 WS 2022-11 MON N	2022-11-09	-	0.019	< 0.000050	0.0196	45.5	0.00894	0.00074	1.82	5.88	< 0.000010	3.78	0.27	< 0.000010	< 0.000010	< 0.00030	0.000738	0.0031	
EV AQ6	EV MC8 WS 2022-11 MON N	2022-11-09	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.141	< 0.00020	< 0.000010	< 0.000010	< 0.00030	< 0.00010	< 0.010	
EV BC1	EV BC1 WS 2022-01-03 N-SRF	2022-01-03	-	< 0.020	< 0.000100	0.166	187	0.0316	0.0226	6.27	300	< 0.000020	7.57	1.62	0.000025	< 0.00020	< 0.00060	0.00797	0.0118	
EV BC1	EV BC1 WS 2022_Q1 N	2022-01-18	-	< 0.020	< 0.000100	0.17	209	0.0232	0.025	6.61	359	< 0.000020	7.38	1.54	0.00003	< 0.00020	< 0.00060	0.00837	0.0106	
EV BC1	EV BC1 WS 2022-01-18 N-SRF	2022-01-18	-	< 0.020	< 0.000100	0.16	213	0.0265	0.0264	6.93	326	< 0.000020	7.81	1.51	0.00003	< 0.00020	< 0.00060	0.00848	0.0171	
EV BC1	EV BC1 WS 2022-02-01 N-SRF	2022-02-01	-	< 0.020	< 0.000100	0.166	213	0.025	0.0245	6.2	359	< 0.000020	6.9	1.5	0.000024	< 0.00020	< 0.00060	0.00828	0.0124	
EV BC1	EV BC1 WS 2022-02 MON N	2022-02-08	-	< 0.020	< 0.000100	0.119	177	0.011	0.0355	5.97	173	< 0.000020	6.67	0.842	0.000027	< 0.00020	< 0.00060	0.0162	0.005	
EV BC1	EV BC1 WS 2022-02-15 N-SRF	2022-02-15	-	< 0.020	< 0.000100	0.102	186	0.00568	0.0291	5.6	130	< 0.000020	6.79	0.792	0.000029	< 0.00020	< 0.00060	0.0114	0.129	
EV BC1	EV BC1 WS 2022-03-01 N-SRF	2022-03-01	-	< 0.020	< 0.000100	0.107	187	0.0101	0.026	5.72	153	< 0.000020	7.21	0.934	0.000027	< 0.00020	< 0.00060	0.0108	0.0044	
EV BC1	EV BC1 WS 2022-03-15 N-SRF	2022-03-15	-	< 0.020	< 0.000100	0.0998	165	0.00989	0.0234	5.2	174	< 0.000020	6.82	0.902	0.000028	< 0.00020	< 0.00060	0.0106</		

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																	
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper				
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	Acute	Chronic	BLM <sup>d</sup>	
Elkview Operation																					
EV BC1	EV BC1 WS 2022-03 MON N	2022-03-16	-	0.0021	0.00091	0.00023	0.0924	< 0.020	< 0.000050	0.041			0.0000366	252	< 0.00010	0.00022	0.00027				
EV BC1	EV BC1 WS 2022-03-22 N-SRF	2022-03-22	-	0.0021	0.00086	0.00017	0.0942	< 0.020	< 0.000050	0.042			0.000015	242	< 0.00010	0.00018	0.00021				
EV BC1	EV BC1 WS 2022-03 WEK13 N	2022-03-22	-	-	-	-	-	-	-	-			-	-	-	-	-				
EV BC1	EV BC1 WS 2022-03 WEK14 N	2022-03-29	-	-	-	-	-	-	-	-			-	-	-	-	-				
EV BC1	EV BC1 WS 2022-03-29 N-SRF	2022-03-29	-	0.0028	0.00092	0.0002	0.0936	< 0.020	< 0.000050	0.039			0.0000141	217	< 0.00010	0.00013	< 0.00020				
EV BC1	EV BC1 WS 2022-04-05 N-SRF	2022-04-05	-	0.0034	0.00094	0.00024	0.0858	< 0.040	< 0.000100	0.04			0.0000154	219	< 0.00020	< 0.00020	< 0.00040				
EV BC1	EV BC1 WS 2022-04 WEK15 N	2022-04-05	-	-	-	-	-	-	-	-			-	-	-	-	-				
EV BC1	EV BC1 WS 2022-02 N	2022-04-12	-	0.0032	0.00092	0.00021	0.0625	< 0.020	< 0.000050	0.037			< 0.0150	216	< 0.00010	0.00012	0.00024				
EV BC1	EV BC1 WS 2022-04-12 N-SRF	2022-04-12	-	< 0.0010	0.00093	0.00017	0.0654	< 0.020	< 0.000050	0.041			< 0.0100	226	< 0.00010	0.00013	0.0002				
EV BC1	EV BC1 WS 2022-04-19 N-SRF	2022-04-19	-	0.0029	0.0008	< 0.00020	0.0678	< 0.040	< 0.000100	0.038			< 0.0100	211	< 0.00020	< 0.20	< 0.00040				
EV BC1	EV BC1 WS 2022-04 WEK17 N	2022-04-19	-	-	-	-	-	-	-	-			-	-	-	-	-				
EV BC1	EV BC1 WS 2022-04-26 N-SRF	2022-04-26	-	0.0017	0.00084	0.0002	0.0577	< 0.020	< 0.000050	0.037			< 0.0050	211	0.00012	< 0.10	0.00023				
EV BC1	EV BC1 WS 2022-04 WEK18 N	2022-04-26	-	-	-	-	-	-	-	-			-	-	-	-	-				
EV BC1	EV BC1 WS 2022-05-03 N-SRF	2022-05-03	-	0.0035	0.00081	0.00022	0.0541	< 0.020	< 0.000050	0.037			< 0.0100	210	< 0.00010	< 0.10	0.00024				
EV BC1	EV BC1 WS 2022-05 MON N	2022-05-03	-	0.0014	0.00078	0.00023	0.0541	< 0.020	< 0.000050	0.037			< 0.0100	210	< 0.00010	< 0.10	< 0.00020				
EV BC1	EV BC1 WS 2022-05-10 N-SRF	2022-05-10	-	< 0.0010	0.00077	0.00022	0.0591	< 0.020	< 0.000050	0.036			< 0.0100	200	< 0.00010	< 0.10	0.00024				
EV BC1	EV BC1 WS 2022-05 WEK20 N	2022-05-11	-	-	-	-	-	-	-	-			-	-	-	-	-				
EV BC1	EV BC1 WS 2022-05 WEK21 N	2022-05-17	-	-	-	-	-	-	-	-			-	-	-	-	-				
EV BC1	EV BC1 WS 2022-05-17 N-SRF	2022-05-17	-	0.0028	0.0008	0.00024	0.0595	< 0.040	< 0.000100	0.046			0.0000158	215	< 0.00020	< 0.20	< 0.00040				
EV BC1	EV BC1 WS 2022-05-24 N-SRF	2022-05-24	-	< 0.0010	0.00087	0.00024	0.0529	< 0.020	< 0.000050	0.043			< 0.0100	215	< 0.00010	< 0.10	< 0.00020				
EV BC1	EV BC1 WS 2022-05 WEK22 N	2022-05-24	-	-	-	-	-	-	-	-			-	-	-	-	-				
EV BC1	EV BC1 WS 2022-05 WEK23 N	2022-05-31	-	-	-	-	-	-	-	-			-	-	-	-	-				
EV BC1	EV BC1 WS 2022-05-31 N-SRF	2022-05-31	-	0.0018	0.00087	0.00023	0.067	< 0.020	< 0.000050	0.043			< 0.0100	213	< 0.00010	< 0.10	0.00027				
EV BC1	EV BC1 WS 2022-06 MON N	2022-06-06	-	< 0.0010	0.0008	0.00031	0.217	< 0.020	< 0.000050	0.04			0.0000732	232	< 0.00010	0.00017	< 0.00020				
EV BC1	EV BC1 WS 2022-06-07 N-SRF	2022-06-07	-	0.0015	0.0008	0.00027	0.186	< 0.020	< 0.000050	0.044			0.0000675	231	< 0.00010	0.00016	0.00021				
EV BC1	EV BC1 WS 2022-06 WEK25 N	2022-06-13	-	-	-	-	-	-	-	-			-	-	-	-	-				
EV BC1	EV BC1 WS 2022-06-14 N-SRF	2022-06-14	-	0.0041	0.00074	0.00028	0.282	< 0.020	< 0.000050	0.041			< 0.0100	213	< 0.00010	0.00031	0.00025				
EV BC1	EV BC1 WS 2022-06-21 N-SRF	2022-06-21	-	0.0038	0.00086	0.00023	0.226	< 0.040	< 0.000100	0.045			0.0000298	227	< 0.00020	< 0.20	< 0.00040				
EV BC1	EV BC1 WS 2022-06 WEK26 N	2022-06-21	-	-	-	-	-	-	-	-			-	-	-	-	-				
EV BC1	EV BC1 WS 2022-06-28 N-SRF	2022-06-28	-	0.003	0.00088	0.00025	0.234	< 0.040	< 0.000100	0.043			< 0.0200	233	< 0.00020	< 0.20	< 0.00040				
EV BC1	EV BC1 WS 2022-06 WEK27 N	2022-06-28	-	-	-	-	-	-	-	-			-	-	-	-	-				
EV BC1	EV BC1 WS 2022-07-03 N	2022-07-05	-	0.0012	0.00081	0.00026	0.134	< 0.020	< 0.000050	0.049			0.0000216	219	< 0.00010	0.00012	< 0.00020				
EV BC1	EV BC1 WS 2022-07-05 N-SRF	2022-07-05	-	0.0016	0.00086	0.00026	0.158	< 0.020	< 0.000050	0.044			0.0000243	209	< 0.00010	0.00014	0.00073				
EV BC1	EV BC1 WS 2022-07-12 N-SRF	2022-07-12	-	0.0018	0.0008	0.00025	0.117	< 0.020	< 0.000050	0.053			0.0000134	224	< 0.00010	0.00013	< 0.00020				
EV BC1	EV BC1 WS 2022-07 WEK29 N	2022-07-12	-	-	-	-	-	-	-	-			-	-	-	-	-				
EV BC1	EV BC1 WS 2022-07-19 N-SRF	2022-07-19	-	< 0.0010	0.00086	0.00024	0.0782	< 0.020	< 0.000050	0.051			0.0000087	207	< 0.00010	0.00011	< 0.00020				
EV BC1	EV BC1 WS 2022-08-02 N-SRF	2022-08-02	-	0.0025	0.00092	0.00022	0.0698	< 0.040	< 0.000100	0.056			< 0.0100	196	< 0.00020	< 0.20	< 0.00040				
EV BC1	EV BC1 WS 2022-08 MON N	2022-08-10	-	< 0.0010	0.00084	0.00024	0.0739	< 0.020	< 0.000050	0.048			0.0000078	211	< 0.00010	< 0.10	0.00021				
EV BC1	EV BC1 WS 2022-08-16 N-SRF	2022-08-16	-	< 0.0010	0.00082	0.00019	0.0744	< 0.020	< 0.000050	0.049			0.0000051	212	< 0.00010	< 0.10	< 0.00020				
EV BC1	EV BC1 WS 2022-08-30 N-SRF	2022-08-30	-	0.0024	0.00078	0.00024	0.069	< 0.040	< 0.000100	0.046			< 0.0100	196	< 0.00020	< 0.20	< 0.00040				
EV BC1	EV BC1 WS 2022-09 MON N	2022-09-06	-	0.0026	0.00071	0.0002	0.075	< 0.020	< 0.000050	0.049			0.0000082	216	< 0.00010	< 0.10	0.00028				
EV BC1	EV BC1 WS SEPT-2022 N	2022-09-09	-	0.0013	0.0007	0.00022	0.0657	< 0.020	< 0.000050	0.047			0.0000066	216	< 0.00010	< 0.10	< 0.00020				
EV BC1	EV BC1 WS 2022-09-13 N-SRF	2022-09-13	-	< 0.0020	0.00068	0.0002	0.0557	< 0.040	< 0.000100	0.048			< 0.0100	186	< 0.00020	< 0.20	< 0.00040				
EV BC1	EV BC1 WS 2022-09-27 N-SRF	2022-09-27	-	0.0013	0.00076	0.00018	0.0649	< 0.020	< 0.000050	0.052			< 0.0050	226	< 0.00010	< 0.10	0.0003				
EV BC1	EV BC1 WS 2022-10-04 N-SRF	2022-10-04	-	0.0022	0.00076	0.00026	0.247	< 0.020	< 0.000050	0.049			0.0000242	241	< 0.00010	< 0.10	< 0.00020				
EV BC1	EV BC1 WS 2022-04 N	2022-10-06	-	< 0.0010	0.00076	0.00022	0.232	< 0.020	< 0.000050	0.055			0.0000184	247	< 0.00010	< 0.10	< 0.00020				
EV BC1	EV BC1 WS 2022-10-06 N-SRF	2022-10-06	-	-	-	-	-	-	-	-			-	-	-	-	-				
EV BC1	EV BC1 WS 2022-10-18 N-SRF	2022-10-18	-	0.0027	0.00083	< 0.00020	0.0888	< 0.040	< 0.000100	0.044			< 0.0100	214	< 0.00020	< 0.20	< 0.00040				
EV BC1	EV BC1 WS 2022-11-01 N-SRF	2022-11-01	-	0.0024	0.0007	< 0.00020	0.0434	< 0.040	< 0.000100	0.053			< 0.0100	219	< 0.00020	< 0.20	< 0.00040				
EV BC1	EV BC1 WS 2022-11 MON N	2022-11-14	-	0.0013	0.00088	0.00026	0.0816	< 0.020	< 0.000050	0.045			0.000026	259	< 0.00010	0.00017	0.00033				

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Elkview Operation</b>																				
EV BC1	EV BC1 WS 2022-03 MON N	2022-03-16	-	< 0.010	< 0.000050	0.11	168	0.01	0.0216	5.47	186	< 0.000010	6.88	0.947	0.00003	< 0.00010	< 0.00030	0.0112	0.0024	
EV BC1	EV BC1 WS 2022-03-22 N-SRF	2022-03-22	-	< 0.010	< 0.000050	0.107	175	0.00765	0.0215	5.36	160	< 0.000010	6.87	0.939	0.000024	< 0.00010	< 0.00030	0.0104	0.0022	
EV BC1	EV BC1 WS 2022-03 WEK13 N	2022-03-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-03 WEK14 N	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-03-29 N-SRF	2022-03-29	-	< 0.010	< 0.000050	0.103	169	0.00416	0.0221	5.25	156	< 0.000010	6.75	0.802	0.000028	< 0.00010	< 0.00030	0.01	0.0215	
EV BC1	EV BC1 WS 2022-04-05 N-SRF	2022-04-05	-	< 0.020	< 0.000100	0.104	192	0.00471	0.0228	5.36	181	< 0.000020	7.33	0.882	0.000024	< 0.00020	< 0.00060	0.01	0.0025	
EV BC1	EV BC1 WS 2022-04 WEK15 N	2022-04-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-04-12 N	2022-04-12	-	< 0.010	< 0.000050	0.107	173	0.00323	0.0221	5.68	165	< 0.000010	7.41	0.862	0.000027	< 0.00010	< 0.00030	0.0102	0.001	
EV BC1	EV BC1 WS 2022-04-12 N-SRF	2022-04-12	-	< 0.010	< 0.000050	0.107	168	0.00309	0.0211	5.2	145	< 0.000010	6.63	0.858	0.000026	< 0.00010	< 0.00030	0.00997	< 0.0010	
EV BC1	EV BC1 WS 2022-04-19 N-SRF	2022-04-19	-	< 0.020	< 0.000100	0.0957	162	0.00211	0.0232	5.13	101	< 0.000020	7.22	0.71	0.000023	< 0.00020	< 0.00060	0.011	0.0022	
EV BC1	EV BC1 WS 2022-04 WEK17 N	2022-04-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-04-26 N-SRF	2022-04-26	-	< 0.010	< 0.000050	0.0886	177	0.00126	0.0217	5.51	121	< 0.000010	7.13	0.723	0.000026	< 0.00010	< 0.00030	0.0107	0.002	
EV BC1	EV BC1 WS 2022-04 WEK18 N	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-05-03 N-SRF	2022-05-03	-	< 0.010	0.000055	0.0915	165	0.0011	0.0205	5.01	112	< 0.000010	6.69	0.679	0.000027	< 0.00010	< 0.00030	0.0102	0.0021	
EV BC1	EV BC1 WS 2022-05 MON N	2022-05-03	-	< 0.010	< 0.000050	0.0886	163	0.00106	0.0205	5.2	107	< 0.000010	6.51	0.678	0.000027	< 0.00010	< 0.00030	0.0102	< 0.0010	
EV BC1	EV BC1 WS 2022-05-10 N-SRF	2022-05-10	-	< 0.010	< 0.000050	0.0923	166	0.00108	0.0212	5.48	93.2	< 0.000010	6.99	0.664	0.00003	< 0.00010	< 0.00030	0.0102	0.002	
EV BC1	EV BC1 WS 2022-05 WEK20 N	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-05 WEK21 N	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-05-17 N-SRF	2022-05-17	-	< 0.020	< 0.000100	0.111	168	0.00131	0.0222	5.74	110	< 0.000020	7.84	0.802	0.000032	< 0.00020	< 0.00060	0.0103	< 0.0020	
EV BC1	EV BC1 WS 2022-05-24 N-SRF	2022-05-24	-	< 0.010	< 0.000050	0.123	167	0.00144	0.0208	5.55	185	< 0.000010	7.62	0.932	0.000032	< 0.00010	< 0.00030	0.0102	0.0019	
EV BC1	EV BC1 WS 2022-05 WEK22 N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-05 WEK23 N	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-05-31 N-SRF	2022-05-31	-	< 0.010	< 0.000050	0.118	167	0.00116	0.025	5.74	175	0.000021	8.76	0.851	0.000035	< 0.00010	< 0.00030	0.0112	0.0032	
EV BC1	EV BC1 WS 2022-06 MON N	2022-06-06	-	< 0.010	< 0.000050	0.0956	175	0.00495	0.0331	5.44	76.7	< 0.000010	9.86	0.712	0.000042	< 0.00010	< 0.00030	0.012	0.0036	
EV BC1	EV BC1 WS 2022-06-07 N-SRF	2022-06-07	-	< 0.010	< 0.000050	0.115	167	0.00527	0.0327	5.42	66.6	< 0.000010	9.95	0.691	0.000045	< 0.00010	< 0.00030	0.0124	0.0038	
EV BC1	EV BC1 WS 2022-06 WEK25 N	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-06-14 N-SRF	2022-06-14	-	< 0.010	< 0.000050	0.114	155	0.00608	0.0287	5.31	58.6	< 0.000010	9.06	0.674	0.000044	< 0.00010	< 0.00030	0.0109	0.0018	
EV BC1	EV BC1 WS 2022-06-21 N-SRF	2022-06-21	-	< 0.020	< 0.000100	0.128	154	0.00293	0.029	5.56	92.5	< 0.000020	9.32	0.747	0.000042	< 0.00020	< 0.00060	0.0111	0.0039	
EV BC1	EV BC1 WS 2022-06 WEK26 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-06-28 N-SRF	2022-06-28	-	< 0.020	< 0.000100	0.126	167	0.00209	0.03	5.27	68.9	< 0.000020	9.59	0.718	0.000046	< 0.00020	< 0.00060	0.0117	0.0065	
EV BC1	EV BC1 WS 2022-06 WEK27 N	2022-06-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022 Q3 N	2022-07-05	-	< 0.010	< 0.000050	0.126	154	0.00309	0.028	5.36	88.2	< 0.000010	9.48	0.766	0.000049	< 0.00010	< 0.00030	0.0112	0.0013	
EV BC1	EV BC1 WS 2022-07-05 N-SRF	2022-07-05	-	< 0.010	< 0.000050	0.122	156	0.00397	0.0281	5.46	88.9	< 0.000010	9.67	0.81	0.000046	< 0.00010	< 0.00030	0.0109	0.0046	
EV BC1	EV BC1 WS 2022-07-12 N-SRF	2022-07-12	-	< 0.010	< 0.000050	0.138	152	0.00413	0.0279	5.55	71.6	< 0.000010	9.74	0.979	0.000048	< 0.00010	< 0.00030	0.0106	0.0071	
EV BC1	EV BC1 WS 2022-07 WEK29 N	2022-07-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-07-19 N-SRF	2022-07-19	-	< 0.010	< 0.000050	0.133	154	0.00262	0.0277	5.52	79.5	< 0.000010	10.1	0.845	0.000035	< 0.00010	< 0.00030	0.01	0.0012	
EV BC1	EV BC1 WS 2022-08-02 N-SRF	2022-08-02	-	< 0.020	< 0.000100	0.142	156	0.00162	0.0243	5.3	89.3	< 0.000020	9.57	0.845	0.000053	< 0.00020	< 0.00060	0.00958	0.0023	
EV BC1	EV BC1 WS 2022-08 MON N	2022-08-10	-	< 0.010	< 0.000050	0.145	183	0.00094	0.0253	5.64	162	< 0.000010	9.44	0.939	0.000051	< 0.00010	< 0.00030	0.0104	0.0012	
EV BC1	EV BC1 WS 2022-08-16 N-SRF	2022-08-16	-	< 0.010	< 0.000050	0.143	173	0.00089	0.024	5.36	114	< 0.000010	9.37	0.836	0.000044	< 0.00010	< 0.00030	0.00973	0.0024	
EV BC1	EV BC1 WS 2022-08-30 N-SRF	2022-08-30	-	< 0.020	< 0.000100	0.149	161	0.00088	0.022	4.96	82.2	< 0.000020	9.35	0.776	0.000049	< 0.00020	< 0.00060	0.0101	0.0021	
EV BC1	EV BC1 WS 2022-09 MON N	2022-09-06	-	< 0.010	< 0.000050	0.134	176	0.00073	0.0232	5.61	82.8	< 0.000010	10.3	0.849	0.000041	< 0.00010	< 0.00030	0.00996	< 0.0010	
EV BC1	EV BC1 WS SEPT-2022 N	2022-09-09	-	< 0.010	< 0.000050	0.135	176	0.0003	0.0228	5.78	90	< 0.000010	10.6	0.811	0.000041	< 0.00010	< 0.00030	0.0103	< 0.0010	
EV BC1	EV BC1 WS 2022-09-13 N-SRF	2022-09-13	-	< 0.020	< 0.000100	0.14	153	0.00041	0.02	4.94	73.7	< 0.000020	9.67	0.712	0.000039	< 0.00020	< 0.00060	0.00832	< 0.0020	
EV BC1	EV BC1 WS 2022-09-27 N-SRF	2022-09-27	-	< 0.010	< 0.000050	0.142	178	0.00031	0.0218	6.64	84.5	< 0.000010	12.8	1.21	0.000046	< 0.00010	< 0.00030	0.0102	0.0018	
EV BC1	EV BC1 WS 2022-10-04 N-SRF	2022-10-04	-	< 0.010	< 0.000050	0.15	172	0.00142	0.0252	6.31	130	< 0.000010	11.3	1.08	0.000048	< 0.00010	< 0.00030	0.0104	0.0024	
EV BC1	EV BC1 WS 2022-10-04 N	2022-10-06	-	< 0.010	< 0.000050	0.151	168	0.00067	0.0256	6.09	124	< 0.000010	10.9	0.998	0.000046	< 0.00010	< 0.00030	0.0102	0.0015	
EV BC1	EV BC1 WS 2022-10-06 N-SRF	2022-10-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-10-18 N-SRF	2022-10-18	-	< 0.020	< 0.000100	0.132	170	0.00028	0.0221	5.38	102	< 0.000020	10.1	0.869	0.000035	< 0.00020	< 0.00060	0.0096	< 0.0020	
EV BC1	EV BC1 WS 2022-11-01 N-SRF	2022-11-01	-	< 0.020	< 0.000100	0.17	170	0.0003	0.0214	5.33	138	< 0.000020	9.27	0.87	0.000034	< 0.00020	< 0.00060	0.0103	0.0041	
EV BC1	EV BC1 WS 2022-11 MON N	2022-11-14	-	< 0.010	< 0.000050	0.127	192	0.0034	0.0243	6.24	250	< 0.000010	10.9	1.01	0.00004	< 0.00010	< 0.00030	0.0109	0.0025	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper	
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Acute		Chronic								Acute	Chronic				Acute	Chronic		
<b>BC WQG FWAL</b>			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>b</sup>
<b>Elkview Operation</b>																		
EV BC1	EV BC1 WS 2022-11-15 N SRF	2022-11-15	-	0.0012	0.00076	0.00026	0.0938	< 0.020	< 0.000050	0.046	-	-	0.0000317	271	< 0.00010	0.00016	0.00307	
EV EC1	EV EC1 WS 2022-01-05 N-SRF	2022-01-05	-	< 0.0010	0.00044	0.00036	0.028	< 0.020	-	-	-	0.000023	286	0.00058	-	< 0.00020		
EV EC1	EV EC1 WS 2022-01 N	2022-01-17	-	< 0.0010	0.00041	0.00029	0.023	< 0.020	< 0.000050	0.028	-	0.000022	238	< 0.00010	0.00377	< 0.00020		
EV EC1	EV EC1 WS 2022-01-17 N-SRF	2022-01-17	-	0.0013	0.00043	0.00028	0.0234	< 0.020	-	-	-	< 0.0200	233	< 0.00010	-	< 0.00020		
EV EC1	EV EC1 WS 2022-01-31 N-SRF	2022-01-28	-	0.0012	0.00037	0.0003	0.0222	< 0.020	< 0.000050	0.027	-	0.0000185	228	< 0.00010	0.00387	< 0.00020		
EV EC1	EV EC1 WS 2022-02-14 N-SRF	2022-02-14	-	0.0014	0.00035	0.00028	0.0224	< 0.020	< 0.000050	0.025	-	0.0000153	232	0.00011	0.00316	< 0.00020		
EV EC1	EV EC1 WS 2022-02 MON N	2022-02-16	-	0.0018	0.00036	0.00027	0.025	< 0.020	< 0.000050	0.026	-	0.0000192	241	0.00012	0.00256	0.00131		
EV EC1	EV EC1 WS 2022-02-28 N-SRF	2022-02-28	-	< 0.0020	0.0004	0.00027	0.0224	< 0.040	< 0.000100	0.029	-	0.0000169	260	< 0.00020	0.00352	< 0.00040		
EV EC1	EV EC1 WS 2022-03-14 N-SRF	2022-03-14	-	0.0013	0.00038	0.00028	0.019	< 0.020	< 0.000050	0.024	-	0.0000162	217	< 0.00010	0.00303	< 0.00020		
EV EC1	EV EC1 WS 2022-03 MON N	2022-03-17	-	0.002	0.00038	0.00029	0.0197	< 0.020	< 0.000050	0.027	-	0.0000152	238	< 0.00010	0.00301	< 0.00020		
EV EC1	EV EC1 WS 2022-03-21 N SRF	2022-03-21	-	< 0.0010	0.00037	0.00033	0.021	< 0.020	< 0.000050	0.029	-	0.000019	240	< 0.00010	0.00288	0.00042		
EV EC1	EV EC1 WS 2022-03 WEK13 N	2022-03-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-03-28 N-SRF	2022-03-28	-	< 0.0010	0.00025	0.00028	0.031	< 0.020	< 0.000050	0.015	-	0.0000092	242	0.00018	0.00044	< 0.00020		
EV EC1	EV EC1 WS 2022-03-28 N-SRF 1	2022-03-28	-	-	-	-	-	-	-	-	-	-	261	-	-	-	-	
EV EC1	EV EC1 WS 2022-03 WEK14 N	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-04 N-SRF	2022-04-04	-	0.0011	0.0003	0.00032	0.0306	< 0.020	< 0.000050	0.023	-	0.0000186	237	< 0.00010	0.0011	0.00028		
EV EC1	EV EC1 WS 2022-04 WEK15 N	2022-04-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-10 N-SRF	2022-04-10	-	-	-	-	-	-	-	-	-	-	244	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-11 N-SRF	2022-04-11	-	< 0.0010	0.00023	0.00027	0.0389	< 0.020	< 0.000050	0.015	-	0.0000106	273	0.00014	0.00026	0.00078		
EV EC1	EV EC1 WS 2022-04-11 N-SRF 1	2022-04-11	-	-	-	-	-	-	-	-	-	-	249	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-12 N-SRF	2022-04-12	-	-	-	-	-	-	-	-	-	-	225	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-13 N-SRF	2022-04-13	-	-	-	-	-	-	-	-	-	-	248	-	-	-	-	
EV EC1	EV EC1 WS 2022-02 N	2022-04-13	-	0.0056	0.00021	0.00024	0.0415	< 0.020	< 0.000050	0.014	-	0.0000103	235	0.00017	0.00015	< 0.00020		
EV EC1	EV MC8 WS 2022-02 N	2022-04-13	5.7	0.0022	0.00026	0.00027	0.0395	< 0.040	< 0.000050	0.014	-	0.0000063	208	0.00017	0.00014	< 0.00020		
EV EC1	EV EC1 WS 2022-04-14 N-SRF	2022-04-14	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	-	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00020		
EV EC1	EV EC1 WS 2022-04-15 N-SRF	2022-04-15	-	-	-	-	-	-	-	-	-	-	219	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-16 N-SRF	2022-04-16	-	-	-	-	-	-	-	-	-	-	250	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-17 N-SRF	2022-04-17	-	-	-	-	-	-	-	-	-	-	236	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-18 N-SRF	2022-04-18	-	< 0.0010	0.00022	0.00026	0.0405	< 0.020	< 0.000050	0.014	-	0.0000066	215	0.00018	< 0.10	< 0.00020		
EV EC1	EV EC1 WS 2022-04-18 N-SRF 1	2022-04-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-19 N-SRF	2022-04-19	-	-	-	-	-	-	-	-	-	-	240	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-20 N-SRF	2022-04-20	-	-	-	-	-	-	-	-	-	-	247	-	-	-	-	
EV EC1	EV EC1 WS 2022-04 WEK17 N	2022-04-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-21 N-SRF	2022-04-21	-	-	-	-	-	-	-	-	-	-	243	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-22 N-SRF	2022-04-22	-	-	-	-	-	-	-	-	-	-	241	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-23 N-SRF	2022-04-23	-	-	-	-	-	-	-	-	-	-	240	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-24 N-SRF	2022-04-24	-	-	-	-	-	-	-	-	-	-	234	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-25 N-SRF	2022-04-25	-	< 0.0010	0.00022	0.00023	0.0428	< 0.020	< 0.000050	0.014	-	0.0000068	226	0.00017	< 0.10	0.0002		
EV EC1	EV EC1 WS 2022-04-25 N-SRF 1	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-26 N-SRF	2022-04-26	-	-	-	-	-	-	-	-	-	-	223	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-27 N-SRF	2022-04-27	-	-	-	-	-	-	-	-	-	-	223	-	-	-	-	
EV EC1	EV EC1 WS 2022-04 WEK18 N	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-28 N-SRF	2022-04-28	-	-	-	-	-	-	-	-	-	-	228	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-29 N-SRF	2022-04-29	-	-	-	-	-	-	-	-	-	-	222	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-30 N-SRF	2022-04-30	-	-	-	-	-	-	-	-	-	-	231	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-01 N-SRF	2022-05-01	-	-	-	-	-	-	-	-	-	-	240	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-02 N-SRF	2022-05-02	-	0.001	0.0002	0.00024	0.0422	< 0.020	< 0.000050	0.014	-	0.0000068	221	0.00024	< 0.10	< 0.00020		
EV EC1	EV EC1 WS 2022-05-02 N-SRF 1	2022-05-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-03 N-SRF	2022-05-03	-	-	-	-	-	-	-	-	-	-	218	-	-	-	-	

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
				Acute																
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Elkview Operation</b>																				
EV BC1	EV BC1 WS 2022-11-15 N SRF	2022-11-15	-	< 0.010	< 0.000050	0.15	189	0.00293	0.0242	6.19	226	< 0.000010	11	1.01	0.000044	< 0.00010	< 0.00030	0.012	0.0037	
EV EC1	EV EC1 WS 2022-01-05 N-SRF	2022-01-05	-	< 0.010	-	0.0585	165	0.108	0.0336	4.82	72	< 0.000010	6.56	0.365	0.000049	-	< 0.00030	0.0106	0.0031	
EV EC1	EV EC1 WS 2022-Q1 N	2022-01-17	-	< 0.010	< 0.000050	0.0516	151	0.0762	0.0299	4.2	54.6	< 0.000010	5.42	0.319	0.000046	< 0.00010	< 0.00030	0.0118	< 0.0010	
EV EC1	EV EC1 WS 2022-01-17 N-SRF	2022-01-17	-	< 0.010	-	0.0535	151	0.0754	0.0298	4.15	51.6	< 0.000010	5.63	0.321	0.000045	-	< 0.00030	0.0118	0.0016	
EV EC1	EV EC1 WS 2022-01-31 N-SRF	2022-01-28	-	< 0.010	< 0.000050	0.0489	154	0.0789	0.0305	4.04	46.5	< 0.000010	5.52	0.3	0.000039	< 0.00010	< 0.00030	0.0112	< 0.0010	
EV EC1	EV EC1 WS 2022-02-14 N-SRF	2022-02-14	-	< 0.010	< 0.000050	0.049	151	0.0569	0.0301	3.91	60.7	< 0.000010	5.14	0.302	0.000043	< 0.00010	< 0.00030	0.011	0.0016	
EV EC1	EV EC1 WS 2022-02 MON N	2022-02-16	-	0.012	0.000088	0.0506	154	0.0462	0.028	4.24	83.1	< 0.000010	5.07	0.305	0.000044	< 0.00010	< 0.00030	0.0103	0.0042	
EV EC1	EV EC1 WS 2022-02-28 N-SRF	2022-02-28	-	< 0.020	< 0.000100	0.0532	165	0.0627	0.0323	4.02	42.4	< 0.000020	5.98	0.348	0.000051	< 0.00020	< 0.00060	0.0107	< 0.0020	
EV EC1	EV EC1 WS 2022-03-14 N-SRF	2022-03-14	-	< 0.010	< 0.000050	0.0466	144	0.0506	0.0309	3.96	72.3	< 0.000010	5.94	0.308	0.000052	< 0.00010	< 0.00030	0.0111	0.0024	
EV EC1	EV EC1 WS 2022-03 MON N	2022-03-17	-	< 0.010	< 0.000050	0.0563	161	0.052	0.0297	4.49	45.3	< 0.000010	6.63	0.329	0.000048	< 0.00010	< 0.00030	0.0108	< 0.0010	
EV EC1	EV EC1 WS 2022-03-21 N SRF	2022-03-21	-	< 0.010	< 0.000050	0.0601	154	0.0518	0.03	4.42	38.9	< 0.000010	7.02	0.33	0.000047	< 0.00010	< 0.00030	0.0112	0.0017	
EV EC1	EV EC1 WS 2022-03 WEK13 N	2022-03-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-03-28 N-SRF	2022-03-28	-	< 0.010	< 0.000050	0.0278	148	0.0659	0.0169	2.78	168	< 0.000010	3.31	0.235	0.000028	< 0.00010	< 0.00030	0.00779	< 0.0010	
EV EC1	EV EC1 WS 2022-03-28 N-SRF 1	2022-03-28	-	-	-	-	197	-	-	3.43	-	-	4.14	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-03 WEK14 N	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-04 N-SRF	2022-04-04	-	< 0.010	< 0.000050	0.047	155	0.0142	0.0193	3.69	83.6	< 0.000010	5.79	0.29	0.000029	< 0.00010	< 0.00030	0.0095	0.0018	
EV EC1	EV EC1 WS 2022-04 WEK15 N	2022-04-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-10 N-SRF	2022-04-10	-	-	-	-	152	-	-	2.63	-	-	3.29	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-11 N-SRF	2022-04-11	-	< 0.010	< 0.000050	0.0316	147	0.00356	0.0127	2.9	170	< 0.000010	3.43	0.268	0.000021	< 0.00010	< 0.00030	0.00781	< 0.0010	
EV EC1	EV EC1 WS 2022-04-11 N-SRF 1	2022-04-11	-	-	-	-	154	-	-	2.86	-	-	3.71	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-12 N-SRF	2022-04-12	-	-	-	-	135	-	-	2.38	-	-	2.9	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-13 N-SRF	2022-04-13	-	-	-	-	155	-	-	2.83	-	-	3.37	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-Q2 N	2022-04-13	-	0.016	< 0.000050	0.0281	141	0.00183	0.0104	2.71	172	< 0.000010	3.36	0.238	0.000019	< 0.00010	< 0.00030	0.00766	< 0.0010	
EV EC1	EV MC6 WS 2022-Q2 N	2022-04-13	5.7	< 0.010	< 0.000100	0.0265	142	0.00183	0.0105	2.79	163	< 0.000020	3.46	0.226	< 0.000020	< 0.00010	< 0.00030	0.00799	< 0.0010	
EV EC1	EV MC6 WS 2022-Q2 N	2022-04-13	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.000020	< 0.000010	< 0.00010	< 0.00030	< 0.000010	< 0.0010	
EV EC1	EV EC1 WS 2022-04-14 N-SRF	2022-04-14	-	-	-	-	151	-	-	2.49	-	-	3.04	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-15 N-SRF	2022-04-15	-	-	-	-	183	-	-	2.7	-	-	3.47	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-16 N-SRF	2022-04-16	-	-	-	-	159	-	-	2.65	-	-	3.24	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-17 N-SRF	2022-04-17	-	-	-	-	155	-	-	2.6	-	-	3.09	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-18 N-SRF	2022-04-18	-	< 0.010	< 0.000050	0.0269	143	0.00094	0.0081	2.84	176	< 0.000010	3.38	0.226	0.000018	< 0.00010	< 0.00030	0.0081	< 0.0010	
EV EC1	EV EC1 WS 2022-04-18 N-SRF 1	2022-04-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-19 N-SRF	2022-04-19	-	-	-	-	148	-	-	2.48	-	-	3.22	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-20 N-SRF	2022-04-20	-	-	-	-	151	-	-	2.57	-	-	3.09	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04 WEK17 N	2022-04-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-21 N-SRF	2022-04-21	-	-	-	-	155	-	-	2.45	-	-	3.05	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-22 N-SRF	2022-04-22	-	-	-	-	161	-	-	2.82	-	-	3.43	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-23 N-SRF	2022-04-23	-	-	-	-	169	-	-	2.69	-	-	3.3	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-24 N-SRF	2022-04-24	-	-	-	-	160	-	-	2.57	-	-	3.13	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-25 N-SRF	2022-04-25	-	< 0.010	< 0.000050	0.0266	149	0.00055	0.00655	2.83	186	< 0.000010	3.18	0.229	0.000012	< 0.00010	< 0.00030	0.00844	0.0012	
EV EC1	EV EC1 WS 2022-04-25 N-SRF 1	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-26 N-SRF	2022-04-26	-	-	-	-	149	-	-	2.53	-	-	3.4	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-27 N-SRF	2022-04-27	-	-	-	-	151	-	-	2.43	-	-	3.2	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04 WEK18 N	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-28 N-SRF	2022-04-28	-	-	-	-	150	-	-	2.65	-	-	3.37	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-29 N-SRF	2022-04-29	-	-	-	-	150	-	-	2.67	-	-	3.37	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-04-30 N-SRF	2022-04-30	-	-	-	-	153	-	-	2.54	-	-	2.95	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-01 N-SRF	2022-05-01	-	-	-	-	156	-	-	2.88	-	-	3.02	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-02 N-SRF	2022-05-02	-	< 0.010	< 0.000050	0.0259	143	0.00042	0.00544	2.81	170	< 0.000010	3.31	0.205	0.000013	< 0.00010	< 0.00030	0.00795	< 0.0010	
EV EC1	EV EC1 WS 2022-05-02 N-SRF 1	2022-05-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV_EC1_WS_2022-05-03_N-SRF	2022-05-03	-	-	-	-	150	-	-	2.51	-	-	3.19	-	-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper	
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>b</sup>
<b>Elkview Operation</b>																		
EV_EC1	EV_EC1_WS_2022-05-04_N-SRF	2022-05-04	-	-	-	-	-	-	-	-	-	-	-	-	212	-	-	-
EV_EC1	EV_EC1_WS_2022-05-MON_N	2022-05-04	-	< 0.0010	0.00021	0.00025	0.0455	< 0.020	< 0.000050	0.013	-	< 0.0050	215	0.00018	< 0.10	< 0.00020	-	
EV_EC1	EV_EC1_WS_2022-05-05_N-SRF	2022-05-05	-	-	-	-	-	-	-	-	-	-	212	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-05_N	2022-05-05	-	0.0014	0.00022	0.00022	0.0422	< 0.020	< 0.000050	0.014	-	< 0.0050	232	0.00019	< 0.10	< 0.00020	-	
EV_EC1	EV_EC1_WS_2022-05-06_N-SRF	2022-05-06	-	-	-	-	-	-	-	-	-	-	206	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-06_N	2022-05-06	-	0.001	0.00022	0.00021	0.04	< 0.020	< 0.000050	0.011	-	< 0.0050	224	0.00017	< 0.10	< 0.00020	-	
EV_EC1	EV_EC1_WS_2022-05-07_N-SRF	2022-05-07	-	-	-	-	-	-	-	-	-	-	218	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-07_N	2022-05-07	-	< 0.0010	0.00019	0.00026	0.0441	< 0.020	< 0.000050	0.013	-	< 0.0050	227	0.00016	< 0.10	< 0.00020	-	
EV_EC1	EV_EC1_WS_2022-05-08_N-SRF	2022-05-08	-	-	-	-	-	-	-	-	-	-	225	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-08_N	2022-05-08	-	< 0.0010	0.00019	0.00026	0.0447	< 0.020	< 0.000050	0.012	-	< 0.0050	219	0.00014	< 0.10	< 0.00020	-	
EV_EC1	EV_EC1_WS_2022-05-09_N	2022-05-09	-	< 0.0010	0.00019	0.00023	0.0417	< 0.020	< 0.000050	0.012	-	< 0.0050	214	0.00015	< 0.10	< 0.00020	-	
EV_EC1	EV_EC1_WS_2022-05-09_N-SRF	2022-05-09	-	0.0058	0.00021	0.00027	0.0442	< 0.020	< 0.000050	0.014	-	0.0000093	230	0.00018	< 0.10	< 0.00020	-	
EV_EC1	EV_EC1_WS_2022-05-10_N-SRF	2022-05-10	-	-	-	-	-	-	-	-	-	-	214	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-10_N	2022-05-10	-	< 0.0010	0.0002	0.00024	0.0422	< 0.020	< 0.000050	0.012	-	< 0.0050	205	0.00016	< 0.10	< 0.00020	-	
EV_EC1	EV_EC1_WS_2022-05-11_N-SRF	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-12_N-SRF	2022-05-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-13_N-SRF	2022-05-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-14_N-SRF	2022-05-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-15_N-SRF	2022-05-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-16_N-SRF	2022-05-16	-	0.0013	0.00021	0.00024	0.0487	< 0.020	< 0.000050	0.014	-	0.0000067	232	0.00021	< 0.10	< 0.00020	-	
EV_EC1	EV_EC1_WS_2022-05-16_N-SRF_1	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-17_N-SRF	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-18_N-SRF	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-18_N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-19_N-SRF	2022-05-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-20_N-SRF	2022-05-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-02-21_N-SRF	2022-05-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-22_N-SRF	2022-05-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-23_N-SRF	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-23_N	2022-05-23	-	0.0025	0.00021	0.00023	0.0459	< 0.020	< 0.000050	0.013	-	0.0000111	228	0.00019	< 0.10	< 0.00020	-	
EV_EC1	EV_EC1_WS_2022-05-24_N-SRF	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-25_N-SRF	2022-05-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-25_N	2022-05-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-26_N	2022-05-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-26_N-SRF	2022-05-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-27_N-SRF	2022-05-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-28_N-SRF	2022-05-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-29_N-SRF	2022-05-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-30_N-SRF	2022-05-30	-	0.0013	0.00021	0.00024	0.0478	< 0.020	< 0.000050	0.012	-	0.0000058	225	0.00016	< 0.10	< 0.00020	-	
EV_EC1	EV_EC1_WS_2022-05-30_N-SRF_1	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-31_N-SRF	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-31_N	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-05-WEK23_N	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-06-01_N-SRF	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-06-02_N-SRF	2022-06-02	-	0.0017	0.0002	0.0002	0.0392	< 0.020	< 0.000050	0.011	-	< 0.0050	202	0.00014	< 0.10	< 0.00020	-	
EV_EC1	EV_EC1_WS_2022-06-03_N-SRF	2022-06-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-06-04_N-SRF	2022-06-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-06-05_N-SRF	2022-06-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-06-05_N	2022-06-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-06-MON_N	2022-06-06	-	< 0.0010	0.0002	0.00022	0.0476	< 0.020	< 0.000050	0.012	-	0.0000066	225	0.00018	< 0.10	< 0.00020	-	
EV_EC1	EV_EC1_WS_2022-06-06_N-SRF	2022-06-06	-	0.0383	0.00022	0.00026	0.0494	< 0.020	< 0.000050	0.013	-	0.0000435	232	0.00027	0.0001	0.00056	-	
EV_EC1	EV_EC1_WS_2022-06-07_N-SRF	2022-06-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-06-08_N-SRF	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_EC1	EV_EC1_WS_2022-06-09_N	2022-06-09	-	0.001	0.00023	0.00025	0.0481	< 0.020	< 0.000050	0.013	-	< 0.0050	229	0.00017	< 0.10	< 0.00020	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL



APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
				Acute																
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Elkview Operation</b>																				
EV EC1	EV EC1 WS 2022-05-04 N-SRF	2022-05-04	-	-	-	-	157	-	-	2.71	-	-	3.26	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-MON N	2022-05-04	-	< 0.010	< 0.000050	0.0263	143	0.00041	0.00529	2.88	191	< 0.000010	3.34	0.219	0.000013	< 0.00010	< 0.00030	0.00743	< 0.0010	
EV EC1	EV EC1 WS 2022-05-05 N-SRF	2022-05-05	-	-	-	-	160	-	-	2.71	-	-	3.32	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-05 N	2022-05-05	-	< 0.010	< 0.000050	0.027	142	0.00039	0.00503	2.68	185	< 0.000010	3.18	0.222	0.000011	< 0.00010	< 0.00030	0.00747	< 0.0010	
EV EC1	EV EC1 WS 2022-05-06 N-SRF	2022-05-06	-	-	-	-	147	-	-	2.42	-	-	3	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-06 N	2022-05-06	-	< 0.010	< 0.000050	0.0225	139	0.00043	0.00472	2.46	187	< 0.000010	2.89	0.214	< 0.000010	< 0.00010	< 0.00030	0.00747	< 0.0010	
EV EC1	EV EC1 WS 2022-05-07 N-SRF	2022-05-07	-	-	-	-	157	-	-	2.4	-	-	3.18	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-07 N	2022-05-07	-	< 0.010	< 0.000050	0.0266	144	0.00045	0.00491	2.68	189	< 0.000010	3.22	0.21	0.000011	< 0.00010	< 0.00030	0.00713	< 0.0010	
EV EC1	EV EC1 WS 2022-05-08 N-SRF	2022-05-08	-	-	-	-	148	-	-	2.42	-	-	3.12	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-08 N	2022-05-08	-	< 0.010	< 0.000050	0.0253	147	0.00038	0.00466	2.63	185	< 0.000010	3.15	0.214	0.000011	< 0.00010	< 0.00030	0.00732	< 0.0010	
EV EC1	EV EC1 WS 2022-05-09 N	2022-05-09	-	< 0.010	< 0.000050	0.0241	140	0.00032	0.00435	2.5	178	< 0.000010	3.03	0.211	< 0.000010	< 0.00010	< 0.00030	0.00717	< 0.0010	
EV EC1	EV EC1 WS 2022-05-09 N-SRF	2022-05-09	-	< 0.010	< 0.000050	0.027	146	0.00048	0.0048	2.68	174	< 0.000010	3.18	0.218	0.000012	< 0.00010	< 0.00030	0.00787	0.0157	
EV EC1	EV EC1 WS 2022-05-10 N-SRF	2022-05-10	-	-	-	-	150	-	-	2.6	-	-	3.12	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-10 WEK20 N	2022-05-10	-	< 0.010	< 0.000050	0.0259	131	0.00031	0.00433	2.52	173	< 0.000010	3.09	0.212	0.000011	< 0.00010	< 0.00030	0.00715	< 0.0010	
EV EC1	EV EC1 WS 2022-05-11 N-SRF	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-12 N-SRF	2022-05-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-13 N-SRF	2022-05-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-14 N-SRF	2022-05-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-15 N-SRF	2022-05-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-16 N-SRF	2022-05-16	-	< 0.010	< 0.000050	0.0278	150	0.00044	0.00441	2.95	191	< 0.000010	3.37	0.232	0.00001	< 0.00010	< 0.00030	0.00765	0.0032	
EV EC1	EV EC1 WS 2022-05-16 N-SRF 1	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-17 N-SRF	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-18 N-SRF	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05 WEK21 N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-19 N-SRF	2022-05-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-20 N-SRF	2022-05-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-02-21 N-SRF	2022-05-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-22 N-SRF	2022-05-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-23 N-SRF	2022-05-23	-	< 0.010	< 0.000050	0.0253	149	0.0004	0.00365	2.68	180	< 0.000010	3.16	0.218	< 0.000010	< 0.00010	< 0.00030	0.00773	< 0.0010	
EV EC1	EV EC1 WS 2022-05-24 N-SRF	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-25 N-SRF	2022-05-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05 WEK22 N	2022-05-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-26 N-SRF	2022-05-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-27 N-SRF	2022-05-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-28 N-SRF	2022-05-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-29 N-SRF	2022-05-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-30 N-SRF	2022-05-30	-	< 0.010	< 0.000050	0.0256	154	0.00028	0.00334	2.72	187	0.000013	3.23	0.219	0.000011	< 0.00010	< 0.00030	0.00815	< 0.0010	
EV EC1	EV EC1 WS 2022-05-30 N-SRF 1	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05-31 N-SRF	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-05 WEK23 N	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-01 N-SRF	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-02 N-SRF	2022-06-02	-	< 0.010	< 0.000050	0.0234	108	0.00026	0.00252	2.25	144	< 0.000010	2.56	0.203	< 0.000010	< 0.00010	< 0.00030	0.00682	< 0.0010	
EV EC1	EV EC1 WS 2022-06-03 N-SRF	2022-06-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-04 N-SRF	2022-06-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-05 N-SRF	2022-06-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06 MON N	2022-06-06	-	< 0.010	< 0.000050	0.0245	148	0.00025	0.00306	2.53	167	< 0.000010	3	0.209	0.00001	< 0.00010	< 0.00030	0.00708	< 0.0010	
EV EC1	EV EC1 WS 2022-06-06 N-SRF	2022-06-06	-	0.021	0.00032	0.026	150	0.00158	0.00333	2.85	169	< 0.000010	3.4	0.218	0.000012	< 0.00010	0.00075	0.00838	0.0026	
EV EC1	EV EC1 WS 2022-06-07 N-SRF	2022-06-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-08 N-SRF	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-09 N	2022-06-09	-	< 0.010	< 0.000050	0.0298	148	0.00028	0.00303	2.87	180	< 0.000010	3.4	0.231	0.00001	< 0.00010	< 0.00030	0.00839	0.0012	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum mg/L		Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L		Calcium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	
				Acute	Chronic							Acute	Chronic				Acute	Chronic
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>b</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>c</sup>	0.00002-0.00173 <sup>d</sup>	n/a	n/a	n/a	BLM <sup>e</sup>
Elkview Operation																		
EV EC1	EV EC1 WS 2022-06-09 N-SRF	2022-06-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-10 N-SRF	2022-06-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-10 N	2022-06-10	-	< 0.0010	0.00021	0.00023	0.0504	< 0.020	< 0.000050	0.012	-	224	0.00021	< 0.10	< 0.00020	-	-	-
EV EC1	EV EC1 WS 2022-06-11 N	2022-06-11	-	< 0.0010	0.00021	0.00021	0.0514	< 0.020	< 0.000050	0.012	-	226	0.00018	< 0.10	< 0.00020	-	-	-
EV EC1	EV EC1 WS 2022-06-11 N-SRF 1	2022-06-11	-	< 0.0010	0.00021	0.00029	0.0567	< 0.020	< 0.000050	0.013	-	229	0.00024	< 0.10	< 0.00020	-	-	-
EV EC1	EV EC1 WS 2022-06-12 N	2022-06-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-12 N-SRF 1	2022-06-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-13 N-SRF	2022-06-13	-	0.0034	0.00019	0.00024	0.0501	< 0.020	< 0.000050	0.012	-	222	0.00024	< 0.10	< 0.00020	-	-	-
EV EC1	EV EC1 WS 2022-06-14 N	2022-06-14	-	0.0049	0.00021	0.00026	0.0562	< 0.020	< 0.000050	0.01	-	202	0.00016	< 0.10	< 0.00024	-	-	-
EV EC1	EV EC1 WS 2022-06-15 N	2022-06-15	-	< 0.0010	0.00021	0.00031	0.0541	< 0.020	< 0.000050	0.012	-	218	0.00016	< 0.10	< 0.00020	-	-	-
EV EC1	EV EC1 WS 2022-06-15 N	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-16 N-SRF	2022-06-16	-	0.001	0.0002	0.00025	0.0558	< 0.020	< 0.000050	0.011	-	214	0.00016	< 0.10	< 0.00020	-	-	-
EV EC1	EV EC1 WS 2022-06-17 N-SRF	2022-06-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-18 N-SRF	2022-06-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-19 N-SRF	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-20 N-SRF	2022-06-20	-	0.009	0.00021	0.00024	0.0549	< 0.020	< 0.000050	0.011	-	223	0.00018	< 0.10	< 0.00020	-	-	-
EV EC1	EV EC1 WS 2022-06-22 N-SRF	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-21 N-SRF	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-23 N-SRF	2022-06-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-24 N-SRF	2022-06-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-25 N-SRF	2022-06-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-26 N-SRF	2022-06-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-27 N-SRF	2022-06-27	-	< 0.0010	0.00017	0.00023	0.0501	< 0.020	< 0.000050	0.011	-	224	0.00018	< 0.10	< 0.00020	-	-	-
EV EC1	EV EC1 WS 2022-06-28 N-SRF	2022-06-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-29 N-SRF	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-29 N-SRF	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-30 N-SRF	2022-06-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-01 N-SRF	2022-07-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-02 N-SRF	2022-07-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-03 N-SRF	2022-07-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-04 N-SRF	2022-07-04	-	< 0.0010	0.00017	0.00026	0.0543	< 0.020	< 0.000050	0.012	-	230	0.0002	< 0.10	< 0.00020	-	-	-
EV EC1	EV EC1 WS 2022-07-05 N-SRF	2022-07-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-Q3 N	2022-07-06	-	< 0.0010	0.0002	0.00025	0.0507	< 0.020	< 0.000050	0.011	-	211	0.00017	< 0.10	< 0.00020	-	-	-
EV EC1	EV MC5 WS 2022-Q3 N	2022-07-06	-	< 0.0010	0.0002	0.00026	0.0506	< 0.020	< 0.000050	0.011	-	213	0.00018	< 0.10	< 0.00020	-	-	-
EV EC1	EV MC7 WS 2022-Q3 N	2022-07-06	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	-	< 0.050	< 0.00010	< 0.10	< 0.00020	-	-	-
EV EC1	EV EC1 WS 2022-07-06 N-SRF	2022-07-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-07 N-SRF	2022-07-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-08 N-SRF	2022-07-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-09 N-SRF	2022-07-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-10 N-SRF	2022-07-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-11 N-SRF	2022-07-11	-	< 0.0010	0.00021	0.00025	0.0506	< 0.020	< 0.000050	0.011	-	216	0.00018	< 0.10	< 0.00031	-	-	-
EV EC1	EV EC1 WS 2022-07-12 N-SRF	2022-07-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-13 N-SRF	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-13 N-SRF	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-14 N-SRF	2022-07-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-15 N-SRF	2022-07-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-16 N-SRF	2022-07-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-17 N-SRF	2022-07-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-18 N-SRF	2022-07-18	-	0.0025	0.0002	0.00028	0.0529	< 0.020	< 0.000050	0.012	-	211	0.0002	< 0.10	< 0.00020	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Elkview Operation</b>																			
EV EC1	EV EC1 WS 2022-06-09 N-SRF	2022-06-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-10 N-SRF	2022-06-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-10 N	2022-06-10	-	< 0.010	< 0.000050	0.0259	147	0.00026	0.00296	2.72	179	< 0.000010	3.13	0.213	< 0.000010	< 0.00010	< 0.00030	0.0074	< 0.0010
EV EC1	EV EC1 WS 2022-06-11 N	2022-06-11	-	< 0.010	< 0.000050	0.026	150	0.00027	0.00299	2.7	188	< 0.000010	3.28	0.215	< 0.000010	< 0.00010	< 0.00030	0.00744	< 0.0010
EV EC1	EV EC1 WS 2022-06-11 N-SRF 1	2022-06-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-12 N	2022-06-12	-	< 0.010	< 0.000050	0.0266	164	0.00036	0.00329	3.12	226	< 0.000010	3.54	0.232	< 0.000010	< 0.00010	< 0.00030	0.00761	< 0.0010
EV EC1	EV EC1 WS 2022-06-12 N-SRF 1	2022-06-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-13 N-SRF	2022-06-13	-	< 0.010	< 0.000050	0.0252	143	0.00036	0.00277	2.77	172	< 0.000010	3.02	0.206	< 0.000010	< 0.00010	< 0.00030	0.00731	0.0056
EV EC1	EV EC1 WS 2022-06-14 N	2022-06-14	-	< 0.010	< 0.000050	0.0228	124	0.00047	0.00253	2.5	149	< 0.000010	2.88	0.201	< 0.000010	< 0.00010	< 0.00030	0.00684	< 0.0010
EV EC1	EV EC1 WS 2022-06-15 N	2022-06-15	-	< 0.010	< 0.000050	0.0225	137	0.00032	0.0027	2.56	165	< 0.000010	2.96	0.204	< 0.000010	< 0.00010	< 0.00030	0.00691	< 0.0010
EV EC1	EV EC1 WS 2022-06-16 N	2022-06-16	-	< 0.010	< 0.000050	0.023	136	0.00034	0.00258	2.67	170	< 0.000010	3.18	0.208	< 0.000010	< 0.00010	< 0.00030	0.00734	< 0.0010
EV EC1	EV EC1 WS 2022-06-17 N-SRF	2022-06-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-18 N-SRF	2022-06-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-19 N-SRF	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-20 N-SRF	2022-06-20	-	< 0.010	0.000417	0.0232	142	0.00045	0.00242	2.52	176	< 0.000010	2.94	0.202	< 0.000010	< 0.00010	< 0.00060	0.0078	0.0053
EV EC1	EV EC1 WS 2022-06-22 N-SRF	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-21 N-SRF	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-23 N	2022-06-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-23 N-SRF	2022-06-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-24 N-SRF	2022-06-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-25 N-SRF	2022-06-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-26 N-SRF	2022-06-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-27 N-SRF	2022-06-27	-	< 0.010	< 0.000050	0.0248	150	0.00023	0.00215	2.6	168	< 0.000010	3.21	0.217	< 0.000010	< 0.00010	< 0.00030	0.0074	< 0.0010
EV EC1	EV EC1 WS 2022-06-28 N-SRF	2022-06-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-29 N-SRF	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-29 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-30 N-SRF	2022-06-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-01 N-SRF	2022-07-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-02 N-SRF	2022-07-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-03 N-SRF	2022-07-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-04 N-SRF	2022-07-04	-	< 0.010	< 0.000050	0.0242	152	0.00022	0.00222	2.71	188	< 0.000010	3.34	0.216	< 0.000010	< 0.00010	< 0.00030	0.00867	< 0.0010
EV EC1	EV EC1 WS 2022-07-05 N-SRF	2022-07-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-Q3 N	2022-07-06	-	< 0.010	< 0.000050	0.0258	143	0.00019	0.00205	2.7	182	< 0.000010	3.22	0.207	< 0.000010	< 0.00010	< 0.00030	0.00748	< 0.0010
EV EC1	EV MC5 WS 2022-Q3 N	2022-07-06	-	< 0.010	< 0.000050	0.024	143	0.00016	0.00205	2.65	178	< 0.000010	3.25	0.212	< 0.000010	< 0.00010	< 0.00030	0.0072	< 0.0010
EV EC1	EV MC7 WS 2022-Q3 N	2022-07-06	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.00010	< 0.00030	< 0.000010	< 0.0010
EV EC1	EV EC1 WS 2022-07-06 N-SRF	2022-07-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-07 N-SRF	2022-07-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-08 N-SRF	2022-07-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-09 N-SRF	2022-07-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-10 N-SRF	2022-07-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-11 N-SRF	2022-07-11	-	< 0.010	< 0.000050	0.0253	143	0.00029	0.00209	2.71	168	< 0.000010	3.1	0.203	< 0.000010	< 0.00010	< 0.00030	0.00759	0.0027
EV EC1	EV EC1 WS 2022-07-12 N-SRF	2022-07-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-13 N-SRF	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-13 N	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-14 N-SRF	2022-07-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-15 N-SRF	2022-07-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-16 N-SRF	2022-07-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-17 N-SRF	2022-07-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-07-18 N-SRF	2022-07-18	-	< 0.010	< 0.000050	0.0253	145	0.00029	0.0022	2.78	204	< 0.000010	3.12	0.214	< 0.000010	< 0.00010	< 0.00030	0.00789	0.001

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper		
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	Acute Chronic	BLM <sup>d</sup>
Elkview Operation																			
EV_EC1	EV_EC1_WS_2022-07-19_N-SRF	2022-07-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-20_N-SRF	2022-07-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-21_N-SRF	2022-07-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-22_N-SRF	2022-07-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-23_N-SRF	2022-07-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-24_N-SRF	2022-07-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-25_N-SRF	2022-07-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-26_N-SRF	2022-07-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-27_N-SRF	2022-07-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-28_N-SRF	2022-07-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-29_N-SRF	2022-07-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-30_N-SRF	2022-07-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-31_N-SRF	2022-07-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-01_N-SRF	2022-08-01	-	< 0.0020	< 0.00020	0.00031	0.054	< 0.040	< 0.000100	< 0.020	-	< 0.0100	197	0.00023	< 0.20	< 0.00040	-	-	-
EV_EC1	EV_EC1_WS_2022-08-02_N-SRF	2022-08-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-03_N-SRF	2022-08-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-04_N-SRF	2022-08-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-05_N-SRF	2022-08-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-06_N-SRF	2022-08-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-07_N-SRF	2022-08-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-08_N-SRF	2022-08-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-09_MON_N	2022-08-09	-	< 0.0010	0.00021	0.00026	0.0482	< 0.020	< 0.000050	0.013	-	< 0.0050	192	0.00023	< 0.10	0.00024	-	-	-
EV_EC1	EV_EC1_WS_2022-08-09_N-SRF	2022-08-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-10_N-SRF	2022-08-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-11_N-SRF	2022-08-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-12_N-SRF	2022-08-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-13_N-SRF	2022-08-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-14_N-SRF	2022-08-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-15_N-SRF	2022-08-15	-	0.0012	0.00021	0.00023	0.0447	< 0.020	< 0.000050	0.012	-	0.0000068	204	0.00018	< 0.10	< 0.00020	-	-	-
EV_EC1	EV_EC1_WS_2022-08-16_N-SRF	2022-08-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-17_N-SRF	2022-08-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-18_N-SRF	2022-08-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-19_N-SRF	2022-08-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-20_N-SRF	2022-08-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-21_N-SRF	2022-08-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-22_N-SRF	2022-08-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-23_N-SRF	2022-08-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-24_N-SRF	2022-08-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-25_N-SRF	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-26_N-SRF	2022-08-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-27_N-SRF	2022-08-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-28_N-SRF	2022-08-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-29_N-SRF	2022-08-29	-	< 0.0010	0.00019	0.00024	0.0456	< 0.020	< 0.000050	0.014	-	0.0000052	225	0.0002	< 0.10	< 0.00020	-	-	-
EV_EC1	EV_EC1_WS_2022-08-30_N-SRF	2022-08-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-31_N-SRF	2022-08-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-09-01_N-SRF	2022-09-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-09-02_N-SRF	2022-09-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-09-03_N-SRF	2022-09-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-09-04_N-SRF	2022-09-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-09-05_N-SRF	2022-09-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Elkview Operation</b>																			
EV_EC1	EV_EC1_WS_2022-07-19_N-SRF	2022-07-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-20_N-SRF	2022-07-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-21_N-SRF	2022-07-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-22_N-SRF	2022-07-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-23_N-SRF	2022-07-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-24_N-SRF	2022-07-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-25_N-SRF	2022-07-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-26_N-SRF	2022-07-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-27_N-SRF	2022-07-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-28_N-SRF	2022-07-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-29_N-SRF	2022-07-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-30_N-SRF	2022-07-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-07-31_N-SRF	2022-07-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-01_N-SRF	2022-08-01	-	< 0.020	< 0.000100	0.0244	144	0.00037	0.00228	2.56	141	< 0.000020	3.23	0.202	< 0.000020	< 0.00020	< 0.00060	0.007	< 0.0020
EV_EC1	EV_EC1_WS_2022-08-02_N-SRF	2022-08-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-03_N-SRF	2022-08-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-04_N-SRF	2022-08-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-05_N-SRF	2022-08-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-06_N-SRF	2022-08-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-07_N-SRF	2022-08-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-08_N-SRF	2022-08-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-09_MON_N	2022-08-09	-	< 0.010	< 0.000050	0.0234	137	0.00012	0.00198	2.58	137	< 0.000010	2.9	0.187	< 0.000010	< 0.00010	< 0.00030	0.00739	< 0.0010
EV_EC1	EV_EC1_WS_2022-08-09_N-SRF	2022-08-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-10_N-SRF	2022-08-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-11_N-SRF	2022-08-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-12_N-SRF	2022-08-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-13_N-SRF	2022-08-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-14_N-SRF	2022-08-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-15_N-SRF	2022-08-15	-	< 0.010	< 0.000050	0.0267	144	0.00015	0.00202	2.48	174	< 0.000010	2.98	0.204	< 0.000010	< 0.00010	< 0.00030	0.00754	0.0014
EV_EC1	EV_EC1_WS_2022-08-16_N-SRF	2022-08-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-17_N-SRF	2022-08-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-18_N-SRF	2022-08-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-19_N-SRF	2022-08-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-20_N-SRF	2022-08-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-21_N-SRF	2022-08-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-22_N-SRF	2022-08-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-23_N-SRF	2022-08-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-24_N-SRF	2022-08-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-25_N-SRF	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-26_N-SRF	2022-08-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-27_N-SRF	2022-08-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-28_N-SRF	2022-08-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-29_N-SRF	2022-08-29	-	< 0.010	< 0.000050	0.028	164	0.00013	0.00206	2.71	183	< 0.000010	3.29	0.211	< 0.000010	< 0.00010	< 0.00030	0.00773	< 0.0010
EV_EC1	EV_EC1_WS_2022-08-30_N-SRF	2022-08-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-08-31_N-SRF	2022-08-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-09-01_N-SRF	2022-09-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-09-02_N-SRF	2022-09-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-09-03_N-SRF	2022-09-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-09-04_N-SRF	2022-09-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_EC1	EV_EC1_WS_2022-09-05_N-SRF	2022-09-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper	
				Acute mg/L	Chronic mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Acute mg/L	Chronic mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>d</sup>
<b>Elkview Operation</b>																		
EV EC1	EV EC1 WS 2022-09-06 N-SRF	2022-09-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-07 N-SRF	2022-09-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09 MON N	2022-09-08	-	0.0014	0.00024	0.00023	0.0493	< 0.020	< 0.000050	0.014	-	0.000007	199	0.0002	< 0.10	0.00045	-	-
EV EC1	EV EC1 WS 2022-09-08 N-SRF	2022-09-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-09 N-SRF	2022-09-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-10 N-SRF	2022-09-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-11 N-SRF	2022-09-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-12 N-SRF	2022-09-12	-	0.001	0.0002	0.00021	0.0434	< 0.020	< 0.000050	0.011	-	< 0.0050	189	0.00015	< 0.10	< 0.00020	-	-
EV EC1	EV EC1 WS 2022-09-13 N-SRF	2022-09-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-14 N-SRF	2022-09-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-15 N-SRF	2022-09-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-16 N-SRF	2022-09-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-17 N-SRF	2022-09-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-18 N-SRF	2022-09-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-19 N-SRF	2022-09-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-20 N-SRF	2022-09-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-21 N-SRF	2022-09-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-22 N-SRF	2022-09-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-23 N-SRF	2022-09-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-24 N-SRF	2022-09-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-25 N-SRF	2022-09-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-26 N-SRF	2022-09-26	-	0.002	0.00023	0.00025	0.0498	< 0.020	< 0.000050	0.014	-	0.0000074	211	0.00018	< 0.10	< 0.00020	-	-
EV EC1	EV EC1 WS 2022-09-27 N-SRF	2022-09-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-28 N-SRF	2022-09-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-29 N-SRF	2022-09-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-30 N-SRF	2022-09-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-10-01 N-SRF	2022-10-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-10-02 N-SRF	2022-10-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-10-03 N-SRF	2022-10-03	-	0.002	0.00019	0.0003	0.0476	< 0.020	< 0.000050	0.014	-	0.0000074	221	0.00019	< 0.10	< 0.00020	-	-
EV EC1	EV EC1 WS 2022-10-04 N-SRF	2022-10-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-10-05 N-SRF	2022-10-05	-	< 0.0010	0.00021	0.00034	0.046	< 0.020	< 0.000050	0.021	-	< 0.0050	230	0.00013	0.00013	< 0.00020	-	-
EV EC1	EV EC1 WS 2022-10-06 N-SRF	2022-10-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-10-17 N-SRF	2022-10-17	-	< 0.0020	0.00022	0.00028	0.0374	< 0.040	< 0.000100	0.022	-	< 0.0100	231	< 0.00020	0.0006	< 0.00040	-	-
EV EC1	EV EC1 WS 2022-10-31 N-SRF	2022-10-31	-	0.002	0.00021	0.00036	0.0368	< 0.020	< 0.000050	0.022	-	0.0000079	228	0.00012	0.00081	< 0.00020	-	-
EV EC1	EV EC1 WS 2022-11-14 N-SRF	2022-11-14	-	< 0.0010	0.00022	0.00025	0.035	< 0.020	< 0.000050	0.025	-	0.0000151	244	0.00012	0.00104	< 0.00020	-	-
EV EC1	EV EC1 WS 2022-11 MON N	2022-11-15	-	< 0.0010	0.00022	0.00032	0.034	< 0.020	< 0.000050	0.026	-	0.0000085	252	< 0.00010	0.00105	< 0.00020	-	-
EV EC1	EV EC1 WS 2022-11-21 N-SRF	2022-11-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV ER4	EV ER4 WS 2022-Q1 N	2022-01-10	-	0.0015	< 0.00010	0.00019	0.0669	< 0.020	< 0.000050	< 0.010	-	0.0000119	64.5	0.00031	< 0.00010	0.00025	-	-
EV ER4	EV ER4 WS 2022-02 MON N	2022-02-15	-	0.0012	< 0.00010	0.00024	0.0761	< 0.020	< 0.000050	< 0.010	-	0.0000138	77.3	0.0002	< 0.00010	< 0.00020	-	-
EV ER4	EV ER4 WS 2022-03 MON N	2022-03-15	-	0.0742	0.00022	0.00029	0.0806	< 0.020	< 0.000050	< 0.010	-	0.0000673	82.5	0.0071	0.00015	0.00129	-	-
EV ER4	EV ER4 WS 2022-03 WEK13 N	2022-03-21	-	< 0.0010	< 0.00010	0.00017	0.0741	< 0.020	< 0.000050	< 0.010	-	0.0000118	73.9	0.00019	< 0.00010	< 0.00020	-	-
EV ER4	EV ER4 WS 2022-03 WEK14 N	2022-03-28	-	< 0.0010	< 0.00010	0.00019	0.0784	< 0.020	< 0.000050	< 0.010	-	0.0000103	75	0.00019	< 0.10	< 0.00020	-	-
EV ER4	EV ER4 WS 2022-04 WEK15 N	2022-04-04	-	0.0015	< 0.00010	0.00016	0.0787	< 0.020	< 0.000050	< 0.010	-	0.0000104	78.3	0.0002	< 0.10	0.00027	-	-
EV ER4	EV ER4 WS 2022-Q2 N	2022-04-11	-	< 0.0010	< 0.00010	0.00016	0.0745	< 0.020	< 0.000050	< 0.010	-	0.0000117	76.3	0.0002	< 0.10	< 0.00020	-	-
EV ER4	EV ER4 WS 2022-04 WEK17 N	2022-04-18	-	< 0.0010	< 0.00010	0.00016	0.079	< 0.020	< 0.000050	< 0.010	-	< 0.0050	77	0.00019	< 0.10	< 0.00020	-	-
EV ER4	EV ER4 WS 2022-04 WEK18 N	2022-04-25	-	< 0.0010	< 0.00010	0.00013	0.0727	< 0.020	< 0.000050	< 0.010	-	0.0000096	76	0.00017	< 0.10	< 0.00020	-	-
EV ER4	EV ER4 WS 2022-05 MON N	2022-05-01	-	0.003	< 0.00010	0.00013	0.0722	< 0.020	< 0.000050	< 0.010	-	0.0000119	73.5	0.00018	< 0.10	< 0.00020	-	-
EV ER4	EV ER4 WS 2022-05 WEK20 N	2022-05-10	-	0.003	< 0.00010	0.00013	0.0621	< 0.020	< 0.000050	< 0.010	-	0.0000142	58.9	0.00014	< 0.10	0.00034	-	-
EV ER4	EV ER4 WS 2022-05 WEK21 N	2022-05-16	-	0.0019	< 0.00010	0.00014	0.0659	< 0.020	< 0.000050	< 0.010	-	0.0000162	65.9	0.0002	< 0.10	< 0.00020	-	-
EV ER4	EV ER4 WS 2022-05 WEK22 N	2022-05-24	-	0.0011	< 0.00010	0.00014	0.0594	< 0.020	< 0.000050	< 0.010	-	0.0000168	66.6	0.00018	< 0.10	< 0.00020	-	-

< Denotes concentration less than indicated detection limit  
- Denotes analysis not conducted  
n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Elkview Operation</b>																			
EV EC1	EV EC1 WS 2022-09-06 N-SRF	2022-09-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-07 N-SRF	2022-09-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-08 MON N	2022-09-08	-	< 0.010	< 0.000050	0.0265	160	0.00013	0.00208	2.76	186	< 0.000010	3.32	0.186	< 0.000010	< 0.00010	< 0.00030	0.00705	< 0.0010
EV EC1	EV EC1 WS 2022-09-08 N-SRF	2022-09-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-09 N-SRF	2022-09-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-10 N-SRF	2022-09-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-11 N-SRF	2022-09-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-12 N-SRF	2022-09-12	-	< 0.010	< 0.000050	0.0282	127	0.00011	0.00175	2.44	161	< 0.000010	2.88	0.198	< 0.000010	< 0.00010	< 0.00030	0.00654	0.0014
EV EC1	EV EC1 WS 2022-09-13 N-SRF	2022-09-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-14 N-SRF	2022-09-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-15 N-SRF	2022-09-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-16 N-SRF	2022-09-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-17 N-SRF	2022-09-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-18 N-SRF	2022-09-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-19 N-SRF	2022-09-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-20 N-SRF	2022-09-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-21 N-SRF	2022-09-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-22 N-SRF	2022-09-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-23 N-SRF	2022-09-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-24 N-SRF	2022-09-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-25 N-SRF	2022-09-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-26 N-SRF	2022-09-26	-	< 0.010	< 0.000050	0.0313	159	0.00011	0.00194	2.94	172	< 0.000010	3.58	0.205	< 0.000010	< 0.00010	< 0.00030	0.00688	0.0062
EV EC1	EV EC1 WS 2022-09-27 N-SRF	2022-09-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-28 N-SRF	2022-09-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-29 N-SRF	2022-09-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-30 N-SRF	2022-09-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-10-01 N-SRF	2022-10-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-10-02 N-SRF	2022-10-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-10-03 N-SRF	2022-10-03	-	< 0.010	< 0.000050	0.0248	144	0.00017	0.00173	2.92	219	< 0.000010	3.33	0.207	< 0.000010	< 0.00010	< 0.00030	0.00689	0.0089
EV EC1	EV EC1 WS 2022-10-04 N-SRF	2022-10-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-10-04 N	2022-10-05	-	< 0.010	< 0.000050	0.05	161	0.00079	0.00373	3.19	157	< 0.000010	5.4	0.246	0.000015	< 0.00010	< 0.00030	0.00778	< 0.0010
EV EC1	EV EC1 WS 2022-10-06 N-SRF	2022-10-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-10-17 N-SRF	2022-10-17	-	< 0.020	< 0.000100	0.068	150	0.0106	0.0095	3.26	117	< 0.000020	5.85	0.289	0.000023	< 0.00020	< 0.00060	0.00854	< 0.0020
EV EC1	EV EC1 WS 2022-10-31 N-SRF	2022-10-31	-	< 0.010	< 0.000050	0.0626	169	0.0146	0.0124	3.93	118	< 0.000010	7.4	0.316	0.000029	< 0.00010	< 0.00030	0.00956	0.0084
EV EC1	EV EC1 WS 2022-11-14 N-SRF	2022-11-14	-	< 0.010	< 0.000050	0.0649	154	0.0175	0.0142	3.73	122	< 0.000010	7.7	0.328	0.000036	< 0.00010	< 0.00030	0.0095	0.0071
EV EC1	EV EC1 WS 2022-11-21 MON N	2022-11-21	-	< 0.010	< 0.000050	0.0696	150	0.018	0.0144	3.55	111	< 0.000010	7.65	0.315	0.000033	< 0.00010	< 0.00030	0.00962	< 0.0010
EV EC1	EV EC1 WS 2022-11-21 N-SRF	2022-11-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV ER4	EV ER4 WS 2022-Q1 N	2022-01-10	-	< 0.010	< 0.000050	0.011	23	0.001	< 0.00050	0.794	19.3	< 0.000010	3.29	0.252	< 0.000010	< 0.00010	< 0.00030	0.00135	0.0024
EV ER4	EV ER4 WS 2022-Q2 MON N	2022-02-15	-	< 0.010	< 0.000050	0.0124	26.2	0.00136	< 0.00050	0.722	19.6	< 0.000010	3.57	0.265	< 0.000010	< 0.00010	< 0.00030	0.00141	0.0081
EV ER4	EV ER4 WS 2022-Q3 MON N	2022-03-15	-	0.11	0.000383	0.0143	26.3	0.0179	0.00153	1.05	18.7	< 0.000010	4.25	0.263	< 0.000010	< 0.00010	0.00102	0.00147	0.124
EV ER4	EV ER4 WS 2022-Q3 WEK13 N	2022-03-21	-	< 0.010	< 0.000050	0.0132	25.3	0.00128	< 0.00050	0.732	17.6	< 0.000010	3.85	0.261	< 0.000010	< 0.00010	< 0.00030	0.00138	< 0.0010
EV ER4	EV ER4 WS 2022-Q3 WEK14 N	2022-03-28	-	< 0.010	< 0.000050	0.0132	25.4	0.00192	< 0.00050	0.838	19.9	< 0.000010	3.64	0.257	< 0.000010	< 0.00010	< 0.00030	0.00151	0.0018
EV ER4	EV ER4 WS 2022-Q4 WEK15 N	2022-04-04	-	< 0.010	< 0.000050	0.0143	29.9	0.00145	< 0.00050	0.844	20.4	< 0.000010	3.67	0.252	< 0.000010	< 0.00010	< 0.00030	0.0016	0.002
EV ER4	EV ER4 WS 2022-Q2 N	2022-04-11	-	< 0.010	< 0.000050	0.0149	29.5	0.0012	< 0.00050	0.883	23.1	< 0.000010	3.58	0.24	< 0.000010	< 0.00010	< 0.00030	0.00156	< 0.0010
EV ER4	EV ER4 WS 2022-Q4 WEK17 N	2022-04-18	-	< 0.010	< 0.000050	0.0156	27.9	0.00082	0.00063	0.842	23.9	< 0.000010	3.45	0.252	< 0.000010	< 0.00010	< 0.00030	0.00177	< 0.0010
EV ER4	EV ER4 WS 2022-Q4 WEK18 N	2022-04-25	-	< 0.010	< 0.000050	0.016	27.1	0.00099	0.00055	0.826	22.4	< 0.000010	3.12	0.239	< 0.000010	< 0.00010	< 0.00030	0.00164	< 0.0010
EV ER4	EV ER4 WS 2022-Q5 MON N	2022-05-01	-	< 0.010	< 0.000050	0.0134	26.4	0.00111	0.00069	0.79	22	< 0.000010	2.61	0.224	< 0.000010	< 0.00010	< 0.00030	0.00155	< 0.0010
EV ER4	EV ER4 WS 2022-Q5 WEK20 N	2022-05-10	-	< 0.010	< 0.000050	0.0105	20.3	0.00129	0.00071	0.693	16.4	< 0.000010	2.19	0.205	< 0.000010	< 0.00010	< 0.00030	0.0013	0.0012
EV ER4	EV ER4 WS 2022-Q5 WEK21 N	2022-05-16	-	< 0.010	< 0.000050	0.0126	22.6	0.00108	0.00067	0.716	16	< 0.000010	2.42	0.214	< 0.000010	< 0.00010	< 0.00030	0.00137	0.001
EV ER4	EV ER4 WS 2022-Q5 WEK22 N	2022-05-24	-	< 0.010	< 0.000050	0.0103	22.8	0.00102	0.00066	0.596	15	< 0.000010	2.09	0.198	< 0.000010	< 0.00010	< 0.00030	0.0013	< 0.0010

< Denotes concentration less than indicated detection limit  
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 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper	
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Acute	Chronic								Acute	Chronic				Acute	Chronic		
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>d</sup>
<b>Elkview Operation</b>																		
EV ER4	EV ER4 WS 2022-05 WEK23 N	2022-05-30	-	0.0034	< 0.00010	0.00015	0.0624	< 0.020	< 0.000050	< 0.010			0.0000164		52.3	0.0002	< 0.10	< 0.00020
EV ER4	EV ER4 WS 2022-06 MON N	2022-06-07	-	0.0018	< 0.00010	0.00016	0.0497	< 0.020	< 0.000050	< 0.010			0.0000102		48.1	0.00017	< 0.10	0.0002
EV ER4	EV ER4 WS 2022-06 WEK25 N	2022-06-14	-	0.0038	< 0.00010	0.00013	0.0414	< 0.020	< 0.000050	< 0.010			0.0000121		46	0.00018	< 0.10	0.00021
EV ER4	EV ER4 WS 2022-06 WEK26 N	2022-06-20	-	0.0045	< 0.00010	0.00019	0.0453	< 0.020	< 0.000050	< 0.010			0.0000108		44.7	0.00014	< 0.10	0.0003
EV ER4	EV ER4 WS 2022-06 WEK27 N	2022-06-27	-	0.0032	< 0.00010	0.00016	0.0472	< 0.020	< 0.000050	0.016			0.0000269		50.6	0.00024	< 0.10	0.00027
EV ER4	EV ER4 WS 2022-07 N	2022-07-04	-	0.0024	< 0.00010	0.00014	0.0444	< 0.020	< 0.000050	< 0.010			0.0000147		46.5	0.00017	< 0.10	0.00032
EV ER4	EV ER4 WS 2022-07 WEK29 N	2022-07-11	-	0.0019	< 0.00010	0.00017	0.0461	< 0.020	< 0.000050	< 0.010			0.0000138		47.2	0.00027	< 0.10	< 0.00020
EV ER4	EV ER4 WS 2022-08 MON N	2022-08-08	-	< 0.0010	< 0.00010	0.00018	0.0618	< 0.020	< 0.000050	< 0.010			0.000014		54.7	0.00021	< 0.10	< 0.00020
EV ER4	EV ER4 WS 2022-09 MON N	2022-09-06	-	0.0027	< 0.00010	0.00014	0.0675	< 0.020	< 0.000050	< 0.010			0.0000126		62.3	0.00022	< 0.10	< 0.00020
EV ER4	EV ER4 WS 2022-04 N	2022-10-03	-	< 0.0010	< 0.00010	0.00019	0.0728	< 0.020	< 0.000050	< 0.010			0.0000172		66	0.00013	< 0.10	0.00036
EV ER4	EV ER4 WS 2022-11 MON N	2022-11-07	-	< 0.0010	< 0.00010	0.00017	0.066	< 0.020	< 0.000050	< 0.010			0.0000082		73.9	0.00023	< 0.10	< 0.00020
EV GC2	EV GC2 WS 2022-01-02 N	2022-01-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-04 N	2022-01-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-05 N	2022-01-05	-	0.0067	0.0005	0.00015	0.102	< 0.020	< 0.000050	0.022			0.0000713		142	< 0.00010	0.0001	< 0.00020
EV GC2	EV GC2 WS 2022-01-06 N 0915	2022-01-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-06 N 1209	2022-01-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-07 N	2022-01-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-08 N	2022-01-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-09 N	2022-01-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-14 N	2022-01-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-22 N	2022-01-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-23 N 1306	2022-01-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-23 N 1628	2022-01-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-24 N	2022-01-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-25 N	2022-01-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-28 N 1448	2022-01-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-28 N 0816	2022-01-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-29 N	2022-01-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-30 N	2022-01-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1332	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1434	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1509	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1539	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1627	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1645	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 0858	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1208	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1231	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 1304	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 1405	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 1506	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 1538	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 0744	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 0843	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 0933	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 1047	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 1204	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-02 N 1508	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-02 N 1605	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-02 N 0759	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL



APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Elkview Operation</b>																			
EV ER4	EV ER4 WS 2022-05 WEK23 N	2022-05-30	-	< 0.010	< 0.000050	0.0079	21	0.00191	0.00057	0.695	11.9	< 0.000010	1.88	0.202	< 0.000010	< 0.000010	< 0.00030	0.00116	< 0.0010
EV ER4	EV ER4 WS 2022-06 MON N	2022-06-07	-	< 0.010	< 0.000050	0.0062	15.8	0.0018	0.00055	0.58	8.08	< 0.000010	1.29	0.164	< 0.000010	< 0.000010	< 0.00030	0.000976	< 0.0010
EV ER4	EV ER4 WS 2022-06 WEK25 N	2022-06-14	-	< 0.010	< 0.000050	0.0055	13.6	0.00183	< 0.000050	0.551	7.46	< 0.000010	1.18	0.154	< 0.000010	< 0.000010	< 0.00030	0.00093	< 0.0010
EV ER4	EV ER4 WS 2022-06 WEK26 N	2022-06-20	-	< 0.010	< 0.000050	0.006	14.1	0.00235	0.00058	0.675	6.96	< 0.000010	1.13	0.141	< 0.000010	< 0.000010	< 0.00030	0.000912	0.0014
EV ER4	EV ER4 WS 2022-06 WEK27 N	2022-06-27	-	< 0.010	< 0.000050	0.0075	15	0.00244	0.00062	0.618	8.41	< 0.000010	1.42	0.163	< 0.000010	< 0.000010	< 0.00030	0.000968	0.0036
EV ER4	EV ER4 WS 2022-07 WEK27 N	2022-07-04	-	< 0.010	< 0.000050	0.0065	14.4	0.00186	0.00081	0.524	7.67	< 0.000010	1.23	0.163	< 0.000010	< 0.000010	< 0.00030	0.000976	< 0.0010
EV ER4	EV ER4 WS 2022-07 WEK29 N	2022-07-11	-	< 0.010	< 0.000050	0.0065	14.1	0.00251	0.00062	0.547	7.13	< 0.000010	1.33	0.168	< 0.000010	< 0.000010	< 0.00030	0.000972	0.0013
EV ER4	EV ER4 WS 2022-08 MON N	2022-08-08	-	< 0.010	< 0.000050	0.009	18.4	0.00247	0.00051	0.64	9.73	< 0.000010	1.75	0.211	< 0.000010	< 0.000010	< 0.00030	0.00112	< 0.0010
EV ER4	EV ER4 WS 2022-09 MON N	2022-09-06	-	< 0.010	< 0.000050	0.0096	21.2	0.00176	< 0.000050	0.624	12.2	< 0.000010	2.18	0.245	< 0.000010	< 0.000010	< 0.00030	0.00108	< 0.0010
EV ER4	EV ER4 WS 2022-04 N	2022-10-03	-	< 0.010	< 0.000050	0.0118	22.6	0.00124	< 0.000050	0.734	15.4	< 0.000010	2.59	0.254	< 0.000010	< 0.000010	< 0.00030	0.00123	< 0.0010
EV ER4	EV ER4 WS 2022-11 MON N	2022-11-07	-	< 0.010	< 0.000050	0.0118	23.6	0.00123	< 0.000050	0.674	16	< 0.000010	2.89	0.253	< 0.000010	< 0.000010	< 0.00030	0.00129	< 0.0010
EV GC2	EV GC2 WS 2022-01-02 N	2022-01-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-04 N	2022-01-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-05 N	2022-01-05	-	< 0.010	< 0.000050	0.0282	70.1	0.0092	0.00134	2.07	90.6	< 0.000010	8.11	0.408	< 0.000010	< 0.000010	< 0.00030	0.0038	0.0018
EV GC2	EV GC2 WS 2022-01-06 N 0915	2022-01-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-06 N 1209	2022-01-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-07 N	2022-01-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-08 N	2022-01-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-09 N	2022-01-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-14 N	2022-01-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-22 N	2022-01-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-23 N 1306	2022-01-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-23 N 1628	2022-01-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-24 N	2022-01-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-25 N	2022-01-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-28 N 1448	2022-01-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-28 N 0818	2022-01-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-29 N	2022-01-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-30 N	2022-01-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1332	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1434	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1509	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1539	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1627	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1645	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 0858	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1208	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-01-31 N 1231	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 1304	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 1405	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 1506	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 1538	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 0744	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 0843	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 0933	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 1047	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-01 N 1204	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-02 N 1508	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-02 N 1605	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-02 N 0759	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper	
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	Acute Chronic	BLM <sup>d</sup>
<b>Elkview Operation</b>																		
EV GC2	EV GC2 WS 2022-02-02 N 1135	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-02 N 1250	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1334	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1434	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1557	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 0725	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 0840	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1000	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1101	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 1336	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 1421	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 0757	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 1054	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 1236	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-05 N	2022-02-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-08 N	2022-02-08	-	0.0074	0.00051	0.00017	0.104	< 0.020	< 0.000050	0.027		0.0000364	129	< 0.00010	0.00014	0.00023		
EV GC2	EV GC2 WS 2022-02-09 N	2022-02-09	-	0.0087	0.00065	0.00018	0.114	< 0.020	< 0.000050	0.026		0.0000294	128	< 0.00010	0.00018	< 0.00020		
EV GC2	EV GC2 WS 2022-02-10 N 1330	2022-02-10	-	0.0096	0.00059	0.0002	0.105	< 0.020	< 0.000050	0.024		0.0000262	129	< 0.00010	0.00016	< 0.00020		
EV GC2	EV GC2 WS 2022-02-10 N 1722	2022-02-10	-	0.0069	0.00059	0.00018	0.108	< 0.020	< 0.000050	0.026		0.0000408	127	< 0.00010	0.00019	0.00023		
EV GC2	EV GC2 WS 2022-02-10 N 0925	2022-02-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-10 N 1005	2022-02-10	-	0.0077	0.0006	0.00021	0.106	< 0.020	< 0.000050	0.027		0.000039	128	0.00012	0.00021	0.00033		
EV GC2	EV GC2 WS 2022-02-11 N	2022-02-11	-	0.0193	0.00062	0.00019	0.0978	< 0.020	< 0.000050	0.027		< 0.0050	113	< 0.00010	0.00019	0.00026		
EV GC2	EV GC2 WS 2022-02-13 N	2022-02-13	-	0.0159	0.00052	0.00025	0.116	< 0.020	< 0.000050	0.027		0.0000676	117	< 0.00010	0.00018	0.00034		
EV GC2	EV GC2 WS 2022-02-14 N 1522	2022-02-14	-	0.015	0.00046	0.00022	0.118	< 0.020	< 0.000050	0.027		0.0000614	120	< 0.00010	0.00017	0.00041		
EV GC2	EV GC2 WS 2022-02-14 N 1210	2022-02-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-15 N 1403	2022-02-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-15 N 0759	2022-02-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-16 N 1330	2022-02-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-16 N 0750	2022-02-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-17 N 0820	2022-02-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-17 N 1222	2022-02-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-18 N 1354	2022-02-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-18 N 0745	2022-02-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-19 N	2022-02-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-20 N 1509	2022-02-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-20 N 0900	2022-02-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-22 N 1338	2022-02-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-22 N 0738	2022-02-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-23 N 0724	2022-02-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-23 N 1207	2022-02-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-24 N 1325	2022-02-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-24 N 0726	2022-02-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-25 N 1435	2022-02-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-25 N 0740	2022-02-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-26 N 1457	2022-02-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-26 N 0803	2022-02-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-27 N 1421	2022-02-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-27 N 0932	2022-02-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-28 N 1412	2022-02-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Elkview Operation</b>																				
EV_GC2	EV_GC2_WS_2022-02-02_N_1135	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-02_N_1250	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-03_N_1334	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-03_N_1434	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-03_N_1557	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-03_N_0725	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-03_N_0840	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-03_N_1000	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-03_N_1101	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-04_N_1336	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-04_N_1421	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-04_N_0757	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-04_N_1054	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-04_N_1236	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-05_N	2022-02-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-05_MON_N	2022-02-07	-	< 0.010	< 0.000050	0.0316	69	0.0103	0.00125	1.95	74.7	< 0.000010	9.48	0.425	< 0.000010	< 0.00010	< 0.00030	0.00339	0.0012	
EV_GC2	EV_GC2_WS_2022-02-08_N	2022-02-08	-	< 0.010	< 0.000050	0.0321	73	0.0154	0.00133	1.89	84.6	< 0.000010	9.21	0.468	< 0.000010	< 0.00010	< 0.00030	0.00348	0.0011	
EV_GC2	EV_GC2_WS_2022-02-09_N	2022-02-09	-	< 0.010	< 0.000050	0.0296	69.5	0.0131	0.001	1.86	85.2	< 0.000010	9.05	0.43	< 0.000010	< 0.00010	< 0.00030	0.00356	< 0.0010	
EV_GC2	EV_GC2_WS_2022-02-10_N_1330	2022-02-10	-	< 0.010	< 0.000050	0.0296	67.8	0.012	0.00134	2	82.3	< 0.000010	9.55	0.472	< 0.000010	< 0.00010	< 0.00030	0.00359	0.0016	
EV_GC2	EV_GC2_WS_2022-02-10_N_1722	2022-02-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-10_N_0925	2022-02-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-10_N_1005	2022-02-10	-	< 0.010	< 0.000050	0.0306	69.9	0.0127	0.00145	2.05	84.5	< 0.000010	9.74	0.45	< 0.000010	< 0.00010	< 0.00030	0.00358	0.0016	
EV_GC2	EV_GC2_WS_2022-02-11_N	2022-02-11	-	< 0.010	< 0.000050	0.0298	63.2	0.00597	0.00138	2.12	75.5	< 0.000010	10.9	0.456	< 0.000010	< 0.00010	< 0.00030	0.0027	< 0.0010	
EV_GC2	EV_GC2_WS_2022-02-13_N	2022-02-13	-	< 0.010	< 0.000050	0.0295	61.5	0.011	0.00141	2.06	75.3	< 0.000010	10.4	0.453	< 0.000010	< 0.00010	< 0.00030	0.0031	0.0016	
EV_GC2	EV_GC2_WS_2022-02-14_N_1522	2022-02-14	-	< 0.010	< 0.000050	0.0287	60.1	0.0107	0.00146	2.01	72.3	< 0.000010	10	0.443	< 0.000010	< 0.00010	< 0.00030	0.003	0.0014	
EV_GC2	EV_GC2_WS_2022-02-14_N_1210	2022-02-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-15_N_1403	2022-02-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-15_N_0759	2022-02-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-16_N_1330	2022-02-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-16_N_0750	2022-02-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-17_N_0820	2022-02-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-17_N_1222	2022-02-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-18_N_1354	2022-02-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-18_N_0745	2022-02-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-19_N	2022-02-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-20_N_1509	2022-02-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-20_N_0900	2022-02-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-22_N_1338	2022-02-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-22_N_0738	2022-02-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-23_N_0724	2022-02-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-23_N_1207	2022-02-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-24_N_1325	2022-02-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-24_N_0726	2022-02-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-25_N_1435	2022-02-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-25_N_0740	2022-02-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-26_N_1457	2022-02-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-26_N_0803	2022-02-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-27_N_1421	2022-02-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-27_N_0932	2022-02-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-02-28_N_1412	2022-02-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals													
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	Acute Chronic BLM <sup>a</sup>
<b>Elkview Operation</b>																	
EV_GC2	EV_GC2_WS_2022-02-28_N_0740	2022-02-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-01_N_1413	2022-03-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-01_N_1750	2022-03-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-01_N_0723	2022-03-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-02_N_1310	2022-03-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-02_N_0830	2022-03-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-03_N_1310	2022-03-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-03_N_0735	2022-03-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-04_N_1316	2022-03-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-04_N_0751	2022-03-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-05_N_1357	2022-03-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-05_N_0755	2022-03-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-06_N_1437	2022-03-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-06_N_0725	2022-03-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-07_N_0735	2022-03-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-11_N	2022-03-11	-	0.0078	0.00049	0.0002	0.106	< 0.020	< 0.000050	0.026	-	0.0000696	128	< 0.00010	0.00013	0.00055	-
EV_GC2	EV_GC2_WS_2022-03-16_N	2022-03-16	-	0.0074	0.0005	0.00017	0.0874	< 0.020	< 0.000050	0.028	-	0.0000592	114	< 0.00010	0.00022	0.00035	-
EV_GC2	EV_GC2_WS_2022-03-16_N_0005	2022-03-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03_MON_N	2022-03-17	-	0.0144	0.00041	0.00016	0.107	< 0.020	< 0.000050	0.027	-	0.0000558	107	< 0.00010	0.00017	0.00035	-
EV_GC2	EV_MC6_WS_2022-03_MON_N	2022-03-17	-	0.0145	0.0004	0.00018	0.105	< 0.020	< 0.000050	0.027	-	0.0000636	110	0.00012	0.00017	0.00038	-
EV_GC2	EV_MC8_WS_2022-03_MON_N	2022-03-17	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	-	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00020	-
EV_GC2	EV_GC2_WS_2022-03_WEK13_N	2022-03-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-24_N_0634	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-24_N_1115	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-24_N_1251	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-25_N_0845	2022-03-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-26_N_1401	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-26_N_1557	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-26_N_0752	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-27_N	2022-03-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03_WEK14_N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-28_N_0707	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-29_N_1543	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-29_N_0750	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-30_N_1602	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-30_N_0728	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-31_N_1357	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-31_N_0754	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-03-31_N_1210	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-04-01_N_1457	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-04-01_N_1556	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-04-01_N_0743	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-04-02_N_1554	2022-04-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-04-02_N_0807	2022-04-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-04_WEK15_N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-04_N	2022-04-12	-	0.0131	0.00032	0.00021	0.139	< 0.020	< 0.000050	0.024	-	0.0000628	103	< 0.00010	0.0001	< 0.00060	-
EV_GC2	EV_GC2_WS_2022-04_WEK17_N	2022-04-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-04_WEK18_N	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-04-25_N_0757	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_GC2	EV_GC2_WS_2022-05_MON_N	2022-05-05	-	0.0182	0.00031	0.00018	0.124	< 0.020	< 0.000050	0.022	-	0.0000359	97.2	< 0.00010	< 0.10	0.00042	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
BC WQG FWAL			n/a	Acute 0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Elkview Operation</b>																				
EV_GC2	EV_GC2_WS_2022-02-28_N_0740	2022-02-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-01_N_1413	2022-03-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-01_N_1750	2022-03-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-01_N_0723	2022-03-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-02_N_1310	2022-03-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-02_N_0830	2022-03-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-03_N_1310	2022-03-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-03_N_0735	2022-03-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-04_N_1316	2022-03-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-04_N_0751	2022-03-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-05_N_1357	2022-03-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-05_N_0755	2022-03-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-06_N_1437	2022-03-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-06_N_0725	2022-03-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-07_N_0735	2022-03-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-11_N	2022-03-11	-	< 0.010	< 0.000050	0.0284	64.6	0.0104	0.00132	1.95	72.6	< 0.000010	11.2	0.552	< 0.000010	< 0.000010	< 0.00030	0.00311	0.0024	
EV_GC2	EV_GC2_WS_2022-03-16_N	2022-03-16	-	< 0.010	< 0.000050	0.0268	50.5	0.0126	0.00122	2.07	52.9	< 0.000010	10.6	0.496	< 0.000010	< 0.000010	< 0.00030	0.00254	0.0011	
EV_GC2	EV_GC2_WS_2022-03-16_N_0005	2022-03-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03_MON_N	2022-03-17	-	< 0.010	< 0.000050	0.0277	52.5	0.0127	0.00125	1.94	54.4	< 0.000010	11.4	0.491	< 0.000010	< 0.000010	< 0.00030	0.00256	0.0014	
EV_GC2	EV_MC6_WS_2022-03_MON_N	2022-03-17	-	< 0.010	< 0.000050	0.0286	54	0.0124	0.00126	1.94	53	< 0.000010	11.2	0.487	< 0.000010	< 0.000010	< 0.00030	0.00256	0.0015	
EV_GC2	EV_MC8_WS_2022-03_MON_N	2022-03-17	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.000010	< 0.00030	< 0.000010	< 0.0010	
EV_GC2	EV_GC2_WS_2022-03_WEK13_N	2022-03-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-24_N_0634	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-24_N_1115	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-24_N_1251	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-25_N_0845	2022-03-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-26_N_1401	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-26_N_1557	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-26_N_0752	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-27_N	2022-03-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03_WEK14_N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-28_N_0707	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-29_N_1543	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-29_N_0750	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-30_N_1602	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-30_N_0728	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-31_N_1357	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-31_N_0754	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-03-31_N_1210	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-04-01_N_1457	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-04-01_N_1556	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-04-01_N_0743	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-04-02_N_1554	2022-04-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-04-02_N_0807	2022-04-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-04_WEK15_N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-04_N	2022-04-12	-	< 0.010	< 0.000050	0.0216	49.6	0.00756	0.00112	1.74	43.1	< 0.000010	8.56	0.461	< 0.000010	< 0.000010	< 0.00030	0.00228	0.0014	
EV_GC2	EV_GC2_WS_2022-04_WEK17_N	2022-04-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-04_WEK18_N	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-04-25_N_0757	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_GC2	EV_GC2_WS_2022-05_MON_N	2022-05-05	-	< 0.010	< 0.000050	0.0201	46.7	0.00458	0.00098	1.54	50.2	< 0.000010	6.88	0.367	< 0.000010	< 0.000010	< 0.00030	0.00214	< 0.0010	

< Denotes concentration less than indicated detection limit  
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<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper			
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	n/a	BLM <sup>d</sup>	
Elkview Operation																				
EV GC2	EV MC6 WS 2022-05 MON N	2022-05-05	-	0.0246	0.00033	0.0002	0.123	< 0.020	< 0.000050	0.022			0.0000362	96	< 0.00010	< 0.10	0.00066			
EV GC2	EV MC8 WS 2022-05 MON N	2022-05-05	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010			< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00020			
EV GC2	EV GC2 WS 2022-05-07 N 1832	2022-05-07	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-05-07 N 0655	2022-05-07	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-05-08 N 1837	2022-05-08	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-05-08 N 0700	2022-05-08	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-05-09 N 0655	2022-05-09	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-05 WEK20 N	2022-05-10	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-05-10 N 1846	2022-05-10	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-05-10 N 0850	2022-05-10	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-05-11 N 0800	2022-05-11	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-05 WEK21 N	2022-05-16	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-05 WEK22 N	2022-05-24	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-05 WEK23 N	2022-05-30	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-06 MON N	2022-06-08	-	0.0294	0.00034	0.00015	0.101	< 0.020	< 0.000050	0.024			0.0000142	126	< 0.00010	< 0.10	0.00026			
EV GC2	EV GC2 WS 2022-06-13 N 1742	2022-06-13	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-06 WEK25 N	2022-06-14	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-06-14 N 0740	2022-06-14	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-06-14 N 2106	2022-06-14	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-06-15 N 1553	2022-06-15	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-06-15 N 0840	2022-06-15	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-06-16 N 0800	2022-06-16	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-06-18 N 0810	2022-06-18	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-06-19 N 1825	2022-06-19	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-06-19 N 0735	2022-06-19	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-06-20 N 1550	2022-06-20	-	0.0195	0.00036	0.00029	0.146	< 0.020	< 0.000050	0.026			0.0000255	101	< 0.00010	0.00014	0.00059			
EV GC2	EV GC2 WS 2022-06-20 N 0730	2022-06-20	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-06-21 N	2022-06-21	-	0.0203	0.00037	0.00026	0.16	< 0.020	< 0.000050	0.025			0.0000275	108	0.0001	0.00014	0.00064			
EV GC2	EV GC2 WS 2022-06 NP	2022-06-22	-	0.0176	0.00034	0.00023	0.14	< 0.000020	< 0.000050	0.025			0.0000197	107	< 0.00050	0.00012	0.00054			
EV GC2	EV GC2 WS 2022-06 WEK27 N	2022-06-27	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-07-05 N	2022-07-05	-	0.0208	0.00044	0.00026	0.176	< 0.020	< 0.000050	0.025			0.0000402	106	< 0.00010	0.00016	0.00042			
EV GC2	EV GC2 WS 2022-03 N	2022-07-06	-	0.0237	0.00041	0.00025	0.139	< 0.020	< 0.000050	0.024			0.0000332	111	< 0.00010	0.00014	0.00035			
EV GC2	EV GC2 WS 2022-07 WEK29 N	2022-07-11	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV GC2	EV GC2 WS 2022-08 MON N	2022-08-10	-	0.0298	0.00036	0.00018	0.0968	< 0.020	< 0.000050	0.019			0.0000095	122	< 0.00010	< 0.10	0.00023			
EV GC2	EV GC2 WS 2022-09 MON N	2022-09-07	-	0.0088	0.0004	0.00016	0.0952	< 0.020	< 0.000050	0.025			< 0.0050	118	< 0.00010	< 0.10	0.00025			
EV GC2	EV GC2 WS 2022-04 N	2022-10-05	-	0.012	0.0004	0.00019	0.0849	< 0.020	< 0.000050	0.029			< 0.0050	125	< 0.00010	0.00014	< 0.00020			
EV GC2	EV GC2 WS 2022-11 MON N	2022-11-09	-	0.0029	0.00023	0.00016	0.0806	< 0.020	< 0.000050	0.025			0.0000284	128	< 0.00010	< 0.10	0.00021			
EV GC2	EV GC2 WS 2022-11-15 N	2022-11-15	-	0.0041	0.00027	0.00018	0.0762	< 0.020	< 0.000050	0.026			0.0000313	140	< 0.00010	< 0.10	0.00021			
EV GC2	EV GC2 WS 2022-11-17 N	2022-11-17	-	0.0057	0.00028	0.00017	0.0773	< 0.020	< 0.000050	0.026			0.0000288	141	< 0.00010	< 0.10	0.00067			
EV GC2	EV GC2 WS 2022-11-19 N	2022-11-19	-	0.0048	0.00023	0.00018	0.0801	< 0.020	< 0.000050	0.024			0.0000303	128	< 0.00010	< 0.10	0.00031			
EV LC1	EV LC1 WS 2022-01 N	2022-01-14	-	0.0024	0.00021	0.00014	0.152	< 0.020	< 0.000050	0.036			0.000151	82	< 0.00010	0.00034	0.00046			
EV LC1	EV LC1 WS 2022-02 MON N	2022-02-07	-	< 0.0010	0.00019	0.00013	0.141	< 0.020	< 0.000050	0.042			0.0000537	88.6	< 0.00010	0.00013	0.00039			
EV LC1	EV LC1 WS 2022-03 MON N	2022-03-16	-	0.0021	0.00025	0.00016	0.168	< 0.020	< 0.000050	0.035			0.0000994	99.3	< 0.00010	0.00019	0.00056			
EV LC1	EV LC1 WS 2022-02 N	2022-04-11	-	0.0013	0.00022	0.00014	0.156	< 0.020	< 0.000050	0.046			0.000017	97.1	< 0.00010	< 0.10	0.00043			
EV LC1	EV LC1 WS 2022-04-15 N	2022-04-15	-	0.0011	0.00023	0.00012	0.147	< 0.020	< 0.000050	0.046			0.0000146	102	< 0.00010	< 0.10	0.00036			
EV LC1	EV LC1 WS 2022-05 MON N	2022-05-05	-	< 0.0010	0.00022	0.00016	0.16	< 0.020	< 0.000050	0.042			0.0000152	91.4	< 0.00010	< 0.10	0.00037			
EV LC1	EV LC1 WS 2022-06 MON N	2022-06-08	-	< 0.0010	0.00019	0.00015	0.158	< 0.020	< 0.000050	0.044			0.0000096	122	< 0.00010	< 0.10	0.00026			
EV LC1	EV LC1 WS 2022-03 N	2022-07-08	-	0.004	0.0002	0.00018	0.204	< 0.020	< 0.000050	0.043			0.0000648	120	< 0.00010	< 0.10	0.00054			
EV LC1	EV LC1 WS 2022-08 MON N	2022-08-08	-	< 0.0010	0.00015	0.0002	0.212	< 0.020	< 0.000050	0.044			0.0000252	115	< 0.00010	< 0.10	0.00035			
EV LC1	EV LC1 WS_SESMP_2022_08_N	2022-08-12	-	< 0.0010	0.00015	0.00014	0.183	< 0.020	< 0.000050	0.047			0.0000258	123	0.00036	< 0.10	0.00033			

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Elkview Operation</b>																				
EV GC2	EV MC6 WS 2022-05 MON N	2022-05-05	-	0.013	< 0.000050	0.0198	46.7	0.00503	0.00101	1.58	48.6	< 0.000010	6.86	0.381	< 0.000010	< 0.000010	< 0.000030	0.00216	0.0019	
EV GC2	EV MC8 WS 2022-05 MON N	2022-05-05	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.000010	< 0.000030	< 0.000010	< 0.0010	
EV GC2	EV GC2 WS 2022-05-07 N 1832	2022-05-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05-07 N 0655	2022-05-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05-08 N 1837	2022-05-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05-08 N 0740	2022-05-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05-09 N 0655	2022-05-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05 WEK20 N	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05-10 N 1846	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05-10 N 0850	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05-11 N 0800	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05 WEK21 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05 WEK22 N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05 WEK23 N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06 MON N	2022-06-08	-	< 0.010	< 0.000050	0.0272	59.8	0.00669	0.00077	1.72	72.4	< 0.000010	6.55	0.421	< 0.000010	< 0.000010	< 0.000030	0.00309	< 0.0010	
EV GC2	EV GC2 WS 2022-06-13 N 1742	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06 WEK25 N	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-14 N 0740	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-14 N 2106	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-15 N 1553	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-15 N 0840	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-16 N 0800	2022-06-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-18 N 0810	2022-06-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-19 N 1825	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-19 N 0735	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-20 N 1550	2022-06-20	-	< 0.010	< 0.000050	0.0227	51.5	0.0101	0.00126	2.03	52.5	< 0.000010	7.52	0.387	< 0.000010	< 0.000010	< 0.000030	0.00253	< 0.0010	
EV GC2	EV GC2 WS 2022-06-20 N 0730	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-21 N	2022-06-21	-	< 0.010	< 0.000050	0.0232	52.8	0.00995	0.00131	2	51.1	< 0.000010	7.28	0.417	< 0.000010	< 0.000010	< 0.000030	0.00258	< 0.0010	
EV GC2	EV GC2 WS 2022-06 NP	2022-06-22	-	< 0.010	< 0.000050	0.0229	52.8	0.0109	0.00114	1.93	59.6	< 0.000010	7.12	0.404	< 0.000010	< 0.000010	< 0.000030	0.0026	< 0.0010	
EV GC2	EV GC2 WS 2022-06 WEK27 N	2022-06-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-07-05 N	2022-07-05	-	< 0.010	< 0.000050	0.0238	56.5	0.0127	0.00119	2.36	73.8	< 0.000010	7.83	0.413	< 0.000010	< 0.000010	< 0.000030	0.00317	0.0067	
EV GC2	EV GC2 WS 2022-03 N	2022-07-06	-	< 0.010	< 0.000050	0.0277	65.9	0.00889	0.00124	2.18	78.9	< 0.000010	7.84	0.406	< 0.000010	< 0.000010	< 0.000030	0.00298	< 0.0010	
EV GC2	EV GC2 WS 2022-07 WEK29 N	2022-07-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-08 MON N	2022-08-10	-	< 0.010	< 0.000050	0.0277	76.7	0.00295	0.00154	2.12	112	< 0.000010	6.91	0.329	< 0.000010	< 0.000010	< 0.000030	0.00432	< 0.0010	
EV GC2	EV GC2 WS 2022-09 MON N	2022-09-07	-	< 0.010	< 0.000050	0.0298	80.3	0.00237	0.00104	2.02	122	< 0.000010	7.8	0.389	< 0.000010	< 0.000010	< 0.000030	0.00422	< 0.0010	
EV GC2	EV GC2 WS 2022-04 N	2022-10-05	-	< 0.010	< 0.000050	0.03	82.7	0.00342	0.00117	2.05	107	< 0.000010	8.82	0.367	< 0.000010	< 0.000010	< 0.000030	0.0034	< 0.0010	
EV GC2	EV GC2 WS 2022-11 MON N	2022-11-09	-	< 0.010	< 0.000050	0.0285	75.2	0.00779	0.00129	1.94	60	< 0.000010	8.32	0.436	< 0.000010	< 0.000010	< 0.000030	0.00289	0.0017	
EV GC2	EV GC2 WS 2022-11-15 N	2022-11-15	-	< 0.010	< 0.000050	0.0326	72.2	0.00764	0.00122	1.92	80.8	< 0.000010	8.68	0.463	< 0.000010	< 0.000010	< 0.000030	0.00336	0.0021	
EV GC2	EV GC2 WS 2022-11-17 N	2022-11-17	-	< 0.010	< 0.000050	0.0306	75.3	0.00755	0.0013	1.93	89	< 0.000010	8.5	0.442	< 0.000010	< 0.000010	< 0.000030	0.00354	0.0026	
EV GC2	EV GC2 WS 2022-11-19 N	2022-11-19	-	< 0.010	< 0.000050	0.0293	80.1	0.00777	0.00116	2.06	110	< 0.000010	8.84	0.456	< 0.000010	< 0.000010	< 0.000030	0.0033	0.0016	
EV LC1	EV LC1 WS 2022-01 N	2022-01-14	-	< 0.010	< 0.000050	0.0532	59.3	0.0242	0.002	3.94	3.66	< 0.000010	8.1	0.434	< 0.000010	< 0.000010	< 0.000030	0.0026	0.0058	
EV LC1	EV LC1 WS 2022-02 MON N	2022-02-07	-	< 0.010	< 0.000050	0.0597	64.2	0.0221	0.00153	4.02	3.68	< 0.000010	8.35	0.424	< 0.000010	< 0.000010	< 0.000030	0.00279	0.002	
EV LC1	EV LC1 WS 2022-03 MON N	2022-03-16	-	< 0.010	< 0.000050	0.0524	58.8	0.0154	0.00157	3.97	5.1	< 0.000010	6.74	0.458	< 0.000010	< 0.000010	< 0.000030	0.00295	0.003	
EV LC1	EV LC1 WS 2022-02 N	2022-04-11	-	< 0.010	< 0.000050	0.0676	73.7	0.00959	0.00158	4.61	6.16	< 0.000010	9.08	0.499	< 0.000010	< 0.000010	< 0.000030	0.00329	< 0.0010	
EV LC1	EV LC1 WS 2022-04-15 N	2022-04-15	-	< 0.010	< 0.000050	0.0861	71.3	0.00967	0.00154	4.04	6.02	< 0.000010	7.83	0.495	< 0.000010	< 0.000010	< 0.000030	0.00343	< 0.0010	
EV LC1	EV LC1 WS 2022-05 MON N	2022-05-05	-	< 0.010	< 0.000050	0.0623	71	0.00873	0.00151	4.23	5.75	< 0.000010	8.16	0.496	< 0.000010	< 0.000010	< 0.000030	0.00326	< 0.0010	
EV LC1	EV LC1 WS 2022-06 MON N	2022-06-08	-	0.021	< 0.000050	0.0886	71.5	0.00404	0.00116	4.16	5.08	< 0.000010	7.78	0.548	< 0.000010	< 0.000010	< 0.000030	0.00327	< 0.0010	
EV LC1	EV LC1 WS 2022-03 N	2022-07-08	-	0.012	< 0.000050	0.0894	84.7	0.00774	0.00214	4.93	4.82	< 0.000010	8.4	0.527	< 0.000010	< 0.000010	< 0.000030	0.00261	0.0292	
EV LC1	EV LC1 WS 2022-08 MON N	2022-08-08	-	0.022	< 0.000050	0.0861	84.8	0.00241	0.00215	4.67	1.89	< 0.000010	8.59	0.517	< 0.000010	< 0.000010	< 0.000030	0.00297	0.0016	
EV LC1	EV LC1 WS_SESMIP_2022_08_N	2022-08-12	-	0.026	< 0.000050	0.0701	79.3	0.00338	0.00216	4.35	1.92	< 0.000010	8.65	0.533	0.000011	< 0.000010	< 0.000030	0.00305	0.002	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Aluminum mg/L		Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L		Calcium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L			
				Acute	Chronic							Acute	Chronic				Acute	Chronic		
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	n/a	BLM <sup>b</sup>	
Elkview Operation																				
EV LC1	EV LC1 WS 2022-09 MON N	2022-09-07	-	0.0065	0.00013	0.00014	0.182	< 0.020	< 0.000050	0.043			0.0000332	124	< 0.00010	< 0.10	0.00038			
EV LC1	EV LC1 WS 2022-Q4 N	2022-10-03	-	< 0.0010	0.00014	< 0.00010	0.201	< 0.020	< 0.000050	0.043			0.0000008	128	< 0.00010	< 0.10	0.00024			
EV LC1	EV ER5 WS 2022-Q4 N	2022-10-03	-	0.0011	0.00014	0.00013	0.2	< 0.020	< 0.000050	0.042			0.0000384	128	< 0.00010	< 0.10	0.00034			
EV LC1	EV ER7 WS 2022-Q4 N	2022-10-03	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010			< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00020			
EV LC1	EV LC1 WS 2022-11 MON N	2022-11-09	-	< 0.0010	0.00014	0.00011	0.143	< 0.020	< 0.000050	0.037			0.0000229	103	< 0.00010	< 0.10	0.00025			
EV MC2	EV MC2 WS 2022-01-06 N-SRF	2022-01-06	-	0.0023	< 0.00010	0.00014	0.106	< 0.020	< 0.000050	0.012			0.0000186	76.2	0.00013	0.00013	0.00027			
EV MC2	EV MC2 WS 2022-01-17 N-SRF	2022-01-17	-	0.0019	< 0.00010	0.00016	0.106	< 0.020	< 0.000050				0.0000202	67.6	0.00012		0.0002			
EV MC2	EV MC2 WS 2022 Q1 N	2022-01-18	-	0.0018	< 0.00010	0.00016	0.108	< 0.020	< 0.000050	0.013			0.0000257	69.3	0.00013	0.00013	< 0.00020			
EV MC2	EV MC2 WS 2022-01-31 N-SRF	2022-01-31	-	0.0014	< 0.00010	0.00012	0.0963	< 0.020	< 0.000050	0.011			0.0000231	68	0.00012	0.00012	< 0.00020			
EV MC2	EV MC2 WS 2022 Q1 WK0 N	2022-02-01	-	0.0019	< 0.00010	0.00016	0.116	< 0.020	< 0.000050	0.014			0.0000315	79.1	0.00013	0.00015	< 0.00020			
EV MC2	EV MC2 WS 2022-02 MON N	2022-02-08	-	0.0017	< 0.00010	0.00016	0.122	< 0.020	< 0.000050	0.013			0.0000229	79.3	0.00028	0.00013	< 0.00020			
EV MC2	EV MC2 WS 2022-02-14 N-SRF	2022-02-14	-	0.0012	< 0.00010	0.00013	0.104	< 0.020	< 0.000050	0.011			0.0000201	71.4	0.00013	< 0.00010	< 0.00020			
EV MC2	EV MC2 WS 2022 Q1 WK1 N	2022-02-15	-	0.001	0.00011	0.00014	0.107	< 0.020	< 0.000050	0.013			0.0000267	82.5	0.00015	0.0001	< 0.00020			
EV MC2	EV MC2 WS 2022 Q1 WK2 N	2022-02-22	-	0.0014	0.00013	0.00015	0.134	< 0.020	< 0.000050	0.016			0.0000472	97.1	0.00014	0.00023	0.00022			
EV MC2	EV MC2 WS 2022-02-28 N-SRF	2022-03-01	-	0.0011	< 0.00010	0.00013	0.108	< 0.020	< 0.000050	0.013			0.000028	80.3	0.00014	0.00012	0.00026			
EV MC2	EV MC2 WS 2022 Q1 WK3 N	2022-03-01	-	< 0.0010	< 0.00010	0.00013	0.1	< 0.020	< 0.000050	0.012			0.0000238	73.5	0.00013	0.00012	< 0.00020			
EV MC2	EV MC2 WS 2022 Q1 WK4 N	2022-03-08	-	0.0016	< 0.00010	0.00014	0.103	< 0.020	< 0.000050	0.012			0.0000204	77.5	0.00012	0.0001	< 0.00020			
EV MC2	EV MC2 WS 2022-03-14 N-SRF	2022-03-14	-	0.0016	0.00011	0.00013	0.102	< 0.020	< 0.000050	0.011			0.0000217	67.4	0.00012	0.0001	< 0.00020			
EV MC2	EV MC2 WS 2022 Q1 WK5 N	2022-03-15	-	< 0.0010	< 0.00010	0.00014	0.104	< 0.020	< 0.000050	0.011			0.0000212	73.7	0.00014	0.00011	< 0.00020			
EV MC2	EV MC2 WS 2022-03 MON N	2022-03-16	-	0.0038	< 0.00010	0.00013	0.0953	< 0.020	< 0.000050	0.013			0.000019	81.5	0.0001	0.0001	< 0.00020			
EV MC2	EV MC5 WS 2022-03 MON N	2022-03-16	-	0.0022	< 0.00010	0.00012	0.0934	< 0.020	< 0.000050	0.012			0.000025	80.2	0.00012	0.0001	< 0.00020			
EV MC2	EV MC2 WS 2022-03-21 N-SRF	2022-03-21	-	0.0026	< 0.00010	0.00014	0.11	< 0.020	< 0.000050	0.013			0.0000265	78.7	0.00013	0.0001	< 0.00020			
EV MC2	EV MC2 WS 2022-03 WEK13 N	2022-03-22	-	0.003	0.0001	0.00014	0.104	< 0.020	< 0.000050	0.013			0.000029	77.2	0.00014	0.00011	0.00026			
EV MC2	EV MC5 WS 2022-03 WEK13 N	2022-03-22	-	0.0026	< 0.00010	0.00013	0.105	< 0.020	< 0.000050	0.014			0.0000332	76.2	0.00013	0.00011	< 0.00020			
EV MC2	EV MC2 WS 2022-03-28 N-SRF	2022-03-28	-	0.002	< 0.00010	0.00014	0.111	< 0.020	< 0.000050	< 0.010			0.0000208	66.2	0.0002	< 0.10	0.00032			
EV MC2	EV MC2 WS 2022-03-28 N-SRF 1	2022-03-28	-	-	-	-	-	-	-	-			-	72.3	-	-	-			
EV MC2	EV MC2 WS 2022-03 WEK14 N	2022-03-29	-	0.0045	< 0.00010	0.00016	0.105	< 0.020	< 0.000050	0.011			0.000025	62.8	0.00013	< 0.10	0.00033			
EV MC2	EV MC5 WS 2022-03 WEK14 N	2022-03-29	-	0.0016	< 0.00010	0.00016	0.0949	< 0.020	< 0.000050	0.012			0.0000273	66	< 0.00010	< 0.10	0.00028			
EV MC2	EV MC2 WS 2022-04-04 N-SRF	2022-04-04	-	0.0059	0.00011	0.00016	0.108	< 0.020	< 0.000050	0.01			0.0000219	62.8	< 0.00010	< 0.10	0.00028			
EV MC2	EV MC2 WS 2022-04 WEK15 N	2022-04-05	-	0.0016	< 0.00010	0.00014	0.102	< 0.020	< 0.000050	0.011			0.0000243	67.9	< 0.00010	< 0.10	0.00024			
EV MC2	EV MC5 WS 2022-04 WEK15 N	2022-04-05	-	0.0016	< 0.00010	0.00015	0.101	< 0.020	< 0.000050	0.012			0.0000271	71.1	< 0.00010	< 0.10	0.00024			
EV MC2	EV MC2 WS 2022-04-10 N-SRF	2022-04-10	-	-	-	-	-	-	-	-			-	66	-	-	-			
EV MC2	EV MC2 WS 2022-04-11 N-SRF	2022-04-11	-	0.0019	0.00012	0.00015	0.0974	< 0.020	< 0.000050	0.011			0.0000224	72.4	0.00013	< 0.10	0.00037			
EV MC2	EV MC2 WS 2022-04-11 N-SRF 1	2022-04-11	-	-	-	-	-	-	-	-			-	66.2	-	-	-			
EV MC2	EV MC2 WS 2022-Q2 N	2022-04-12	-	0.0042	0.00011	0.00014	0.104	< 0.020	< 0.000050	0.011			0.0000262	66.8	0.00011	< 0.10	0.0011			
EV MC2	EV MC2 WS 2022-04-12 N-SRF	2022-04-12	-	-	-	-	-	-	-	-			-	71.7	-	-	-			
EV MC2	EV MC2 WS 2022-04-13 N-SRF	2022-04-13	-	-	-	-	-	-	-	-			-	72.5	-	-	-			
EV MC2	EV MC2 WS 2022-04-14 N-SRF	2022-04-14	-	-	-	-	-	-	-	-			-	68.5	-	-	-			
EV MC2	EV MC2 WS 2022-04-15 N-SRF	2022-04-15	-	-	-	-	-	-	-	-			-	68.1	-	-	-			
EV MC2	EV MC2 WS 2022-04-16 N-SRF	2022-04-16	-	-	-	-	-	-	-	-			-	67.8	-	-	-			
EV MC2	EV MC2 WS 2022-04-17 N-SRF	2022-04-17	-	-	-	-	-	-	-	-			-	66.4	-	-	-			
EV MC2	EV MC2 WS 2022-04-18 N-SRF	2022-04-18	-	0.0022	0.0001	0.00017	0.112	< 0.020	< 0.000050	0.011			0.0000192	70.5	0.00012	< 0.10	0.00029			
EV MC2	EV MC2 WS 2022-04-18 N-SRF 1	2022-04-18	-	-	-	-	-	-	-	-			-	-	-	-	-			
EV MC2	EV MC2 WS 2022-04 WEK17 N	2022-04-19	-	0.0016	< 0.00010	0.00016	0.115	< 0.020	< 0.000050	0.011			0.0000252	66.2	< 0.00010	< 0.10	0.00022			
EV MC2	EV MC5 WS 2022-04 WEK17 N	2022-04-19	-	0.0019	0.00011	0.00035	0.116	< 0.020	< 0.000050	0.011			0.0000291	68.2	0.00011	< 0.10	0.00023			
EV MC2	EV MC2 WS 2022-04-19 N-SRF	2022-04-19	-	-	-	-	-	-	-	-			-	73.6	-	-	-			
EV MC2	EV MC2 WS 2022-04-20 N-SRF	2022-04-20	-	-	-	-	-	-	-	-			-	72.3	-	-	-			
EV MC2	EV MC2 WS 2022-04-21 N-SRF	2022-04-21	-	-	-	-	-	-	-	-			-	70.5	-	-	-			
EV MC2	EV MC2 WS 2022-04-22 N-SRF	2022-04-22	-	-	-	-	-	-	-	-			-	70.2	-	-	-			
EV MC2	EV MC2 WS 2022-04-23 N-SRF	2022-04-23	-	-	-	-	-	-	-	-			-	71.8	-	-	-			

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL



APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Elkview Operation</b>																				
EV LC1	EV LC1 WS 2022-09 MON N	2022-09-07	-	< 0.010	< 0.000050	0.0616	77	0.0014	0.00181	4.29	1.43	< 0.000010	8.22	0.54	< 0.000010	< 0.000010	< 0.000030	0.00289	0.0016	
EV LC1	EV LC1 WS 2022-Q4 N	2022-10-03	-	< 0.010	< 0.000050	0.0641	76.9	0.00632	0.00216	4.89	1.68	< 0.000010	8.3	0.544	0.000012	< 0.000010	< 0.000030	0.00278	0.0022	
EV LC1	EV ER5 WS 2022-Q4 N	2022-10-03	-	< 0.010	< 0.000050	0.0647	76.9	0.00619	0.00212	4.89	1.6	< 0.000010	8.24	0.545	0.000011	< 0.000010	< 0.000030	0.00285	0.0017	
EV LC1	EV ER7 WS 2022-Q4 N	2022-10-03	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.000010	< 0.000030	< 0.000010	< 0.0010	
EV LC1	EV LC1 WS 2022-11 MON N	2022-11-09	-	< 0.010	< 0.000050	0.0604	68.8	0.00368	0.0017	4.07	3.28	< 0.000010	7.34	0.438	< 0.000010	< 0.000010	< 0.000030	0.00261	< 0.0010	
EV MC2	EV MC2 WS 2022-01-06 N-SRF	2022-01-06	-	< 0.010	< 0.000050	0.0121	25.6	0.00347	0.0019	0.972	8.15	< 0.000010	5.36	0.191	< 0.000010	< 0.000010	< 0.000030	0.00124	0.0015	
EV MC2	EV MC2 WS 2022-01-17 N-SRF	2022-01-17	-	< 0.010	< 0.000050	0.0112	25.3	0.00271	0.00177	0.903	8.09	< 0.000010	4.46	0.177	< 0.000010	< 0.000010	< 0.000030	0.00136	< 0.0010	
EV MC2	EV MC2 WS 2022 Q1 N	2022-01-18	-	< 0.010	< 0.000050	0.0125	29	0.00298	0.00193	0.984	9.66	< 0.000010	5.24	0.186	< 0.000010	< 0.000010	< 0.000030	0.00143	< 0.0010	
EV MC2	EV MC2 WS 2022-01-31 N-SRF	2022-01-31	-	< 0.010	< 0.000050	0.0111	26.2	0.00258	0.00165	0.876	7.86	< 0.000010	4.69	0.165	< 0.000010	< 0.000010	< 0.000030	0.00126	< 0.0010	
EV MC2	EV MC2 WS 2022 Q1 WK0 N	2022-02-01	-	< 0.010	< 0.000050	0.0143	31	0.00326	0.00209	1.04	15.5	< 0.000010	5.34	0.201	< 0.000010	< 0.000010	< 0.000030	0.00157	0.0013	
EV MC2	EV MC2 WS 2022-02 MON N	2022-02-08	-	< 0.010	< 0.000050	0.0138	31.2	0.00272	0.00208	1.06	9.14	< 0.000010	5.1	0.19	< 0.000010	< 0.000010	< 0.000030	0.00156	0.0016	
EV MC2	EV MC2 WS 2022-02-14 N-SRF	2022-02-14	-	< 0.010	< 0.000050	0.012	29.3	0.00219	0.00211	0.979	10.8	< 0.000010	4.36	0.18	< 0.000010	< 0.000010	< 0.000030	0.00156	< 0.0010	
EV MC2	EV MC2 WS 2022 Q1 WK1 N	2022-02-15	-	< 0.010	0.00008	0.0156	34.3	0.00222	0.00242	1.11	14.9	< 0.000010	5.34	0.2	< 0.000010	< 0.000010	< 0.000030	0.00163	< 0.0010	
EV MC2	EV MC2 WS 2022 Q1 WK2 N	2022-02-22	-	< 0.010	< 0.000050	0.0202	46.4	0.00554	0.00342	1.43	16.6	< 0.000010	6.08	0.242	< 0.000010	< 0.000010	< 0.000030	0.00232	0.0035	
EV MC2	EV MC2 WS 2022-02-28 N-SRF	2022-03-01	-	< 0.010	< 0.000050	0.013	32	0.0026	0.00214	1.02	10.1	< 0.000010	5.17	0.197	< 0.000010	< 0.000010	< 0.000030	0.00153	0.0049	
EV MC2	EV MC2 WS 2022 Q1 WK3 N	2022-03-01	-	< 0.010	< 0.000050	0.0131	30	0.00247	0.00218	1.05	11.1	< 0.000010	5.81	0.179	< 0.000010	< 0.000010	< 0.000030	0.00156	< 0.0010	
EV MC2	EV MC2 WS 2022 Q1 WK4 N	2022-03-08	-	< 0.010	< 0.000050	0.0148	31	0.00227	0.00205	0.966	9.41	< 0.000010	4.83	0.189	< 0.000010	< 0.000010	< 0.000030	0.00135	< 0.0010	
EV MC2	EV MC2 WS 2022-03-14 N-SRF	2022-03-14	-	< 0.010	< 0.000050	0.0129	28.6	0.00209	0.00207	1.05	14.2	< 0.000010	4.91	0.19	0.000013	< 0.000010	< 0.000030	0.00153	0.0016	
EV MC2	EV MC2 WS 2022 Q1 WK5 N	2022-03-15	-	< 0.010	< 0.000050	0.0134	32	0.00227	0.00228	1.05	10.9	< 0.000010	5.18	0.18	< 0.000010	< 0.000010	< 0.000030	0.0015	< 0.0010	
EV MC2	EV MC2 WS 2022-03 MON N	2022-03-16	-	< 0.010	< 0.000050	0.0141	30.9	0.00226	0.00186	1.04	10.8	< 0.000010	5.04	0.193	< 0.000010	< 0.000010	< 0.000030	0.0015	< 0.0010	
EV MC2	EV MC5 WS 2022-03 MON N	2022-03-16	-	< 0.010	< 0.000050	0.0141	30	0.00222	0.00174	1.01	11	< 0.000010	4.93	0.192	< 0.000010	< 0.000010	< 0.000030	0.00155	< 0.0010	
EV MC2	EV MC2 WS 2022-03-21 N-SRF	2022-03-21	-	< 0.010	< 0.000050	0.0152	30.6	0.00234	0.00199	1.08	11.5	< 0.000010	5.43	0.191	< 0.000010	< 0.000010	< 0.000030	0.00162	0.0012	
EV MC2	EV MC2 WS 2022-03 WEK13 N	2022-03-22	-	0.024	< 0.000050	0.0159	31	0.00284	0.00188	1.09	12.6	< 0.000010	5.51	0.189	< 0.000010	< 0.000010	< 0.000030	0.00156	< 0.0010	
EV MC2	EV MC2 WS 2022-03-22 N	2022-03-22	-	< 0.010	< 0.000050	0.0159	30.2	0.00239	0.00182	1.06	11.8	< 0.000010	5.3	0.189	< 0.000010	< 0.000010	< 0.000030	0.00156	< 0.0010	
EV MC2	EV MC2 WS 2022-03-28 N-SRF	2022-03-28	-	< 0.010	< 0.000050	0.009	25	0.00133	0.0019	0.876	12.7	< 0.000010	4.22	0.164	< 0.000010	< 0.000010	< 0.000030	0.00115	0.0026	
EV MC2	EV MC2 WS 2022-03-28 N-SRF 1	2022-03-28	-	-	-	-	31	-	-	0.992	-	-	5.38	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-03 WEK14 N	2022-03-29	-	< 0.010	< 0.000050	0.0104	28.3	0.00139	0.00118	0.972	11.7	< 0.000010	4.86	0.165	< 0.000010	< 0.000010	< 0.000030	0.00104	0.0026	
EV MC2	EV MC5 WS 2022-03 WEK14 N	2022-03-29	-	< 0.010	< 0.000050	0.0124	26.7	0.00114	0.00106	0.963	13.9	< 0.000010	5.01	0.176	< 0.000010	< 0.000010	< 0.000030	0.00107	< 0.0010	
EV MC2	EV MC2 WS 2022-04-04 N-SRF	2022-04-04	-	0.024	< 0.000050	0.01	25.6	0.00182	0.00124	0.953	10.5	< 0.000010	4.4	0.169	< 0.000010	< 0.000010	< 0.000030	0.0012	0.0034	
EV MC2	EV MC2 WS 2022-04 WEK15 N	2022-04-05	-	< 0.010	< 0.000050	0.0117	27.7	0.00142	0.00136	0.977	11.4	< 0.000010	4.87	0.174	< 0.000010	< 0.000010	< 0.000030	0.00121	< 0.0010	
EV MC2	EV MC5 WS 2022-04 WEK15 N	2022-04-05	-	< 0.010	< 0.000050	0.014	29.8	0.00135	0.00122	1.06	13.7	< 0.000010	5.44	0.185	< 0.000010	< 0.000010	< 0.000030	0.00121	< 0.0010	
EV MC2	EV MC2 WS 2022-04-10 N-SRF	2022-04-10	-	-	-	-	26.1	-	-	0.837	-	-	4.18	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-11 N-SRF	2022-04-11	-	< 0.010	< 0.000050	0.0107	25.7	0.00139	0.00142	0.879	12.3	< 0.000010	4.36	0.193	< 0.000010	< 0.000010	< 0.000030	0.00116	0.0021	
EV MC2	EV MC2 WS 2022-04-11 N-SRF 1	2022-04-11	-	-	-	-	26.2	-	-	0.85	-	-	4.36	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-Q2 N	2022-04-12	-	0.01	< 0.000050	0.0109	27	0.00148	0.00132	0.921	15.6	< 0.000010	4.62	0.181	< 0.000010	0.00022	< 0.000030	0.00126	0.0022	
EV MC2	EV MC2 WS 2022-04-12 N-SRF	2022-04-12	-	-	-	-	27.5	-	-	0.872	-	-	4.58	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-13 N-SRF	2022-04-13	-	-	-	-	27.9	-	-	0.839	-	-	4.58	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-14 N-SRF	2022-04-14	-	-	-	-	29.4	-	-	0.89	-	-	4.52	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-15 N-SRF	2022-04-15	-	-	-	-	29.6	-	-	0.876	-	-	4.23	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-16 N-SRF	2022-04-16	-	-	-	-	28.5	-	-	0.855	-	-	4.06	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-17 N-SRF	2022-04-17	-	-	-	-	26.9	-	-	0.825	-	-	4.05	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-18 N-SRF	2022-04-18	-	0.01	< 0.000050	0.012	30.6	0.00186	0.00162	1.04	14.6	< 0.000010	4.88	0.193	< 0.000010	< 0.000010	< 0.000030	0.00156	0.0019	
EV MC2	EV MC2 WS 2022-04-18 N-SRF 1	2022-04-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04 WEK17 N	2022-04-19	-	< 0.010	< 0.000050	0.011	29.8	0.00127	0.00119	0.932	16.2	< 0.000010	4.82	0.177	< 0.000010	< 0.000010	< 0.000030	0.00131	< 0.0010	
EV MC2	EV MC5 WS 2022-04 WEK17 N	2022-04-19	-	< 0.010	0.000088	0.0112	30	0.0013	0.00124	0.943	15.6	< 0.000010	4.86	0.178	< 0.000010	< 0.000010	< 0.000030	0.00132	< 0.0010	
EV MC2	EV MC2 WS 2022-04-19 N-SRF	2022-04-19	-	-	-	-	29.6	-	-	0.942	-	-	4.94	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-20 N-SRF	2022-04-20	-	-	-	-	32.5	-	-	0.999	-	-	4.97	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-21 N-SRF	2022-04-21	-	-	-	-	27.9	-	-	0.809	-	-	4.12	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-22 N-SRF	2022-04-22	-	-	-	-	27.7	-	-	0.8										

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																	
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper				
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	Acute	Chronic	BLM <sup>d</sup>	
Elkview Operation																					
EV_MC2	EV_MC2_WS_2022-04-24_N-SRF	2022-04-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-04-25_N-SRF_1	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-04-25_N-SRF	2022-04-25	-	0.0031	0.0001	0.00017	0.11	< 0.020	< 0.000050	0.012	-	0.0000298	-	64.4	< 0.00010	< 0.10	0.00041	-	-	-	
EV_MC2	EV_MC2_WS_2022-04-26_N-SRF	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	62.9	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-04-26_N-SRF_P	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-04-26_N-SRF_UP	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-04-WEK18_N	2022-04-28	-	0.0034	< 0.00010	0.00016	0.109	< 0.020	< 0.000050	0.01	-	0.0000378	-	61.2	< 0.00010	< 0.10	0.00036	-	-	-	
EV_MC2	EV_MC5_WS_2022-04-WEK18_N	2022-04-28	-	0.0029	< 0.00010	0.00016	0.101	< 0.020	< 0.000050	0.01	-	0.0000237	-	58.7	< 0.00010	< 0.10	0.00039	-	-	-	
EV_MC2	EV_MC2_WS_2022-04-27_N-SRF	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	53.9	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-04-27_N-SRF_P	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-04-27_N-SRF_UP	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-04-28_N-SRF	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-04-28_N-SRF_P	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	56.3	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-04-29_N-SRF	2022-04-29	-	-	-	-	-	-	-	-	-	-	-	63.7	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-04-30_N-SRF	2022-04-30	-	-	-	-	-	-	-	-	-	-	-	63.6	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-01_N-SRF	2022-05-01	-	-	-	-	-	-	-	-	-	-	-	67.7	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-01_N-SRF_P	2022-05-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-01_N-SRF_UP	2022-05-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-02_N-SRF	2022-05-02	-	0.004	< 0.00010	0.00018	0.0862	< 0.020	< 0.000050	< 0.010	-	0.0000183	-	50.4	0.00014	< 0.10	0.00035	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-02_N-SRF_1	2022-05-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-03_N-SRF	2022-05-03	-	-	-	-	-	-	-	-	-	-	-	52.9	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-MON_N	2022-05-03	-	0.005	< 0.00010	0.00017	0.0822	< 0.020	< 0.000050	< 0.010	-	0.0000167	-	50.3	< 0.00010	< 0.10	0.00032	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-04_N-SRF	2022-05-04	-	-	-	-	-	-	-	-	-	-	-	41.6	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-05_N-SRF	2022-05-05	-	-	-	-	-	-	-	-	-	-	-	45	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-06_N-SRF	2022-05-06	-	-	-	-	-	-	-	-	-	-	-	29.2	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-07_N-SRF	2022-05-07	-	-	-	-	-	-	-	-	-	-	-	36.6	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-08_N-SRF	2022-05-08	-	-	-	-	-	-	-	-	-	-	-	41.7	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-09_N-SRF	2022-05-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-10_N-SRF	2022-05-10	-	0.0113	< 0.00010	0.00018	0.0717	< 0.020	< 0.000050	< 0.010	-	0.0000249	-	40.5	0.00014	< 0.10	0.00038	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-11_N-SRF	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	46.9	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-11_N-SRF	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-WEK20_N	2022-05-11	-	0.0072	< 0.00010	0.00019	0.081	< 0.020	< 0.000050	0.01	-	0.0000216	-	45.5	0.0001	< 0.10	0.00033	-	-	-	
EV_MC2	EV_MC5_WS_2022-05-WEK20_N	2022-05-11	-	0.009	< 0.00010	0.0002	0.0817	< 0.020	< 0.000050	< 0.010	-	0.0000241	-	44.9	0.00012	< 0.10	0.00038	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-12_N-SRF	2022-05-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC10_WS_2022-05-12_N-SRF	2022-05-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-13_N-SRF	2022-05-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC10_WS_2022-05-13_N-SRF	2022-05-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-14_N-SRF	2022-05-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC10_WS_2022-05-14_N-SRF	2022-05-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-15_N-SRF	2022-05-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC10_WS_2022-05-15_N-SRF	2022-05-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-16_N-SRF	2022-05-16	-	0.0078	0.00014	0.00015	0.078	< 0.020	< 0.000050	< 0.010	-	0.0000222	-	43.4	0.00014	< 0.10	0.00033	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-16_N-SRF_1	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC10_WS_2022-05-16_N-SRF	2022-05-16	-	0.0067	< 0.00010	0.00019	0.078	< 0.020	< 0.000050	< 0.010	-	0.0000234	-	43.9	0.00014	< 0.10	0.00039	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-WEK21_N	2022-05-17	-	0.0223	< 0.00010	0.00018	0.069	< 0.020	< 0.000050	< 0.010	-	0.0000256	-	37.7	0.00015	< 0.10	0.0016	-	-	-	
EV_MC2	EV_MC5_WS_2022-05-WEK21_N	2022-05-17	-	0.0149	< 0.00010	0.0002	0.0672	< 0.020	< 0.000050	< 0.010	-	0.0000254	-	37.1	0.00014	< 0.10	0.00066	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-17_N-SRF	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC10_WS_2022-05-17_N-SRF	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-18_N-SRF	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC10_WS_2022-05-18_N-SRF	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-19_N-SRF	2022-05-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC10_WS_2022-05-20_N-SRF	2022-05-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Elkview Operation</b>																			
EV_MC2	EV_MC2_WS_2022-04-24_N-SRF	2022-04-24	-	-	-	-	35.1	-	-	1.1	-	-	6.23	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-04-25_N-SRF_1	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-04-25_N-SRF	2022-04-25	-	< 0.010	< 0.000050	0.0098	27	0.00129	0.00122	0.959	12.6	< 0.000010	4.42	0.173	< 0.000010	< 0.00010	< 0.00030	0.00126	0.0016
EV_MC2	EV_MC2_WS_2022-04-26_N-SRF	2022-04-26	-	-	-	-	25.1	-	-	0.862	-	-	4.59	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-04-26_N-SRF_P	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-04-26_N-SRF_UP	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-04_WEK18_N	2022-04-26	-	< 0.010	< 0.000050	0.0095	25.9	0.00131	0.00113	0.897	12	< 0.000010	4.46	0.174	< 0.000010	< 0.00010	< 0.00030	0.00108	0.0014
EV_MC2	EV_MC5_WS_2022-04_WEK18_N	2022-04-26	-	< 0.010	< 0.000050	0.0089	23.9	0.00117	0.00104	0.845	10.6	< 0.000010	4.18	0.16	< 0.000010	< 0.00010	< 0.00030	0.00106	< 0.0010
EV_MC2	EV_MC2_WS_2022-04-27_N-SRF	2022-04-27	-	-	-	-	20.8	-	-	0.708	-	-	3.66	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-04-27_N-SRF_P	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-04-27_N-SRF_UP	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-04-28_N-SRF	2022-04-28	-	-	-	-	21.2	-	-	0.782	-	-	4.18	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-04-29_N-SRF	2022-04-29	-	-	-	-	23.9	-	-	0.878	-	-	5.15	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-04-30_N-SRF	2022-04-30	-	-	-	-	24.9	-	-	0.858	-	-	4.62	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-01_N-SRF	2022-05-01	-	-	-	-	24	-	-	0.867	-	-	4.65	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-01_N-SRF_P	2022-05-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-01_N-SRF_UP	2022-05-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-02_N-SRF	2022-05-02	-	< 0.010	< 0.000050	0.0072	19.2	0.00103	0.00108	0.772	7.76	< 0.000010	3.84	0.137	< 0.000010	< 0.00010	< 0.00030	0.000937	< 0.0010
EV_MC2	EV_MC2_WS_2022-05-02_N-SRF_1	2022-05-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-03_N-SRF	2022-05-03	-	-	-	-	20	-	-	0.79	-	-	4.18	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05_MON_N	2022-05-03	-	< 0.010	< 0.000050	0.0069	17.6	0.00131	0.00095	0.705	6.68	< 0.000010	3.49	0.136	< 0.000010	< 0.00010	< 0.00030	0.000787	< 0.0010
EV_MC2	EV_MC2_WS_2022-05-04_N-SRF	2022-05-04	-	-	-	-	16.3	-	-	0.756	-	-	3.28	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-05_N-SRF	2022-05-05	-	-	-	-	17.5	-	-	0.798	-	-	3.75	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-06_N-SRF	2022-05-06	-	-	-	-	9.83	-	-	0.564	-	-	2.19	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-07_N-SRF	2022-05-07	-	-	-	-	13.9	-	-	0.605	-	-	2.9	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-08_N-SRF	2022-05-08	-	-	-	-	15	-	-	0.636	-	-	3.15	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-09_N-SRF	2022-05-09	-	0.015	< 0.000050	0.0068	14.7	0.00137	0.00109	0.706	5.48	< 0.000010	3.44	0.118	< 0.000010	< 0.00010	< 0.00030	0.000635	0.001
EV_MC2	EV_MC2_WS_2022-05-10_N-SRF	2022-05-10	-	-	-	-	18.6	-	-	0.751	-	-	4.22	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-11_N-SRF	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05_WEK20_N	2022-05-11	-	< 0.010	< 0.000050	0.0067	15.9	0.00123	0.00116	0.673	4.88	< 0.000010	3.62	0.129	< 0.000010	< 0.00010	< 0.00030	0.00066	< 0.0010
EV_MC2	EV_MC5_WS_2022-05_WEK20_N	2022-05-11	-	< 0.010	< 0.000050	0.0064	16.2	0.00124	0.00118	0.68	5.2	< 0.000010	3.65	0.127	< 0.000010	< 0.00010	< 0.00030	0.000635	0.0017
EV_MC2	EV_MC2_WS_2022-05-12_N-SRF	2022-05-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC10_WS_2022-05-12_N-SRF	2022-05-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-13_N-SRF	2022-05-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC10_WS_2022-05-13_N-SRF	2022-05-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-14_N-SRF	2022-05-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC10_WS_2022-05-14_N-SRF	2022-05-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-15_N-SRF	2022-05-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC10_WS_2022-05-15_N-SRF	2022-05-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-16_N-SRF	2022-05-16	-	0.013	< 0.000050	0.0062	15.3	0.00112	0.001	0.686	5.56	< 0.000010	3.46	0.125	< 0.000010	< 0.00010	< 0.00030	0.000675	0.0025
EV_MC2	EV_MC2_WS_2022-05-16_N-SRF_1	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC10_WS_2022-05-16_N-SRF	2022-05-16	-	< 0.010	< 0.000050	0.0063	15.9	0.00102	0.00117	0.706	5.52	< 0.000010	3.47	0.128	< 0.000010	< 0.00010	< 0.00030	0.000689	0.0052
EV_MC2	EV_MC2_WS_2022-05_WEK21_N	2022-05-17	-	0.03	< 0.000050	0.0057	13.9	0.00158	0.00138	0.642	4.48	< 0.000010	3.05	0.109	< 0.000010	< 0.00010	0.0005	0.000519	0.0028
EV_MC2	EV_MC5_WS_2022-05_WEK21_N	2022-05-17	-	0.018	< 0.000050	0.0054	13.8	0.00127	0.00135	0.636	4.36	< 0.000010	3.02	0.11	< 0.000010	< 0.00010	< 0.00030	0.00054	0.0015
EV_MC2	EV_MC2_WS_2022-05-17_N-SRF	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC10_WS_2022-05-17_N-SRF	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-18_N-SRF	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC10_WS_2022-05-18_N-SRF	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-19_N-SRF	2022-05-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-20_N-SRF	2022-05-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper		
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	Acute Chronic	BLM <sup>d</sup>
Elkview Operation																			
EV_MC2	EV_MC2_WS_2022-02-21_N-SRF	2022-05-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-22_N-SRF	2022-05-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-23_N-SRF	2022-05-23	-	0.0059	< 0.00010	0.00016	0.0728	< 0.020	< 0.000050	< 0.010	-	0.0000219	46	0.00012	< 0.10	0.00027	-	-	
EV_MC2	EV_MC2_WS_2022-05-WEK22_N	2022-05-24	-	0.007	< 0.00010	0.00017	0.0702	< 0.020	< 0.000050	0.01	-	0.0000222	44.4	0.00011	< 0.10	0.00087	-	-	
EV_MC2	EV_MC5_WS_2022-05-WEK22_N	2022-05-24	-	0.0166	0.00012	0.00017	0.0715	< 0.020	< 0.000050	0.01	-	0.0000195	49.1	0.00018	< 0.10	0.00058	-	-	
EV_MC2	EV_MC2_WS_2022-05-24_N-SRF	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-25_N-SRF	2022-05-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-26_N-SRF	2022-05-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-27_N-SRF	2022-05-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-28_N-SRF	2022-05-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-29_N-SRF	2022-05-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-30_N-SRF	2022-05-30	-	0.0123	< 0.00010	0.00019	0.0588	< 0.020	< 0.000050	< 0.010	-	0.000021	34.5	0.00016	< 0.10	0.00032	-	-	
EV_MC2	EV_MC2_WS_2022-05-30_N-SRF_1	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-05-WEK23_N	2022-05-31	-	0.0112	< 0.00010	0.00016	0.0584	< 0.020	< 0.000050	< 0.010	-	0.0000226	38.8	0.00013	< 0.10	0.00036	-	-	
EV_MC2	EV_MC5_WS_2022-05-WEK23_N	2022-05-31	-	0.0127	< 0.00010	0.00017	0.0604	< 0.020	< 0.000050	< 0.010	-	0.0000245	38.3	0.00012	< 0.10	0.00036	-	-	
EV_MC2	EV_MC2_WS_2022-05-31_N-SRF	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-01_N-SRF	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-02_N-SRF	2022-06-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-03_N-SRF	2022-06-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-04_N-SRF	2022-06-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-05_N-SRF	2022-06-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-06_N-SRF	2022-06-06	-	0.0139	< 0.00010	0.00021	0.0485	< 0.020	< 0.000050	< 0.010	-	0.0000227	29.3	0.00019	< 0.10	0.00054	-	-	
EV_MC2	EV_MC2_WS_2022-06-MON_N	2022-06-06	-	0.0119	< 0.00010	0.00021	0.0495	< 0.020	< 0.000050	< 0.010	-	0.0000202	30.7	0.00013	< 0.10	0.00031	-	-	
EV_MC2	EV_MC5_WS_2022-06-MON_N	2022-06-06	-	0.0119	< 0.00010	0.0002	0.0468	< 0.020	< 0.000050	< 0.010	-	0.0000198	30.6	0.00011	< 0.10	0.00031	-	-	
EV_MC2	EV_MC2_WS_2022-06-07_N-SRF	2022-06-07	-	0.0138	< 0.00010	0.00017	0.0455	< 0.020	< 0.000050	< 0.010	-	0.0000204	35.2	0.0002	< 0.10	0.00028	-	-	
EV_MC2	EV_MC2_WS_2022-06-08_N-SRF	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-09_N-SRF	2022-06-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-10_N-SRF	2022-06-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-11_N-SRF	2022-06-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-12_N-SRF	2022-06-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-13_N-SRF	2022-06-13	-	0.0123	< 0.00010	0.00019	0.0484	< 0.020	< 0.000050	< 0.010	-	0.000023	29.7	0.00021	< 0.10	0.00032	-	-	
EV_MC2	EV_MC2_WS_2022-06-WEK25_N	2022-06-13	-	0.0225	< 0.00010	0.00022	0.0485	< 0.020	< 0.000050	< 0.010	-	0.0000247	28.9	0.00016	< 0.10	0.00041	-	-	
EV_MC2	EV_MC5_WS_2022-06-WEK25_N	2022-06-13	-	0.0256	< 0.00010	0.00021	0.0485	< 0.020	< 0.000050	< 0.010	-	0.0000282	28	0.0002	< 0.10	0.00042	-	-	
EV_MC2	EV_MC2_WS_2022-06-WEK5_N	2022-06-14	-	0.0138	< 0.00010	0.00019	0.0459	< 0.020	< 0.000050	< 0.010	-	0.0000226	32	0.00016	< 0.10	0.00035	-	-	
EV_MC2	EV_MC2_WS_2022-06-14_N-SRF	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-15_N-SRF	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-16_N-SRF	2022-06-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-17_N-SRF	2022-06-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-18_N-SRF	2022-06-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-19_N-SRF	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-20_N-SRF	2022-06-20	-	0.0093	< 0.00010	0.0002	0.047	< 0.020	< 0.000050	< 0.010	-	0.0000167	33.7	0.00014	< 0.10	0.00029	-	-	
EV_MC2	EV_MC2_WS_2022-06-21_N-SRF	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-WEK26_N	2022-06-21	-	0.0084	< 0.00010	0.0002	0.0479	< 0.020	< 0.000050	< 0.010	-	0.0000213	34.1	0.00013	< 0.10	0.00031	-	-	
EV_MC2	EV_MC5_WS_2022-06-WEK26_N	2022-06-21	-	0.0091	< 0.00010	0.00017	0.0507	< 0.020	< 0.000050	< 0.010	-	0.0000209	34.3	0.00013	< 0.10	0.00029	-	-	
EV_MC2	EV_MC2_WS_2022-06-22_N-SRF	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-23_N-SRF	2022-06-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-24_N-SRF	2022-06-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-25_N-SRF	2022-06-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-26_N-SRF	2022-06-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Elkview Operation</b>																			
EV_MC2	EV_MC2_WS_2022-02-21_N-SRF	2022-05-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-22_N-SRF	2022-05-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-23_N-SRF	2022-05-23	-	< 0.010	< 0.000050	0.0065	16.8	0.00101	0.00138	0.666	6.02	< 0.000010	3.08	0.126	< 0.000010	< 0.000010	< 0.000030	0.000738	0.0027
EV_MC2	EV_MC2_WS_2022-05-24_N-SRF	2022-05-24	-	0.01	< 0.000050	0.0068	16.8	0.00094	0.00154	0.589	6.02	< 0.000010	3.08	0.115	< 0.000010	0.00019	< 0.000030	0.000675	0.0022
EV_MC2	EV_MC5_WS_2022-05-24_N-SRF	2022-05-24	-	0.016	< 0.000050	0.0072	17.3	0.00172	0.00152	0.607	6.69	< 0.000010	3.17	0.11	< 0.000010	< 0.000010	< 0.000030	0.000706	0.0067
EV_MC2	EV_MC2_WS_2022-05-25_N-SRF	2022-05-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-26_N-SRF	2022-05-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-27_N-SRF	2022-05-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-28_N-SRF	2022-05-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-29_N-SRF	2022-05-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-30_N-SRF	2022-05-30	-	0.011	< 0.000050	0.0044	12.3	0.0011	0.00124	0.525	3.45	0.000012	1.99	0.091	< 0.000010	< 0.000010	< 0.000030	0.000519	0.001
EV_MC2	EV_MC2_WS_2022-05-30_N-SRF_1	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-05-31_N-SRF	2022-05-31	-	0.01	< 0.000050	0.0056	13.7	0.00104	0.00124	0.537	4.54	< 0.000010	2.28	0.0985	< 0.000010	< 0.000010	< 0.000030	0.000506	< 0.0010
EV_MC2	EV_MC5_WS_2022-05-31_N-SRF	2022-05-31	-	0.01	< 0.000050	0.0055	13.1	0.0011	0.00125	0.521	4.57	< 0.000010	2.3	0.0967	< 0.000010	< 0.000010	< 0.000030	0.000517	< 0.0010
EV_MC2	EV_MC2_WS_2022-06-01_N-SRF	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-02_N-SRF	2022-06-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-03_N-SRF	2022-06-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-04_N-SRF	2022-06-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-05_N-SRF	2022-06-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-06_N-SRF	2022-06-06	-	0.015	< 0.000050	0.0036	9.37	0.00152	0.00109	0.473	2.44	< 0.000010	1.51	0.0772	< 0.000010	< 0.000010	< 0.000030	0.000389	0.0031
EV_MC2	EV_MC2_WS_2022-06-06_MON_N	2022-06-06	-	< 0.010	< 0.000050	0.0032	11.1	0.00134	0.00131	0.487	2.91	< 0.000010	1.61	0.0796	< 0.000010	< 0.000010	< 0.000030	0.000413	< 0.0010
EV_MC2	EV_MC5_WS_2022-06-07_N-SRF	2022-06-07	-	0.011	< 0.000050	0.0031	10.5	0.00125	0.0013	0.455	2.79	< 0.000010	1.53	0.081	< 0.000010	< 0.000010	< 0.000030	0.000405	< 0.0010
EV_MC2	EV_MC2_WS_2022-06-07_N-SRF	2022-06-07	-	0.015	< 0.000050	0.0041	9.88	0.00141	0.00063	0.462	2.81	< 0.000010	1.44	0.0852	< 0.000010	< 0.000010	< 0.000030	0.00044	< 0.0010
EV_MC2	EV_MC2_WS_2022-06-08_N-SRF	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-09_N-SRF	2022-06-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-10_N-SRF	2022-06-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-11_N-SRF	2022-06-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-12_N-SRF	2022-06-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-13_N-SRF	2022-06-13	-	0.015	< 0.000050	0.0035	9.33	0.00174	0.00097	0.472	2.64	0.000026	1.35	0.0731	< 0.000010	< 0.000010	< 0.000030	0.00037	< 0.0010
EV_MC2	EV_MC2_WS_2022-06-13_N-SRF	2022-06-13	-	0.027	< 0.000050	0.0037	9.81	0.00102	0.00095	0.501	2.73	< 0.000010	1.47	0.0764	< 0.000010	< 0.000010	0.0019	0.000388	< 0.0010
EV_MC2	EV_MC5_WS_2022-06-13_N-SRF	2022-06-13	-	0.032	< 0.000050	0.0034	9.55	0.00112	0.00094	0.491	2.7	< 0.000010	1.4	0.0708	< 0.000010	< 0.000010	0.00204	0.000382	< 0.0010
EV_MC2	EV_MC2_WS_2022-06-14_N-SRF	2022-06-14	-	0.012	< 0.000050	0.0036	9.7	0.0019	0.00095	0.491	2.86	< 0.000010	1.63	0.0841	< 0.000010	< 0.000010	< 0.000030	0.000404	< 0.0010
EV_MC2	EV_MC2_WS_2022-06-14_N-SRF	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-15_N-SRF	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-16_N-SRF	2022-06-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-17_N-SRF	2022-06-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-18_N-SRF	2022-06-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-19_N-SRF	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-20_N-SRF	2022-06-20	-	< 0.010	< 0.000050	0.0044	11.4	0.0015	0.00094	0.483	3.58	< 0.000010	1.65	0.0834	< 0.000010	< 0.000010	< 0.000030	0.000435	0.0015
EV_MC2	EV_MC2_WS_2022-06-21_N-SRF	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-21_N-SRF	2022-06-21	-	< 0.010	< 0.000050	0.0044	11.7	0.00163	0.00099	0.479	4.08	< 0.000010	1.84	0.0843	< 0.000010	< 0.000010	< 0.000030	0.000426	< 0.0010
EV_MC2	EV_MC5_WS_2022-06-21_N-SRF	2022-06-21	-	< 0.010	< 0.000050	0.0044	11.9	0.00164	0.00096	0.486	4.27	< 0.000010	1.85	0.0869	< 0.000010	< 0.000010	< 0.000030	0.000443	< 0.0010
EV_MC2	EV_MC2_WS_2022-06-22_N-SRF	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-23_N-SRF	2022-06-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-24_N-SRF	2022-06-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-25_N-SRF	2022-06-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-06-26_N-SRF	2022-06-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																	
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper				
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	Acute	Chronic	BLM <sup>d</sup>	
Elkview Operation																					
EV_MC2	EV_MC2_WS_2022-06-27_N-SRF	2022-06-27	-	0.0053	< 0.00010	0.00018	0.0548	< 0.020	< 0.000050	< 0.010			0.000025		46.6	0.00014	< 0.10			0.0003	
EV_MC2	EV_MC2_WS_2022-06-28_N-SRF	2022-06-28	-																		
EV_MC2	EV_MC2_WS_2022-06-WEK27_N	2022-06-28	-	0.0085	< 0.00010	0.00017	0.0562	< 0.020	< 0.000050	< 0.010			0.0000246		42	0.00014	< 0.10			0.00025	
EV_MC2	EV_MC5_WS_2022-06-WEK27_N	2022-06-28	-	0.0064	< 0.00010	0.00019	0.0555	< 0.020	< 0.000050	< 0.010			0.0000199		43.4	0.00014	< 0.10			0.00025	
EV_MC2	EV_MC2_WS_2022-06-29_N-SRF	2022-06-29	-																		
EV_MC2	EV_MC2_WS_2022-06-30_N-SRF	2022-06-30	-																		
EV_MC2	EV_MC2_WS_2022-07-01_N-SRF	2022-07-01	-																		
EV_MC2	EV_MC2_WS_2022-07-02_N-SRF	2022-07-02	-																		
EV_MC2	EV_MC2_WS_2022-07-03_N-SRF	2022-07-03	-																		
EV_MC2	EV_MC2_WS_2022-07-04_N-SRF	2022-07-04	-	0.0067	< 0.00010	0.0002	0.0632	< 0.020	< 0.000050	< 0.010			0.0000223		47	0.00015	< 0.10			0.00023	
EV_MC2	EV_MC2_WS_2022_03_N	2022-07-05	-	0.0055	< 0.00010	0.0002	0.0569	< 0.020	< 0.000050	< 0.010			0.0000181		40.3	0.00015	< 0.10			< 0.00020	
EV_MC2	EV_MC2_WS_2022-07-05_N-SRF	2022-07-05	-																		
EV_MC2	EV_MC2_WS_2022-07-06_N-SRF	2022-07-06	-																		
EV_MC2	EV_MC2_WS_2022-07-07_N-SRF	2022-07-07	-																		
EV_MC2	EV_MC2_WS_2022-07-08_N-SRF	2022-07-08	-																		
EV_MC2	EV_MC2_WS_2022-07-09_N-SRF	2022-07-09	-																		
EV_MC2	EV_MC2_WS_2022-07-10_N-SRF	2022-07-10	-																		
EV_MC2	EV_MC2_WS_2022-07-11_N-SRF	2022-07-11	-	0.0028	< 0.00010	0.00017	0.0689	< 0.020	< 0.000050	< 0.010			0.0000249		56	0.00012	< 0.10			0.00025	
EV_MC2	EV_MC2_WS_2022-07-WEK29_N	2022-07-12	-	0.0038	< 0.00010	0.00019	0.0735	< 0.020	< 0.000050	< 0.010			0.0000173		49.1	0.00014	< 0.10			0.00028	
EV_MC2	EV_MC5_WS_2022-07-WEK29_N	2022-07-12	-	0.0039	< 0.00010	0.0002	0.0718	< 0.020	< 0.000050	< 0.010			0.0000199		47.9	0.00016	< 0.10			0.00026	
EV_MC2	EV_MC2_WS_2022-07-12_N-SRF	2022-07-12	-																		
EV_MC2	EV_MC2_WS_2022-07-13_N-SRF	2022-07-13	-																		
EV_MC2	EV_MC2_WS_2022-07-14_N-SRF	2022-07-14	-																		
EV_MC2	EV_MC2_WS_2022-07-15_N-SRF	2022-07-15	-																		
EV_MC2	EV_MC2_WS_2022-07-16_N-SRF	2022-07-16	-																		
EV_MC2	EV_MC2_WS_2022-07-17_N-SRF	2022-07-17	-																		
EV_MC2	EV_MC2_WS_2022-07-18_N-SRF	2022-07-18	-																		
EV_MC2	EV_MC2_WS_2022-07-19_N-SRF	2022-07-19	-	0.0027	< 0.00010	0.00018	0.0823	< 0.020	< 0.000050	0.012			0.0000226		55.3	0.00016	< 0.10			< 0.00020	
EV_MC2	EV_MC2_WS_2022-07-20_N-SRF	2022-07-20	-																		
EV_MC2	EV_MC2_WS_2022-07-21_N-SRF	2022-07-21	-																		
EV_MC2	EV_MC2_WS_2022-07-22_N-SRF	2022-07-22	-																		
EV_MC2	EV_MC2_WS_2022-07-23_N-SRF	2022-07-23	-																		
EV_MC2	EV_MC2_WS_2022-07-24_N-SRF	2022-07-24	-																		
EV_MC2	EV_MC2_WS_2022-07-25_N-SRF	2022-07-25	-																		
EV_MC2	EV_MC2_WS_2022-07-26_N-SRF	2022-07-26	-																		
EV_MC2	EV_MC2_WS_2022-07-27_N-SRF	2022-07-27	-																		
EV_MC2	EV_MC2_WS_2022-07-28_N-SRF	2022-07-28	-																		
EV_MC2	EV_MC2_WS_2022-07-29_N-SRF	2022-07-29	-																		
EV_MC2	EV_MC2_WS_2022-07-30_N-SRF	2022-07-30	-																		
EV_MC2	EV_MC2_WS_2022-07-31_N-SRF	2022-07-31	-																		
EV_MC2	EV_MC2_WS_2022-08-01_N-SRF	2022-08-01	-	< 0.0010	< 0.00010	0.00014	0.0898	< 0.020	< 0.000050	0.01			0.0000198		57.4	0.00014	< 0.10			< 0.00020	
EV_MC2	EV_MC2_WS_2022-08-02_N-SRF	2022-08-02	-																		
EV_MC2	EV_MC2_WS_2022-08-03_N-SRF	2022-08-03	-																		
EV_MC2	EV_MC2_WS_2022-08-04_N-SRF	2022-08-04	-																		
EV_MC2	EV_MC2_WS_2022-08-05_N-SRF	2022-08-05	-																		
EV_MC2	EV_MC2_WS_2022-08-06_N-SRF	2022-08-06	-																		
EV_MC2	EV_MC2_WS_2022-08-07_N-SRF	2022-08-07	-																		
EV_MC2	EV_MC2_WS_2022-08-08_N-SRF	2022-08-08	-																		
EV_MC2	EV_MC2_WS_2022-08-09_N-SRF	2022-08-09	-																		
EV_MC2	EV_MC2_WS_2022-08-10_N-SRF	2022-08-10	-																		

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 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Elkview Operation</b>																				
EV_MC2	EV_MC2_WS_2022-06-27_N-SRF	2022-06-27	-	< 0.010	< 0.000050	0.0078	16.8	0.00155	0.00106	0.626	6.7	< 0.000010	2.9	0.112	< 0.000010	< 0.00010	< 0.00030	0.000642	< 0.0010	
EV_MC2	EV_MC2_WS_2022-06-28_N-SRF	2022-06-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-WEK27_N	2022-06-28	-	< 0.010	< 0.000050	0.0062	14.1	0.00142	0.00107	0.547	5.42	< 0.000010	2.14	0.104	< 0.000010	< 0.00010	< 0.00030	0.000622	< 0.0010	
EV_MC2	EV_MC5_WS_2022-06-WEK27_N	2022-06-28	-	< 0.010	< 0.000050	0.0062	13.7	0.00138	0.00112	0.549	5.26	< 0.000010	2.2	0.102	< 0.000010	< 0.00010	< 0.00030	0.00064	< 0.0010	
EV_MC2	EV_MC2_WS_2022-06-29_N-SRF	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-06-30_N-SRF	2022-06-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-01_N-SRF	2022-07-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-02_N-SRF	2022-07-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-03_N-SRF	2022-07-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-04_N-SRF	2022-07-04	-	< 0.010	< 0.000050	0.0066	17	0.00136	0.00125	0.631	6.7	< 0.000010	2.52	0.116	< 0.000010	< 0.00010	< 0.00030	0.000712	0.0179	
EV_MC2	EV_MC2_WS_2022-07-05_N-SRF	2022-07-05	-	< 0.010	< 0.000050	0.0058	14.7	0.00127	0.00117	0.583	5.18	< 0.000010	2.27	0.102	< 0.000010	< 0.00010	< 0.00030	0.000667	< 0.0010	
EV_MC2	EV_MC2_WS_2022-07-06_N-SRF	2022-07-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-07_N-SRF	2022-07-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-08_N-SRF	2022-07-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-09_N-SRF	2022-07-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-10_N-SRF	2022-07-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-11_N-SRF	2022-07-11	-	< 0.010	< 0.000050	0.01	20.6	0.00143	0.00139	0.781	9.09	< 0.000010	3.44	0.136	< 0.000010	< 0.00010	< 0.00030	0.000868	0.0028	
EV_MC2	EV_MC2_WS_2022-07-WEK29_N	2022-07-12	-	< 0.010	< 0.000050	0.0084	19.2	0.00135	0.00146	0.754	9.37	< 0.000010	2.8	0.134	< 0.000010	< 0.00010	< 0.00030	0.000882	< 0.0010	
EV_MC2	EV_MC5_WS_2022-07-WEK29_N	2022-07-12	-	< 0.010	< 0.000050	0.0076	18.8	0.00132	0.00138	0.727	9.24	< 0.000010	2.66	0.13	< 0.000010	< 0.00010	< 0.00030	0.000896	< 0.0010	
EV_MC2	EV_MC2_WS_2022-07-12_N-SRF	2022-07-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-13_N-SRF	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-14_N-SRF	2022-07-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-15_N-SRF	2022-07-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-16_N-SRF	2022-07-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-17_N-SRF	2022-07-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-18_N-SRF	2022-07-18	-	< 0.010	< 0.000050	0.0107	23.1	0.0015	0.00146	0.87	12.2	< 0.000010	3.45	0.148	< 0.000010	< 0.00010	< 0.00030	0.00101	0.0051	
EV_MC2	EV_MC2_WS_2022-07-19_N-SRF	2022-07-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-20_N-SRF	2022-07-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-21_N-SRF	2022-07-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-22_N-SRF	2022-07-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-23_N-SRF	2022-07-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-24_N-SRF	2022-07-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-25_N-SRF	2022-07-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-26_N-SRF	2022-07-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-27_N-SRF	2022-07-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-28_N-SRF	2022-07-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-29_N-SRF	2022-07-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-30_N-SRF	2022-07-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-07-31_N-SRF	2022-07-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-01_N-SRF	2022-08-01	-	< 0.010	< 0.000050	0.0087	22.8	0.00155	0.0009	0.76	9.51	< 0.000010	3.29	0.152	< 0.000010	< 0.00010	< 0.00030	0.000955	0.0049	
EV_MC2	EV_MC2_WS_2022-08-02_N-SRF	2022-08-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-03_N-SRF	2022-08-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-04_N-SRF	2022-08-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-05_N-SRF	2022-08-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-06_N-SRF	2022-08-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-07_N-SRF	2022-08-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-08_N-SRF	2022-08-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-09_N-SRF	2022-08-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-10_N-SRF	2022-08-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																	
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper				
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	Acute	Chronic	BLM <sup>d</sup>	
Elkview Operation																					
EV_MC2	EV_MC2_WS_2022-08_MON_N	2022-08-10	-	0.0011	0.00011	0.00019	0.111	< 0.020	< 0.000050	0.015		0.0000444	82.4	0.00016	< 0.10	0.00022					
EV_MC2	EV_MC2_WS_2022-08-11_N-SRF	2022-08-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-12_N-SRF	2022-08-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-13_N-SRF	2022-08-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-14_N-SRF	2022-08-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-15_N-SRF	2022-08-15	-	0.0027	0.00011	0.00017	0.109	< 0.020	< 0.000050	0.014		0.0000274	71.8	0.00019	< 0.10	0.0002					
EV_MC2	EV_MC2_WS_2022-08-16_N-SRF	2022-08-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022_Q3_WK1_N	2022-08-16	-	< 0.0010	0.00011	0.0002	0.106	< 0.020	< 0.000050	0.013		0.0000323	83.2	0.00012	< 0.10	< 0.00020					
EV_MC2	EV_MC2_WS_2022-08-17_N-SRF	2022-08-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-18_N-SRF	2022-08-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-19_N-SRF	2022-08-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-20_N-SRF	2022-08-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-21_N-SRF	2022-08-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-22_N-SRF	2022-08-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-23_N-SRF	2022-08-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022_Q3_WK2_N	2022-08-23	-	< 0.0010	0.00011	0.0002	0.115	< 0.020	< 0.000050	0.016		0.0000354	83.4	0.00018	< 0.10	< 0.00020					
EV_MC2	EV_MC2_WS_2022-08-24_N-SRF	2022-08-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-25_N-SRF	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-26_N-SRF	2022-08-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-27_N-SRF	2022-08-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-28_N-SRF	2022-08-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-08-29_N-SRF	2022-08-29	-	0.0014	< 0.00010	0.00016	0.141	< 0.020	< 0.000050	0.014		0.0000331	80.1	0.00015	< 0.10	< 0.00020					
EV_MC2	EV_MC2_WS_2022-08-30_N-SRF	2022-08-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022_Q3_WK3_N	2022-08-30	-	0.001	0.0001	0.0002	0.114	< 0.020	< 0.000050	0.013		0.0000259	74.4	0.00012	< 0.10	< 0.00020					
EV_MC2	EV_MC2_WS_2022-08-31_N-SRF	2022-08-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-01_N-SRF	2022-09-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-02_N-SRF	2022-09-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-03_N-SRF	2022-09-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-04_N-SRF	2022-09-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-05_N-SRF	2022-09-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-06_N-SRF	2022-09-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09_MON_N	2022-09-06	-	0.0028	< 0.00010	0.00015	0.14	< 0.020	< 0.000050	0.017		0.0000258	84	0.00017	< 0.10	0.00026					
EV_MC2	EV_MC5_WS_2022-09_MON_N	2022-09-06	-	0.0026	< 0.00010	0.00016	0.138	< 0.020	< 0.000050	0.016		0.000023	82.6	0.00015	< 0.10	0.00022					
EV_MC2	EV_MC2_WS_2022-09-07_N-SRF	2022-09-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_SEPT-2022_N	2022-09-08	-	0.0018	0.0001	0.00018	0.129	< 0.020	< 0.000050	0.014		0.0000208	73.8	0.00013	< 0.10	< 0.00020					
EV_MC2	EV_MC2_WS_2022-09-08_N-SRF	2022-09-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-09_N-SRF	2022-09-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-09_N	2022-09-09	-	0.001	< 0.00010	0.00015	0.135	< 0.020	< 0.000050	0.018		0.0000234	85.1	0.00014	< 0.10	< 0.00020					
EV_MC2	EV_MC2_WS_2022-09-10_N-SRF	2022-09-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-11_N-SRF	2022-09-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-12_N-SRF	2022-09-12	-	< 0.0010	< 0.00010	0.00014	0.0936	< 0.020	< 0.000050	0.011		0.0000215	69.6	0.00011	< 0.10	< 0.00020					
EV_MC2	EV_MC2_WS_2022-09-13_N-SRF	2022-09-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022_Q3_WK5_N	2022-09-13	-	0.0018	0.00012	0.00017	0.124	< 0.020	< 0.000050	0.016		0.0000364	88.3	0.00019	< 0.10	< 0.00020					
EV_MC2	EV_MC2_WS_2022-09-14_N-SRF	2022-09-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-15_N-SRF	2022-09-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-16_N-SRF	2022-09-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-17_N-SRF	2022-09-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-18_N-SRF	2022-09-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-19_N-SRF	2022-09-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-20_N-SRF	2022-09-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL



APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
				Acute																
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Elkview Operation																				
EV_MC2	EV_MC2_WS_2022-08_MON_N	2022-08-10	-	< 0.010	< 0.000050	0.0198	37.8	0.0018	0.00128	1.27	15.5	< 0.000010	5.68	0.211	0.00001	< 0.00010	< 0.00030	0.00156	0.0012	
EV_MC2	EV_MC2_WS_2022-08-11_N-SRF	2022-08-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-12_N-SRF	2022-08-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-13_N-SRF	2022-08-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-14_N-SRF	2022-08-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-15_N-SRF	2022-08-15	-	0.01	< 0.000050	0.0145	32	0.00216	0.00156	1.02	18.4	< 0.000010	3.93	0.185	< 0.000010	0.00044	< 0.00030	0.00153	0.008	
EV_MC2	EV_MC2_WS_2022-08-16_N-SRF	2022-08-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022_Q3_WK1_N	2022-08-16	-	< 0.010	< 0.000050	0.0178	36.4	0.00196	0.00132	1.14	22.8	< 0.000010	4.67	0.19	< 0.000010	< 0.00010	< 0.00030	0.00153	< 0.0010	
EV_MC2	EV_MC2_WS_2022-08-17_N-SRF	2022-08-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-18_N-SRF	2022-08-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-19_N-SRF	2022-08-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-20_N-SRF	2022-08-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-21_N-SRF	2022-08-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-22_N-SRF	2022-08-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-23_N-SRF	2022-08-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-Q3_WK2_N	2022-08-23	-	< 0.010	< 0.000050	0.0204	37.6	0.00188	0.00122	1.19	23.2	< 0.000010	4.98	0.204	< 0.000010	< 0.00010	< 0.00030	0.00154	< 0.0010	
EV_MC2	EV_MC2_WS_2022-08-24_N-SRF	2022-08-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-25_N-SRF	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-26_N-SRF	2022-08-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-27_N-SRF	2022-08-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-28_N-SRF	2022-08-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-08-29_N-SRF	2022-08-29	-	< 0.010	< 0.000050	0.0148	36	0.00177	0.00134	0.924	17.1	< 0.000010	4.33	0.189	< 0.000010	< 0.00010	< 0.00030	0.00126	< 0.0010	
EV_MC2	EV_MC2_WS_2022-08-30_N-SRF	2022-08-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-Q3_WK3_N	2022-08-30	-	< 0.010	< 0.000050	0.0134	35.2	0.00152	0.0013	1.03	18.7	< 0.000010	4.12	0.176	< 0.000010	< 0.00010	< 0.00030	0.00158	< 0.0010	
EV_MC2	EV_MC2_WS_2022-08-31_N-SRF	2022-08-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-01_N-SRF	2022-09-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-02_N-SRF	2022-09-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-03_N-SRF	2022-09-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-04_N-SRF	2022-09-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-05_N-SRF	2022-09-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-06_N-SRF	2022-09-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-06_MON_N	2022-09-06	-	< 0.010	< 0.000050	0.0157	38	0.00183	0.00141	1.07	20.5	< 0.000010	4.54	0.2	< 0.000010	< 0.00010	< 0.00030	0.00148	< 0.0010	
EV_MC2	EV_MC5_WS_2022-09-06_MON_N	2022-09-06	-	< 0.010	< 0.000050	0.0154	37.3	0.00175	0.00127	1.05	20	< 0.000010	4.42	0.201	< 0.000010	< 0.00010	< 0.00030	0.00149	0.0021	
EV_MC2	EV_MC2_WS_2022-09-07_N-SRF	2022-09-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_SEPT-2022_N	2022-09-08	-	< 0.010	< 0.000050	0.0153	35	0.00178	0.00119	1.11	20.9	< 0.000010	4.19	0.192	< 0.000010	< 0.00010	< 0.00030	0.00151	< 0.0010	
EV_MC2	EV_MC2_WS_2022-09-08_N-SRF	2022-09-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-09_N-SRF	2022-09-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-09_N	2022-09-09	-	< 0.010	< 0.000050	0.0135	36.5	0.00158	0.00139	1.03	21.8	< 0.000010	4.33	0.195	< 0.000010	< 0.00010	< 0.00030	0.0014	< 0.0010	
EV_MC2	EV_MC2_WS_2022-09-10_N-SRF	2022-09-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-11_N-SRF	2022-09-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-12_N-SRF	2022-09-12	-	< 0.010	< 0.000050	0.017	28.3	0.00126	0.0011	0.934	18	< 0.000010	3.78	0.174	< 0.000010	< 0.00010	< 0.00030	0.00131	< 0.0010	
EV_MC2	EV_MC2_WS_2022-09-13_N-SRF	2022-09-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-Q3_WK5_N	2022-09-13	-	< 0.010	< 0.000050	0.0185	46.4	0.00174	0.00162	1.5	29.5	< 0.000010	5.79	0.214	< 0.000010	< 0.00010	< 0.00030	0.00167	0.0018	
EV_MC2	EV_MC2_WS_2022-09-14_N-SRF	2022-09-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-15_N-SRF	2022-09-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-16_N-SRF	2022-09-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-17_N-SRF	2022-09-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-18_N-SRF	2022-09-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-19_N-SRF	2022-09-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_MC2	EV_MC2_WS_2022-09-20_N-SRF	2022-09-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum mg/L		Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L		Calcium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	
				Acute	Chronic							Acute	Chronic				Acute	Chronic
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>d</sup>
Elkview Operation																		
EV_MC2	EV_MC2_WS_2022-09-21_N_SRF	2022-09-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-22_N_SRF	2022-09-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-23_N_SRF	2022-09-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-24_N_SRF	2022-09-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-25_N_SRF	2022-09-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-26_N_SRF	2022-09-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-27_N_SRF	2022-09-27	-	0.0019	0.0011	0.0001	0.123	< 0.020	< 0.000050	0.015		0.0000177		83.9	0.00017	< 0.10	0.0002	
EV_MC2	EV_MC2_WS_2022-09-28_N_SRF	2022-09-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-29_N_SRF	2022-09-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-30_N_SRF	2022-09-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-01_N_SRF	2022-10-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-02_N_SRF	2022-10-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-03_N_SRF	2022-10-03	-	< 0.0010	0.00011	0.00014	0.135	< 0.020	< 0.000050	0.013		0.0000254		91.3	0.0003	< 0.10	< 0.00020	
EV_MC2	EV_MC2_WS_2022-10-04_N_SRF	2022-10-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-06_N_SRF	2022-10-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-06_N_SRF	2022-10-06	-	< 0.0010	0.00011	0.00021	0.128	< 0.020	< 0.000050	0.015		0.000024		86	0.00015	< 0.10	< 0.00020	
EV_MC2	EV_MC5_WS_2022-Q4_N	2022-10-06	-	< 0.0010	0.00011	0.00014	0.131	< 0.020	< 0.000050	0.016		0.0000184		88.6	0.00012	< 0.10	< 0.00020	
EV_MC2	EV_MC2_WS_2022-Q4_WK1_N	2022-10-11	-	< 0.0010	0.0001	0.00012	0.119	< 0.020	< 0.000050	0.015		0.0000245		88	0.00014	< 0.10	< 0.00020	
EV_MC2	EV_MC2_WS_2022-10-12_N_SRF	2022-10-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-14_N_SRF	2022-10-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-17_N_SRF	2022-10-17	-	< 0.0020	< 0.00020	< 0.00020	0.102	< 0.040	< 0.000100	< 0.020		0.0000267		80.3	< 0.00020	< 0.20	< 0.00040	
EV_MC2	EV_MC2_WS_2022-Q4_WK2_N	2022-10-18	-	0.0082	< 0.00010	0.00017	0.115	< 0.020	< 0.000050	0.015		0.0000182		93.4	0.00015	< 0.10	< 0.00020	
EV_MC2	EV_MC2_WS_2022-10-19_N_SRF	2022-10-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-24_N_SRF	2022-10-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-Q4_WK3_N	2022-10-25	-	< 0.0010	< 0.00010	0.00018	0.114	< 0.020	< 0.000050	0.012		0.0000206		77.7	0.00015	< 0.10	< 0.00020	
EV_MC2	EV_MC2_WS_2022-10-26_N_SRF	2022-10-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-28_N_SRF	2022-10-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-31_N_SRF	2022-10-31	-	0.0022	< 0.00010	0.0002	0.108	< 0.020	< 0.000050	0.012		0.0000257		72.6	0.00016	< 0.10	< 0.00020	
EV_MC2	EV_MC2_WS_2022-Q4_WK4_N	2022-11-01	-	0.0018	< 0.00010	0.0002	0.104	< 0.020	< 0.000050	0.011		0.0000219		57.7	0.0001	< 0.10	0.00027	
EV_MC2	EV_MC2_WS_2022-Q4_WK5_N	2022-11-08	-	0.0012	< 0.00010	0.00015	0.119	< 0.020	< 0.000050	0.014		0.0000198		80.4	< 0.00010	< 0.10	< 0.00020	
EV_MC2	EV_MC2_WS_2022-11-14_N_SRF	2022-11-14	-	< 0.0010	< 0.00010	0.00016	0.114	< 0.020	< 0.000050	0.013		0.0000178		82.1	0.00013	< 0.10	< 0.00020	
EV_MC2	EV_MC2_WS_2022-11_MON_N	2022-11-14	-	< 0.0010	< 0.00010	0.00016	0.117	< 0.020	< 0.000050	0.014		0.0000282		85.3	0.0001	< 0.10	< 0.00020	
EV_MC2	EV_MC5_WS_2022-11_MON_N	2022-11-14	-	< 0.0010	< 0.00010	0.00013	0.114	< 0.020	< 0.000050	0.014		0.0000244		85.2	0.00012	< 0.10	< 0.00020	
EV_MC2	EV_MC2_WS_2022-11-28_N_SRF	2022-11-28	-	< 0.0010	< 0.00010	0.00021	0.121	< 0.020	< 0.000050	0.013		0.0000278		82	0.00015	< 0.10	< 0.00020	
EV_MC2	EV_MC2_WS_2022-12_MON_N	2022-12-06	-	< 0.0010	0.00011	0.00014	0.127	< 0.020	< 0.000050	0.013		0.0000239		90	0.00013	< 0.10	< 0.00020	
EV_MC2	EV_MC2_WS_2022-12-12_N_SRF	2022-12-12	-	0.002	0.00012	0.00016	0.121	< 0.020	< 0.000050	0.014		0.0000234		82.4	0.00014	< 0.10	< 0.00020	
EV_MC2	EV_MC2_WS_2022-12-27_N_SRF	2022-12-27	-	< 0.0010	< 0.00010	0.00021	0.115	< 0.020	< 0.000050	0.016		0.0000325		84.6	0.00013	< 0.10	0.00022	
EV_OC1	EV_OC1_WS_2022-Q1_N	2022-01-05	-	< 0.0010	< 0.00010	0.00044	0.446	< 0.020	< 0.000050	0.058		< 0.0050		101	< 0.00010	0.00019	< 0.00020	
EV_OC1	EV_OC1_WS_2022-Q2_MON_N	2022-02-07	-	< 0.0010	< 0.00010	0.00037	0.419	< 0.020	< 0.000050	0.076		0.0000069		102	< 0.00010	0.00013	< 0.00020	
EV_OC1	EV_OC1_WS_2022-Q3_MON_N	2022-03-16	-	0.0014	0.00012	0.00034	0.226	< 0.020	< 0.000050	0.057		0.0000287		82.2	< 0.00010	0.00019	0.00028	
EV_OC1	EV_OC1_WS_2022-Q3_WERK13_N	2022-03-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-Q3_WERK14_N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-Q4_WERK15_N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-Q2_N	2022-04-12	-	0.0021	0.00015	0.00036	0.27	< 0.020	< 0.000050	0.06		0.0000138		91.8	< 0.00010	0.00015	< 0.00040	
EV_OC1	EV_OC1_WS_2022-Q4_WERK17_N	2022-04-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-Q4_WERK18_N	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-Q5_MON_N	2022-05-03	-	0.0046	0.00016	0.00035	0.326	< 0.020	< 0.000050	0.066		0.0000082		95.4	< 0.00010	< 0.10	0.00039	
EV_OC1	EV_OC1_WS_2022-Q5_WERK20_N	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-Q5_WERK21_N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-Q5_WERK22_N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
- Denotes analysis not conducted  
n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L
				Acute															
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Elkview Operation																			
EV_MC2	EV_MC2_WS_2022-09-21_N_SRF	2022-09-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-22_N_SRF	2022-09-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-23_N_SRF	2022-09-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-24_N_SRF	2022-09-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-25_N_SRF	2022-09-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-26_N_SRF	2022-09-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-27_N_SRF	2022-09-27	-	< 0.010	< 0.000050	0.0218	37.6	0.00146	0.00162	1.26	20.9	< 0.000010	4.5	0.198	< 0.000010	< 0.00010	< 0.00030	0.00166	0.0092
EV_MC2	EV_MC2_WS_2022-09-28_N_SRF	2022-09-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-29_N_SRF	2022-09-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-09-30_N_SRF	2022-09-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-01_N_SRF	2022-10-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-02_N_SRF	2022-10-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-03_N_SRF	2022-10-03	-	< 0.010	< 0.000050	0.0144	38.6	0.00145	0.00122	1.24	27.4	< 0.000010	4.68	0.224	< 0.000010	< 0.00010	< 0.00030	0.00179	< 0.0010
EV_MC2	EV_MC2_WS_2022-10-04_N_SRF	2022-10-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-06_N_SRF	2022-10-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-06_N_SRF	2022-10-06	-	< 0.010	< 0.000050	0.0184	39.5	0.00169	0.00203	1.26	29.4	< 0.000010	4.14	0.203	< 0.000010	< 0.00010	< 0.00030	0.00178	< 0.0010
EV_MC2	EV_MC2_WS_2022-10-06_N_SRF	2022-10-06	-	< 0.010	< 0.000050	0.0186	39.4	0.0016	0.0015	1.28	27.8	< 0.000010	4.19	0.209	< 0.000010	< 0.00010	< 0.00030	0.00183	< 0.0010
EV_MC2	EV_MC5_WS_2022-Q4_N	2022-10-06	-	< 0.010	< 0.000050	0.0201	37.7	0.00176	0.00142	1.14	19.9	< 0.000010	4.38	0.208	< 0.000010	< 0.00010	< 0.00030	0.00174	< 0.0010
EV_MC2	EV_MC2_WS_2022-10-12_N_SRF	2022-10-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-14_N_SRF	2022-10-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-17_N_SRF	2022-10-17	-	< 0.020	< 0.000100	0.0197	34.5	0.00157	0.00132	1	20.1	< 0.000020	4.23	0.189	< 0.000020	< 0.00020	< 0.00060	0.0016	< 0.0020
EV_MC2	EV_MC2_WS_2022-10-17_N_SRF	2022-10-18	-	< 0.010	< 0.000050	0.0187	38.7	0.00187	0.0013	1.1	20.9	< 0.000010	4.36	0.22	< 0.000010	< 0.00010	< 0.00030	0.0017	< 0.0010
EV_MC2	EV_MC2_WS_2022-10-19_N_SRF	2022-10-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-24_N_SRF	2022-10-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-Q4_WK3_N	2022-10-25	-	< 0.010	< 0.000050	0.0163	33	0.00174	0.00112	0.994	18.2	< 0.000010	4.2	0.189	< 0.000010	< 0.00010	< 0.00030	0.00151	< 0.0010
EV_MC2	EV_MC2_WS_2022-10-28_N_SRF	2022-10-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-28_N_SRF	2022-10-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_MC2	EV_MC2_WS_2022-10-31_N_SRF	2022-10-31	-	< 0.010	< 0.000050	0.0131	32.8	0.00178	0.00132	1.02	13.5	< 0.000010	4.3	0.184	< 0.000010	< 0.00010	< 0.00030	0.00154	0.0624
EV_MC2	EV_MC2_WS_2022-Q4_WK4_N	2022-11-01	-	< 0.010	< 0.000050	0.0104	23.9	0.00172	0.00111	0.88	8.44	< 0.000010	3.41	0.16	< 0.000010	< 0.00010	< 0.00030	0.001	< 0.002
EV_MC2	EV_MC2_WS_2022-Q4_WK5_N	2022-11-08	-	< 0.010	< 0.000050	0.016	37.4	0.00216	0.00166	1.05	19.9	< 0.000010	4.46	0.192	< 0.000010	< 0.00010	< 0.00030	0.00171	< 0.0010
EV_MC2	EV_MC2_WS_2022-11-14_N_SRF	2022-11-14	-	< 0.010	< 0.000050	0.0165	35.8	0.00186	0.00205	1.1	17.3	< 0.000010	4.84	0.207	< 0.000010	< 0.00010	< 0.00030	0.00179	0.0031
EV_MC2	EV_MC2_WS_2022-11_MON_N	2022-11-14	-	< 0.010	< 0.000050	0.0162	37.9	0.00192	0.00214	1.16	18.9	< 0.000010	5.04	0.212	< 0.000010	< 0.00010	< 0.00030	0.00186	< 0.0010
EV_MC2	EV_MC2_WS_2022-11_MON_N	2022-11-14	-	< 0.010	< 0.000050	0.0161	37.8	0.00197	0.00209	1.12	19.1	< 0.000010	5.02	0.21	< 0.000010	< 0.00010	< 0.00030	0.00186	< 0.0010
EV_MC2	EV_MC2_WS_2022-11-28_N_SRF	2022-11-28	-	< 0.010	< 0.000050	0.0203	40.4	0.00204	0.00251	1.24	22.8	< 0.000010	5.2	0.21	< 0.000010	< 0.00010	< 0.00030	0.00175	0.0013
EV_MC2	EV_MC2_WS_2022-12-12_MON_N	2022-12-06	-	< 0.010	< 0.000050	0.0184	42	0.00188	0.00256	1.18	16.5	< 0.000010	4.85	0.202	< 0.000010	< 0.00010	< 0.00030	0.00209	< 0.0010
EV_MC2	EV_MC2_WS_2022-12-12_N_SRF	2022-12-12	-	< 0.010	< 0.000050	0.0198	38.3	0.00171	0.00261	1.12	15.4	< 0.000010	5.05	0.204	< 0.000010	< 0.00010	< 0.00030	0.00213	0.0013
EV_MC2	EV_MC2_WS_2022-12-27_N_SRF	2022-12-27	-	< 0.010	< 0.000050	0.0171	37.4	0.0014	0.00248	1.39	13.2	< 0.000010	6.08	0.196	< 0.000010	< 0.00010	< 0.00030	0.00183	0.0793
EV_OC1	EV_OC1_WS_2022-Q1_N	2022-01-05	-	0.035	< 0.000050	0.0471	37.3	0.142	0.00137	2.71	0.965	< 0.000010	24.9	0.778	< 0.000010	< 0.00010	< 0.00030	0.000552	0.0013
EV_OC1	EV_OC1_WS_2022-02_MON_N	2022-02-07	-	0.025	< 0.000050	0.0571	39.5	0.107	0.00124	2.59	0.782	< 0.000010	30.1	0.92	< 0.000010	< 0.00010	< 0.00030	0.000509	< 0.0010
EV_OC1	EV_OC1_WS_2022-03_MON_N	2022-03-16	-	0.032	< 0.000050	0.0398	29.8	0.0754	0.00094	2	2.2	< 0.000010	22.4	0.72	< 0.000010	< 0.00010	< 0.00030	0.000538	0.0014
EV_OC1	EV_OC1_WS_2022-03_WK13_N	2022-03-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-03_WK14_N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-04_WK15_N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-02_N	2022-04-12	-	0.038	< 0.000050	0.0423	37	0.0594	0.00147	2.32	1.71	< 0.000010	24	0.757	< 0.000010	< 0.00010	< 0.00030	0.000803	< 0.0010
EV_OC1	EV_OC1_WS_2022-04_WK17_N	2022-04-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-04_WK18_N	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-05_MON_N	2022-05-03	-	0.034	< 0.000050	0.0451	35.7	0.0522	0.00123	2.4	1.2	< 0.000010	22.7	0.779	< 0.000010	< 0.00010	< 0.00030	0.000845	< 0.0010
EV_OC1	EV_OC1_WS_2022-05_WK20_N	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-05_WK21_N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-05_WK22_N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper	
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>b</sup>
Elkview Operation																		
EV_OC1	EV_OC1_WS_2022-05_WEK23_N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV_OC1	EV_OC1_WS_2022-06_MON_N	2022-06-07	-	< 0.0010	0.00011	0.00042	0.294	< 0.020	< 0.000050	0.06	-	< 0.0050	90.8	< 0.00010	< 0.10	< 0.00020	-	
EV_OC1	EV_OC1_WS_2022-06_WEK25_N	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_OC1	EV_OC1_WS_2022-06_WEK26_N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_OC1	EV_OC1_WS_2022-06_WEK27_N	2022-06-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_OC1	EV_OC1_WS_2022-07_Q3_N	2022-07-06	-	< 0.0010	< 0.00010	0.00052	0.309	< 0.020	< 0.000050	0.059	-	< 0.0050	79.8	< 0.00010	< 0.10	0.00025	-	
EV_OC1	EV_OC1_WS_2022-07_WEK29_N	2022-07-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_OC1	EV_OC1_WS_2022-08_MON_N	2022-08-10	-	0.0018	< 0.00010	0.00063	0.343	< 0.020	< 0.000050	0.065	-	< 0.0050	61.6	< 0.00010	< 0.10	< 0.00020	-	
EV_OC1	EV_OC1_WS_2022-09_MON_N	2022-09-07	-	0.0037	< 0.00010	0.00057	0.365	< 0.020	< 0.000050	0.054	-	< 0.0050	58.8	< 0.00010	< 0.10	0.00024	-	
EV_OC1	EV_OC1_WS_2022-04_N	2022-10-07	-	< 0.0010	< 0.00010	0.00049	0.428	< 0.020	< 0.000050	0.056	-	< 0.0050	68.8	< 0.00010	< 0.10	< 0.00020	-	
EV_OC1	EV_OC1_WS_2022-11_MON_N	2022-11-09	-	< 0.0010	< 0.00010	0.0003	0.493	< 0.020	< 0.000050	0.051	-	0.0000053	80.6	< 0.00010	< 0.10	0.0002	-	
EV_SP1	EV_SP1_WS_2022-01_N	2022-01-17	-	< 0.0010	0.0006	< 0.00010	0.0109	< 0.020	< 0.000050	0.04	-	0.000947	180	< 0.00010	< 0.00010	0.00028	-	
EV_SP1	EV_SP1_WS_2022-02_MON_N	2022-02-16	-	0.0012	0.00064	< 0.00010	0.0105	< 0.020	< 0.000050	0.042	-	0.000941	179	0.00016	< 0.00010	0.00033	-	
EV_SP1	EV_SP1_WS_2022-03_MON_N	2022-03-17	-	< 0.0010	0.00061	< 0.00010	0.0112	< 0.020	< 0.000050	0.039	-	0.00091	176	< 0.00010	< 0.10	0.00032	-	
EV_SP1	EV_SP1_WS_2022-03_WEK13_N	2022-03-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_SP1	EV_SP1_WS_2022-03_WEK14_N	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_SP1	EV_SP1_WS_2022-04_WEK15_N	2022-04-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_SP1	EV_SP1_WS_2022-02_N	2022-04-13	-	0.0015	0.00061	< 0.00010	0.0109	< 0.020	< 0.000050	0.042	-	0.000779	150	< 0.00010	< 0.10	0.00032	-	
EV_SP1	EV_SP1_WS_2022-04_WEK17_N	2022-04-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_SP1	EV_SP1_WS_2022-04_WEK18_N	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_SP1	EV_SP1_WS_2022-05-MON_N	2022-05-04	-	< 0.0010	0.00058	< 0.00010	0.0108	< 0.020	< 0.000050	0.04	-	0.000952	177	< 0.00010	< 0.10	0.00032	-	
EV_SP1	EV_SP1_WS_2022-05_WEK20_N	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_SP1	EV_SP1_WS_2022-05_WEK21_N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_SP1	EV_SP1_WS_2022-05_WEK22_N	2022-05-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_SP1	EV_SP1_WS_2022-05_WEK23_N	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_SP1	EV_SP1_WS_2022-06_MON_N	2022-06-06	-	< 0.0010	0.00061	< 0.00010	0.00971	< 0.020	< 0.000050	0.04	-	0.00107	176	< 0.00010	< 0.10	0.00035	-	
EV_SP1	EV_SP1_WS_2022-06_WEK25_N	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_SP1	EV_SP1_WS_2022-06_WEK26_N	2022-06-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_SP1	EV_SP1_WS_2022-06_WEK27_N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_SP1	EV_SP1_WS_2022-03_N	2022-07-06	-	< 0.0010	0.00064	< 0.00010	0.0109	< 0.020	< 0.000050	0.045	-	0.000933	164	< 0.00010	< 0.10	0.0003	-	
EV_SP1	EV_SPT_WS_2022-07_WEK29_N	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV_SP1	EV_SP1_WS_2022-08_MON_N	2022-08-09	-	< 0.0010	0.00077	0.00014	0.0125	< 0.020	< 0.000050	0.064	-	0.00116	184	< 0.00010	< 0.10	0.00034	-	
EV_SP1	EV_SP1_WS_SESMP_2022_08_N	2022-08-15	-	0.0013	0.00069	< 0.00010	0.0117	< 0.020	< 0.000050	0.064	-	0.00107	178	0.00012	< 0.10	0.00037	-	
EV_SP1	EV_SPT_WS_2022-09_MON_NP	2022-09-08	-	0.0026	0.00077	< 0.00010	0.013	< 0.020	< 0.000050	0.064	-	0.00116	192	< 0.00010	< 0.10	0.0004	-	
EV_SP1	EV_SP1_WS_2022-04_N	2022-10-04	-	< 0.0010	0.00072	< 0.00010	0.0108	< 0.020	< 0.000050	0.067	-	0.00107	200	< 0.00010	< 0.10	0.00035	-	
EV_SP1	EV_SP1_WS_2022-11_MON_N	2022-11-15	-	< 0.0010	0.00083	< 0.00010	0.0134	< 0.020	< 0.000050	0.068	-	0.0014	222	< 0.00010	< 0.10	0.00031	-	
EV_TC1	EV_TC1_WS_2022-03_MON_N	2022-03-29	-	0.0048	0.00031	0.0003	0.0683	< 0.020	< 0.000050	< 0.010	-	0.0000861	50.4	< 0.00010	< 0.10	0.0007	-	
EV_TC1	EV_TC1_WS_2022-02_N	2022-04-13	-	0.0031	0.0003	0.00026	0.0582	< 0.020	< 0.000050	< 0.010	-	0.000083	48.5	< 0.00010	< 0.10	0.00091	-	
EV_TC1	EV_TC1_WS_2022-05_MON_N	2022-05-03	-	0.0032	0.00025	0.00023	0.0474	< 0.020	< 0.000050	< 0.010	-	0.0000933	44	< 0.00010	< 0.10	0.00091	-	
EV_TC1	EV_TC1_WS_2022-06_MON_N	2022-06-06	-	0.0018	0.00032	0.00024	0.061	< 0.020	< 0.000050	< 0.010	-	0.000111	50.1	< 0.00010	< 0.10	0.0005	-	
EV_TC1	EV_TC1_WS_2022_03_N	2022-07-05	-	0.0052	0.00035	0.00026	0.0698	< 0.020	< 0.000050	< 0.010	-	0.000144	54.8	< 0.00010	< 0.10	0.0005	-	

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Elkview Operation</b>																			
EV OC1	EV OC1 WS 2022-05 WEK23 N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-06 MON N	2022-06-07	-	0.027	< 0.000050	0.0396	32.4	0.0319	0.00057	1.89	0.61	< 0.000010	16.2	0.678	< 0.000010	< 0.00010	< 0.00030	0.000514	< 0.0010
EV OC1	EV OC1 WS 2022-06 WEK25 N	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-06 WEK26 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-06 WEK27 N	2022-06-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-07 MON N	2022-07-06	-	0.035	< 0.000050	0.0364	37.5	0.0317	0.00118	1.7	0.719	< 0.000010	18.1	0.633	< 0.000010	< 0.00010	< 0.00030	0.000449	< 0.0010
EV OC1	EV OC1 WS 2022-07 WEK29 N	2022-07-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-08 MON N	2022-08-10	-	0.039	< 0.000050	0.0374	37.1	0.0368	0.00097	1.95	0.536	< 0.000010	16.9	0.542	< 0.000010	< 0.00010	< 0.00030	0.000408	< 0.0010
EV OC1	EV OC1 WS 2022-09 MON N	2022-09-07	-	0.053	< 0.000050	0.0331	35.9	0.0248	0.00092	2.17	0.415	< 0.000010	15.2	0.508	< 0.000010	< 0.00010	< 0.00030	0.000355	< 0.0010
EV OC1	EV OC1 WS 2022-04 N	2022-10-07	-	0.071	< 0.000050	0.0307	34.9	0.0209	0.00087	2.85	0.378	< 0.000010	14.2	0.506	< 0.000010	< 0.00010	< 0.00030	0.000337	< 0.0010
EV OC1	EV OC1 WS 2022-11 MON N	2022-11-09	-	0.025	< 0.000050	0.0354	39.6	0.0454	0.00108	3.29	0.625	< 0.000010	16.4	0.555	< 0.000010	< 0.00010	< 0.00030	0.000421	< 0.0010
EV SP1	EV SP1 WS 2022-01 N	2022-01-17	-	< 0.010	< 0.000050	0.0389	123	0.00036	0.0189	3.98	159	< 0.000010	1.12	0.114	0.000136	< 0.00010	< 0.00030	0.00097	0.0272
EV SP1	EV SP1 WS 2022-02 MON N	2022-02-16	-	0.012	< 0.000050	0.0402	129	0.00033	0.0192	4.3	157	< 0.000010	1.2	0.119	0.000126	< 0.00010	< 0.00030	0.00958	0.0302
EV SP1	EV SP1 WS 2022-03 MON N	2022-03-17	-	< 0.010	< 0.000050	0.0386	132	0.0005	0.018	4.2	152	< 0.000010	1.25	0.114	0.000121	< 0.00010	< 0.00030	0.00887	0.028
EV SP1	EV SP1 WS 2022-03 WEK13 N	2022-03-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-03 WEK14 N	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-04 WEK15 N	2022-04-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-02 N	2022-04-13	-	< 0.010	< 0.000050	0.0381	109	0.00041	0.0167	3.43	166	< 0.000010	1.18	0.1	0.00011	< 0.00010	< 0.00030	0.00773	0.0276
EV SP1	EV SP1 WS 2022-04 WEK17 N	2022-04-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-04 WEK18 N	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-05-MON N	2022-05-04	-	< 0.010	< 0.000050	0.0402	123	0.00032	0.0201	3.88	179	< 0.000010	1.22	0.118	0.00012	< 0.00010	< 0.00030	0.00926	0.0326
EV SP1	EV SP1 WS 2022-05 WEK20 N	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-05 WEK21 N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-05 WEK22 N	2022-05-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-05 WEK23 N	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-06 MON N	2022-06-06	-	< 0.010	< 0.000050	0.0348	132	0.00029	0.0222	3.77	160	< 0.000010	1.16	0.12	0.000122	< 0.00010	< 0.00030	0.00918	0.037
EV SP1	EV SP1 WS 2022-06 WEK25 N	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-06 WEK26 N	2022-06-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-06 WEK27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-03 N	2022-07-06	-	< 0.010	< 0.000050	0.0391	120	0.00046	0.0218	4.09	159	< 0.000010	1.21	0.118	0.000124	< 0.00010	< 0.00030	0.00812	0.0346
EV SP1	EV SPT WS 2022-07 WEK29 N	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-08 MON N	2022-08-09	-	< 0.010	< 0.000050	0.0406	125	0.00056	0.0236	4.49	138	< 0.000010	1.22	0.122	0.000181	< 0.00010	< 0.00030	0.00986	0.0377
EV SP1	EV SP1 WS SESMP 2022 08 N	2022-08-15	-	< 0.010	< 0.000050	0.0448	131	0.00082	0.0255	4.54	149	< 0.000010	1.33	0.119	0.000169	< 0.00010	< 0.00030	0.00949	0.0354
EV SP1	EV SPT WS 2022-09 MON NP	2022-09-08	-	< 0.010	< 0.000050	0.0487	146	0.00063	0.0256	4.89	162	< 0.000010	1.36	0.114	0.000166	< 0.00010	< 0.00030	0.00951	0.0301
EV SP1	EV SP1 WS 2022-04 N	2022-10-04	-	< 0.010	< 0.000050	0.0432	126	0.0008	0.022	4.77	180	< 0.000010	1.32	0.126	0.000167	< 0.00010	< 0.00030	0.00938	0.0237
EV SP1	EV SP1 WS 2022-11 MON N	2022-11-15	-	< 0.010	< 0.000050	0.0489	138	0.00055	0.0238	4.57	166	< 0.000010	1.37	0.132	0.00019	< 0.00010	< 0.00030	0.0112	0.0378
EV TC1	EV TC1 WS 2022-03 MON N	2022-03-29	-	< 0.010	< 0.000050	0.0013	25.7	< 0.00010	0.00304	0.872	10.5	< 0.000010	0.861	0.0459	< 0.000010	< 0.00010	< 0.00030	0.000809	0.0017
EV TC1	EV TC1 WS 2022-02 N	2022-04-13	-	< 0.010	< 0.000050	0.0014	23.6	< 0.00010	0.00261	0.817	10.3	< 0.000010	0.858	0.0447	< 0.000010	< 0.00010	< 0.00030	0.000874	0.0019
EV TC1	EV TC1 WS 2022-05 MON N	2022-05-03	-	< 0.010	< 0.000050	< 0.0010	20	< 0.00010	0.00297	0.678	8.87	< 0.000010	0.564	0.04	0.00001	< 0.00010	< 0.00030	0.000787	0.0018
EV TC1	EV TC1 WS 2022-06 MON N	2022-06-06	-	< 0.010	< 0.000050	0.001	24.7	0.00011	0.00337	0.852	8.64	< 0.000010	0.717	0.0485	0.00001	< 0.00010	< 0.00030	0.000804	0.0017
EV TC1	EV TC1 WS 2022_03_N	2022-07-05	-	< 0.010	< 0.000050	0.0015	24.6	< 0.00010	0.00361	0.882	8.83	< 0.000010	0.832	0.0485	0.000011	< 0.00010	< 0.00030	0.000863	0.0021

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper		
				Acute mg/L	Chronic mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Acute mg/L	Chronic mg/L	mg/L	mg/L	mg/L	mg/L	Acute mg/L
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	n/a	BLM <sup>b</sup>
Fording River Operation																			
FR CC1	FR CC1 2022-01-04 N	2022-01-04	-	< 0.0020	0.00073	< 0.00020	0.0296	< 0.040	< 0.000100	0.032		0.000657	335	< 0.00020	< 0.00020	< 0.00040			
FR CC1	FR CC1 2022-01-06 N	2022-01-06	-	0.0089	0.00074	< 0.00020	0.029	< 0.040	< 0.000100	0.028		0.000638	318	< 0.00020	< 0.00020	< 0.00040			
FR CC1	FR CC1 2022-01-12 N	2022-01-12	-	< 0.0020	0.00076	< 0.00020	0.0296	< 0.040	< 0.000100	0.031		0.000621	309	< 0.00020	< 0.00020	< 0.00040			
FR CC1	FR CC1 2022-01-17 N	2022-01-17	-	< 0.0020	0.00075	< 0.00020	0.0332	< 0.040	< 0.000100	0.034		0.000677	310	< 0.00020	< 0.00020	< 0.00040			
FR CC1	FR CC1 2022-01-24 N	2022-01-24	-	< 0.0020	0.00078	< 0.00020	0.0305	< 0.040	< 0.000100	0.031		0.000666	319	< 0.00020	< 0.00020	< 0.00040			
FR CC1	FR CC1 2022-01-31 N	2022-01-31	-	< 0.0020	0.00075	< 0.00020	0.0293	< 0.040	< 0.000100	0.033		0.000654	311	< 0.00020	< 0.00020	< 0.00040			
FR CC1	FR CC1 2022-02-07 N	2022-02-07	-	0.002	0.00075	< 0.00020	0.0292	< 0.040	< 0.000100	0.033		0.000633	310	< 0.00020	< 0.00020	< 0.00040			
FR CC1	FR CC1 2022-02-14 N	2022-02-14	-	0.002	0.00074	< 0.00020	0.0292	< 0.040	< 0.000100	0.033		0.000643	307	< 0.00020	< 0.00020	< 0.00040			
FR CC1	FR CC1 2022-02-21 N	2022-02-21	-	< 0.0020	0.00073	< 0.00020	0.0294	< 0.040	< 0.000100	0.032		0.000697	326	< 0.00020	< 0.00020	< 0.00040			
FR CC1	FR CC1 2022-03-01 N	2022-03-01	-	< 0.0020	0.00072	< 0.00020	0.0306	< 0.040	< 0.000100	0.034		0.000686	331	< 0.00020	< 0.00020	< 0.00040			
FR CC1	FR CC1 2022-03-07 N	2022-03-07	-	< 0.0010	0.00074	< 0.00010	0.03	< 0.020	< 0.000050	0.03		0.000644	320	< 0.00010	0.00018	0.00034			
FR CC1	FR CC1 2022-03-14 N	2022-03-14	-	< 0.0020	0.00079	< 0.00020	0.0266	< 0.040	< 0.000100	0.03		< 0.625	291	< 0.00020	< 0.20	< 0.00040			
FR CC1	FR CC1 2022-03-21 N	2022-03-21	-	< 0.0010	0.00072	< 0.00010	0.0307	< 0.020	< 0.000050	0.032		0.000618	315	< 0.00010	0.00018	0.00029			
FR CC1	FR CC1 2022-03-28 N	2022-03-28	-	0.0014	0.00069	< 0.00010	0.0286	< 0.020	< 0.000050	0.03		0.000572	308	< 0.00010	0.00019	0.00025			
FR CC1	FR CC1 2022 04 06 N	2022-04-06	-	0.00145	0.00042	< 0.00010	0.0125	< 0.020	< 0.000050	0.022		0.0003555	155.5	< 0.00010	0.000175	0.00027			
FR CC1	FR CC1 2022-04-11 N	2022-04-11	-	0.0023	0.0008	< 0.00020	0.0258	< 0.040	< 0.000100	0.033		0.000829	308	< 0.00020	0.00038	0.00042			
FR CC1	FR CC1 2022-04-13 N	2022-04-13	-	0.0023	0.0008	< 0.00020	0.0258	< 0.040	< 0.000100	0.033		0.000829	308	< 0.00020	0.00038	0.00042			
FR CC1	FR CC1 2022-04-18 N	2022-04-18	-	0.0032	0.00082	< 0.00020	0.0193	< 0.040	< 0.000100	0.032		0.000776	271	< 0.00020	0.00033	< 0.00040			
FR CC1	FR CC1 2022-04-25 N	2022-04-25	-	0.0018	0.00083	< 0.00010	0.0195	< 0.020	< 0.000050	0.03		0.000647	259	< 0.00010	0.00025	0.00043			
FR CC1	FR CC1 2022-05-02 N	2022-05-02	-	0.0015	0.00086	< 0.00010	0.0178	< 0.020	< 0.000050	0.032		0.000558	273	< 0.00010	0.00023	0.00034			
FR CC1	FR CC1 2022-05-06 N	2022-05-06	-	< 0.0010	0.00087	< 0.00010	0.0196	< 0.020	< 0.000050	0.032		0.000611	268	< 0.00010	0.00029	0.0004			
FR CC1	FR CC1 2022-05-07 N	2022-05-07	-	0.0022	0.00085	0.00011	0.0188	< 0.020	< 0.000050	0.031		0.000632	241	< 0.00010	0.0003	0.00039			
FR CC1	FR CC1 2022-05-08 N	2022-05-08	-	< 0.0010	0.00086	0.00012	0.0195	< 0.020	< 0.000050	0.032		0.0006	242	< 0.00027	0.00032	0.00038			
FR CC1	FR CC1 2022-05-09 N	2022-05-09	-	< 0.0010	0.00086	< 0.00010	0.0198	< 0.020	< 0.000050	0.036		0.000644	263	< 0.00010	0.00032	0.00037			
FR CC1	FR CC1 2022-05-10 N	2022-05-10	-	0.0011	0.00082	< 0.00010	0.018	< 0.020	< 0.000050	0.029		0.000628	239	< 0.00010	0.00033	0.00037			
FR CC1	FR CC1 2022-05-11 N	2022-05-11	-	0.0011	0.00086	< 0.00010	0.0183	< 0.020	< 0.000050	0.03		0.000623	246	< 0.00010	0.00032	0.00042			
FR CC1	FR CC1 2022-05-12 N	2022-05-12	-	0.0022	0.00084	< 0.00010	0.0187	< 0.020	< 0.000050	0.031		0.000613	245	< 0.00010	0.00032	0.0004			
FR CC1	FR CC1 2022-05-13 N	2022-05-13	-	0.0019	0.00085	< 0.00010	0.0183	< 0.020	< 0.000050	0.033		0.00067	245	< 0.00010	0.00034	0.00067			
FR CC1	FR CC1 2022-05-14 N	2022-05-14	-	0.0018	0.00092	< 0.00010	0.0173	< 0.020	< 0.000050	0.033		0.000594	240	< 0.00010	0.00032	0.00047			
FR CC1	FR CC1 2022-05-16 N	2022-05-16	-	0.0016	0.00084	< 0.00010	0.0188	< 0.020	< 0.000050	0.032		0.000632	223	< 0.00010	0.00031	0.0004			
FR CC1	FR CC1 2022-05-25 N	2022-05-25	-	0.0018	0.00081	< 0.00010	0.0189	< 0.020	< 0.000050	0.032		0.000526	202	< 0.00010	0.00024	0.00039			
FR CC1	FR CC1 2022-05-30 N	2022-05-30	-	0.0046	0.00082	< 0.00010	0.0222	< 0.020	< 0.000050	0.031		0.000446	206	< 0.00010	0.00022	0.00033			
FR CC1	FR CC1 2022-06-13 N	2022-06-13	-	< 0.0010	0.0007	< 0.00010	0.0278	< 0.020	< 0.000050	0.023		0.000419	192	< 0.00010	0.0002	0.00027			
FR CC1	FR CC1 2022-06-27 N	2022-06-27	-	< 0.0010	0.00065	< 0.00010	0.0322	< 0.020	< 0.000050	0.024		0.000522	182	< 0.00010	0.00025	0.00029			
FR CC1	FR CC1 2022-07-18 N	2022-07-18	-	0.0017	0.0007	< 0.00010	0.0325	< 0.020	< 0.000050	0.025		0.000469	174	< 0.00010	0.00021	0.00054			
FR CC1	FR CC1 2022-07-25 N	2022-07-25	-	0.0011	0.00068	< 0.00010	0.0326	< 0.020	< 0.000050	0.027		0.00049	181	< 0.00010	0.00018	0.0004			
FR CC1	FR CC1 2022-08-02 N	2022-08-02	-	< 0.0010	0.00068	< 0.00010	0.0386	< 0.020	< 0.000050	0.027		0.000478	188	< 0.00010	0.00018	0.0197			
FR CC1	FR CC1 2022-08-08 N	2022-08-08	-	< 0.0010	0.00066	< 0.00010	0.0399	< 0.020	< 0.000050	0.027		0.000447	200	< 0.00010	0.00016	0.00033			
FR CC1	FR CC1 2022-08-15 N	2022-08-15	-	< 0.0020	0.00064	< 0.00020	0.041	< 0.040	< 0.000100	0.03		0.000467	204	< 0.00020	< 0.20	0.00065			
FR CC1	FR CCT_WS_SESMP 2022-08_N	2022-08-19	-	< 0.0010	0.00064	0.00018	0.0431	< 0.020	< 0.000050	0.039		0.00042	220	< 0.00016	0.00018	0.00032			
FR CC1	FR CC1 2022-08-22 N	2022-08-22	-	< 0.0010	0.00064	< 0.00010	0.039	< 0.020	< 0.000050	0.028		0.000412	205	< 0.00010	0.00014	0.00029			
FR CC1	FR CC1 2022-08-29 N	2022-08-29	-	< 0.0010	0.00065	< 0.00010	0.0406	< 0.020	< 0.000050	0.03		0.000467	236	< 0.00010	0.00017	0.00026			
FR CC1	FR CC1_RD_WS_2022-08-30 NP	2022-08-30	-	< 0.0010	0.00057	< 0.00010	0.0368	< 0.020	< 0.000050	0.023		0.00052	251	< 0.00010	0.00018	0.00036			
FR CC1	FR CCT_WS_SEPT1-2022 N	2022-09-07	-	< 0.0010	0.0007	< 0.00010	0.0348	< 0.020	< 0.000050	0.021		0.0000943	226	< 0.00010	0.00015	< 0.00020			
FR CC1	FR CC1 2022-09-07 N	2022-09-07	-	0.0011	0.00069	< 0.00010	0.0357	< 0.020	< 0.000050	0.029		0.00038	234	< 0.00010	0.00016	0.00028			
FR CC1	FR CC1 CCTA 2022-09-12 N	2022-09-12	-	0.0014	0.00077	< 0.00010	0.0369	< 0.020	< 0.000050	0.034		0.000297	270	< 0.00010	0.0002	0.00063			
FR CC1	FR CC1 CCTA 2022-09-17 N	2022-09-17	-	< 0.0020	0.00083	< 0.00020	0.0313	< 0.040	< 0.000100	0.037		0.000345	287	< 0.00020	< 0.20	0.00152			
FR CC1	FR CC1 CCTA 2022-09-18 N	2022-09-18	-	0.0032	0.00076	< 0.00020	0.0295	< 0.040	< 0.000100	0.035		0.000173	316	< 0.00020	< 0.20	0.00075			
FR CC1	FR CC1 CCTA 2022-09-19 N	2022-09-19	-	0.0021	0.00079	< 0.00020	0.0315	< 0.040	&										

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
BC WQG FWAL			n/a	Acute 0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Fording River Operation</b>																				
FR CC1	FR CC1 2022-01-04 N	2022-01-04	-	< 0.020	< 0.000100	0.521	177	0.00225	0.0624	7.77	181	< 0.000020	14.2	0.519	0.000052	< 0.00020	< 0.00060	0.0178	0.0342	
FR CC1	FR CC1 2022-01-06 N	2022-01-06	-	< 0.020	< 0.000100	0.471	175	0.00228	0.0605	7.23	169	< 0.000020	13.6	0.536	0.000051	< 0.00020	< 0.00060	0.0171	0.0339	
FR CC1	FR CC1 2022-01-12 N	2022-01-12	-	< 0.020	< 0.000100	0.43	164	0.00224	0.06	7.44	185	< 0.000020	13.1	0.528	0.000053	< 0.00020	< 0.00060	0.0165	0.0307	
FR CC1	FR CC1 2022-01-17 N	2022-01-17	-	< 0.020	< 0.000100	0.508	176	0.00226	0.0616	7.83	178	< 0.000020	14.2	0.513	0.000055	< 0.00020	< 0.00060	0.0166	0.0349	
FR CC1	FR CC1 2022-01-24 N	2022-01-24	-	< 0.020	< 0.000100	0.47	166	0.00196	0.0579	7.14	188	< 0.000020	13.1	0.525	0.000052	< 0.00020	< 0.00060	0.0158	0.031	
FR CC1	FR CC1 2022-01-31 N	2022-01-31	-	< 0.020	< 0.000100	0.454	169	0.00189	0.0566	7.09	196	< 0.000020	12.8	0.531	0.000046	< 0.00020	< 0.00060	0.017	0.0334	
FR CC1	FR CC1 2022-02-07 N	2022-02-07	-	< 0.020	< 0.000100	0.432	164	0.00205	0.0592	7.26	187	< 0.000020	12.2	0.54	0.000054	< 0.00020	< 0.00060	0.0165	0.03	
FR CC1	FR CC1 2022-02-14 N	2022-02-14	-	< 0.020	< 0.000100	0.417	169	0.00212	0.0588	7.15	187	< 0.000020	11.8	0.518	0.000049	< 0.00020	< 0.00060	0.0166	0.03	
FR CC1	FR CC1 2022-02-21 N	2022-02-21	-	< 0.020	< 0.000100	0.45	172	0.00192	0.0567	6.96	184	< 0.000020	11.9	0.532	0.000048	< 0.00020	< 0.00060	0.0147	0.0306	
FR CC1	FR CC1 2022-03-01 N	2022-03-01	-	< 0.020	< 0.000100	0.447	187	0.00197	0.0627	7.79	199	< 0.000020	12.2	0.533	0.000052	< 0.00020	< 0.00060	0.0159	0.0324	
FR CC1	FR CC1 2022-03-07 N	2022-03-07	-	< 0.010	< 0.000050	0.435	173	0.00201	0.0604	7.77	205	< 0.000010	11.8	0.534	0.000051	< 0.00010	< 0.00030	0.0164	0.0317	
FR CC1	FR CC1 2022-03-14 N	2022-03-14	-	< 0.020	< 0.000100	0.403	143	0.00177	0.0546	6.99	185	< 0.000020	11.1	0.536	0.000058	< 0.00020	< 0.00060	0.0153	0.0295	
FR CC1	FR CC1 2022-03-21 N	2022-03-21	-	< 0.010	< 0.000050	0.446	158	0.00204	0.0548	7.52	209	< 0.000010	11.5	0.511	0.000051	< 0.00010	< 0.00030	0.0153	0.029	
FR CC1	FR CC1 2022-03-28 N	2022-03-28	-	< 0.010	< 0.000050	0.429	167	0.00236	0.0559	7.06	186	< 0.000010	11.2	0.5	0.000048	< 0.00010	< 0.00030	0.014	0.0269	
FR CC1	FR CC1 2022_04_06 N	2022-04-06	-	< 0.010	< 0.000050	0.212	88.00255	0.001095	0.0268	3.725	119.025	< 0.000010	5.625	0.2551	0.0000295	< 0.00010	< 0.00030	0.007755	0.01785	
FR CC1	FR CC1 2022-04-11 N	2022-04-11	-	< 0.020	< 0.000100	0.414	168	0.0017	0.0532	7.33	217	< 0.000020	10.7	0.466	0.000051	< 0.00020	< 0.00060	0.0149	0.0404	
FR CC1	FR CC1 2022-04-13 N	2022-04-13	-	< 0.020	< 0.000100	0.414	168	0.0017	0.0532	7.33	217	< 0.000020	10.7	0.466	0.000051	< 0.00020	< 0.00060	0.0149	0.0404	
FR CC1	FR CC1 2022-04-18 N	2022-04-18	-	< 0.020	< 0.000100	0.373	155	0.00106	0.0483	7.33	216	< 0.000020	10.2	0.433	0.00005	< 0.00020	< 0.00060	0.015	0.0369	
FR CC1	FR CC1 2022-04-25 N	2022-04-25	-	< 0.010	< 0.000050	0.339	148	0.0009	0.0437	6.67	211	< 0.000010	9.39	0.416	0.000043	0.00012	< 0.00030	0.0137	0.032	
FR CC1	FR CC1 2022-05-02 N	2022-05-02	-	< 0.010	< 0.000050	0.327	143	0.00069	0.0414	6.56	230	< 0.000010	9.29	0.414	0.000046	< 0.00010	< 0.00030	0.0144	0.0286	
FR CC1	FR CC1 2022-05-06 N	2022-05-06	-	< 0.010	< 0.000050	0.324	138	0.001	0.0417	7.06	225	< 0.000010	9.67	0.389	0.000045	< 0.00010	< 0.00030	0.0132	0.0301	
FR CC1	FR CC1 2022-05-07 N	2022-05-07	-	< 0.010	< 0.000050	0.296	130	0.00128	0.0403	6.55	218	< 0.000010	8.97	0.404	0.000044	0.00019	< 0.00030	0.0138	0.0425	
FR CC1	FR CC1 2022-05-08 N	2022-05-08	-	< 0.010	< 0.000050	0.334	132	0.00102	0.041	6.47	206	< 0.000010	9.37	0.401	0.000046	< 0.00010	< 0.00030	0.014	0.034	
FR CC1	FR CC1 2022-05-09 N	2022-05-09	-	< 0.010	< 0.000050	0.345	152	0.00108	0.0412	7.04	213	< 0.000010	9.97	0.389	0.000049	< 0.00010	< 0.00030	0.0139	0.0593	
FR CC1	FR CC1 2022-05-10 N	2022-05-10	-	< 0.010	< 0.000050	0.32	137	0.00101	0.0392	6.74	191	< 0.000010	9.16	0.37	0.000042	< 0.00010	< 0.00030	0.0125	0.0302	
FR CC1	FR CC1 2022-05-11 N	2022-05-11	-	< 0.010	< 0.000050	0.313	130	0.00101	0.0379	6.62	180	< 0.000010	9.33	0.368	0.000044	< 0.00010	< 0.00030	0.0122	0.031	
FR CC1	FR CC1 2022-05-12 N	2022-05-12	-	< 0.010	< 0.000050	0.304	130	0.00091	0.037	6.47	187	< 0.000010	8.83	0.382	0.000041	< 0.00010	< 0.00030	0.0117	0.0339	
FR CC1	FR CC1 2022-05-13 N	2022-05-13	-	< 0.010	< 0.000050	0.328	146	0.00104	0.0399	7.01	172	< 0.000010	9.32	0.371	0.000047	< 0.00010	< 0.00030	0.0121	0.0335	
FR CC1	FR CC1 2022-05-14 N	2022-05-14	-	< 0.010	< 0.000050	0.315	136	0.00088	0.036	6.5	210	< 0.000010	9.2	0.38	0.000043	< 0.00010	< 0.00030	0.0125	0.0295	
FR CC1	FR CC1 2022-05-16 N	2022-05-16	-	< 0.010	< 0.000050	0.302	123	0.00099	0.0358	6.48	191	< 0.000010	8.76	0.336	0.000043	< 0.00010	< 0.00030	0.0116	0.0309	
FR CC1	FR CC1 2022-05-25 N	2022-05-25	-	< 0.010	< 0.000050	0.284	119	0.00098	0.0336	6.64	172	< 0.000010	9.44	0.324	0.000039	< 0.00010	< 0.00030	0.0108	0.0264	
FR CC1	FR CC1 2022-05-30 N	2022-05-30	-	< 0.010	< 0.000050	0.297	118	0.0013	0.0342	6.54	147	< 0.000010	9.56	0.304	0.000039	< 0.00010	< 0.00030	0.0104	0.0274	
FR CC1	FR CC1 2022-06-13 N	2022-06-13	-	< 0.010	< 0.000050	0.229	105	0.0008	0.0298	5.2	126	< 0.000010	8.25	0.318	0.000038	< 0.00010	< 0.00030	0.01	0.0225	
FR CC1	FR CC1 2022-06-27 N	2022-06-27	-	< 0.010	< 0.000050	0.226	101	0.00063	0.0285	5.02	126	< 0.000010	8.88	0.295	0.000033	< 0.00010	< 0.00030	0.0093	0.0259	
FR CC1	FR CC1 2022-07-18 N	2022-07-18	-	< 0.010	< 0.000050	0.238	94.6	0.00071	0.0268	4.9	131	< 0.000010	8.81	0.27	0.000031	< 0.00010	< 0.00030	0.00856	0.029	
FR CC1	FR CC1 2022-07-25 N	2022-07-25	-	< 0.010	< 0.000050	0.272	101	0.00063	0.03	5.16	132	< 0.000010	9.24	0.275	0.000034	< 0.00010	< 0.00030	0.00907	0.0266	
FR CC1	FR CC1 2022-08-02 N	2022-08-02	-	< 0.010	0.000457	0.263	109	0.00073	0.0315	5.29	143	< 0.000010	10.1	0.298	0.000036	0.00038	< 0.00030	0.0102	0.0399	
FR CC1	FR CC1 2022-08-08 N	2022-08-08	-	< 0.010	< 0.000050	0.271	112	0.00057	0.033	5.28	139	< 0.000010	9.76	0.317	0.000033	< 0.00010	< 0.00030	0.00986	0.0221	
FR CC1	FR CC1 2022-08-15 N	2022-08-15	-	< 0.020	< 0.000100	0.322	114	0.00066	0.0358	5.23	131	< 0.000020	9.99	0.323	0.000036	< 0.00020	< 0.00060	0.011	0.0288	
FR CC1	FR CCT_WS_SESMP 2022-08_N	2022-08-19	-	< 0.010	< 0.000050	0.349	122	0.00064	0.0378	5.26	144	< 0.000010	10.2	0.343	0.000035	< 0.00010	< 0.00030	0.0108	0.0225	
FR CC1	FR CC1 2022-08-22 N	2022-08-22	-	< 0.010	< 0.000050	0.307	111	0.00055	0.0339	5.01	121	< 0.000010	9.23	0.335	0.000036	< 0.00010	< 0.00030	0.0112	0.0216	
FR CC1	FR CC1 2022-08-29 N	2022-08-29	-	< 0.010	< 0.000050	0.343	132	0.00063	0.0376	5.4	151	< 0.000010	10.6	0.381	0.000038	< 0.00010	< 0.00030	0.0117	0.0237	
FR CC1	FR CC1_RD_WS_2022-08-30 NP	2022-08-30	-	< 0.010	< 0.000050	0.247	137	0.0007	0.0438	4.91	145	< 0.000010	11.6	0.412	0.000032	< 0.00010	< 0.00030	0.0141	0.0272	
FR CC1	FR CCT_WS_SEPT-2022 N	2022-09-07	-	< 0.010	< 0.000050	0.286	126	0.00042	0.0415	5.53	148	< 0.000010	10.1	0.387	0.000026	< 0.00010	< 0.00030	0.0131	0.0052	
FR CC1	FR CC1 2022-09-07 N	2022-09-07	-	< 0.010	< 0.000050	0.325	125	0.00053	0.0459	5.43	157	< 0.000010	10.3	0.39	0.000025	< 0.00010	< 0.00030	0.0128	0.0242	
FR CC1	FR CC1 CCTA 2022-09-12 N	2022-09-12	-	< 0.010	0.00007	0.39	137	0.00063	0.0515											

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper			
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	Acute	Chronic	BLM <sup>b</sup>
Fording River Operation																				
FR CC1	FR FLD1 2022-09-19 N	2022-09-19	-	0.0037	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010		< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00020				
FR CC1	FR CC1 CC1A 2022-09-20 N	2022-09-20	-	0.0017	0.0008	< 0.00010	0.0316	< 0.020	< 0.000050	0.039		0.000126	303	< 0.00010	0.00021	0.00059				
FR CC1	FR CC1 CC1A 2022-09-21 N	2022-09-21	-	< 0.0020	0.0007	< 0.00020	0.0311	< 0.040	< 0.000100	0.036		0.000118	290	< 0.00020	0.00022	0.0013				
FR CC1	FR CC1 CC1A 2022-09-22 N	2022-09-22	-	0.0152	0.00076	< 0.00020	0.0348	< 0.040	< 0.000100	0.035		0.000221	286	< 0.00020	0.00021	0.00042				
FR CC1	FR CC1 RD-WS 2022-09-01 NP	2022-09-22	-	0.003	0.00078	< 0.00020	0.0348	< 0.040	< 0.000100	0.035		0.000107	288	0.00032	< 0.20	0.00182				
FR CC1	FR CC1 CC1A 2022-09-23 N	2022-09-23	-	0.0013	0.00074	< 0.00010	0.0347	< 0.020	< 0.000050	0.034		0.000117	272	< 0.00010	0.00019	0.00145				
FR CC1	FR CC1 CC1A 2022-09-24 N	2022-09-24	-	0.001	0.00068	< 0.00010	0.0449	< 0.020	< 0.000050	0.03		0.000387	253	< 0.00010	0.00017	0.00167				
FR CC1	FR CC1 CC1A 2022-09-25 N	2022-09-25	-	< 0.0020	0.00078	< 0.00020	0.0382	< 0.040	< 0.000100	0.03		0.000244	267	< 0.00020	< 0.20	< 0.00040				
FR CC1	FR CC1 CC1A 2022-09-26 N	2022-09-26	-	< 0.0020	0.0007	< 0.00020	0.0442	< 0.040	< 0.000100	0.036		0.000515	281	< 0.00020	0.00022	0.00046				
FR CC1	FR CC1 CC1A 2022-10-03 N	2022-10-03	-	0.0017	0.00071	< 0.00010	0.0502	< 0.020	< 0.000050	0.033		0.000714	290	< 0.00010	0.00018	0.00051				
FR CC1	FR CC1 CC1A 2022-10-11 N	2022-10-11	-	0.0013	0.00059	< 0.00010	0.0499	< 0.020	< 0.000050	0.029		0.000519	234	< 0.00010	0.00014	0.00028				
FR CC1	FR CC1 CC1A 2022-10-17 N	2022-10-17	-	0.005	0.00064	< 0.00020	0.0499	< 0.040	< 0.000100	0.025		0.000549	240	0.00032	< 0.20	< 0.00040				
FR CC1	FR CC1 2022-10-24 N	2022-10-24	-	0.005	0.00057	< 0.00020	0.0561	< 0.040	< 0.000100	0.029		0.000559	256	< 0.00020	< 0.20	0.00128				
FR CC1	FR CC1A 2022-10-31 N	2022-10-31	-	0.0033	0.00053	0.0001	0.0522	< 0.020	< 0.000050	0.024		0.000434	229	< 0.00010	0.00013	0.00031				
FR CC1	FR CC1 2022-11-07 N	2022-11-07	-	0.0042	0.00059	0.00011	0.0501	< 0.020	< 0.000050	0.026		0.000501	233	< 0.00010	0.00014	0.00032				
FR CC1	FR CC1 2022-11-14 N	2022-11-14	-	< 0.0020	0.00069	< 0.00020	0.0386	< 0.040	< 0.000100	0.028		0.000563	264	< 0.00020	< 0.20	< 0.00040				
FR CC1	FR CC1 2022-11-21 N	2022-11-21	-	0.0039	0.00079	< 0.00020	0.0352	< 0.040	< 0.000100	0.036		0.000646	304	< 0.00020	< 0.20	< 0.00040				
FR EC1	FR EC1 MON 2022-01-01 N	2022-03-23	-	0.0067	0.00102	0.00024	0.0827	< 0.020	< 0.000050	0.024		0.000126	120	< 0.00010	0.00082	0.00125				
FR EC1	FR EC1 MON 2022-03-01 N	2022-03-28	-	0.0082	0.00079	0.00029	0.0661	< 0.020	< 0.000050	0.023		0.000646	85.4	< 0.00010	0.00067	0.00054				
FR EC1	FR EC1 MON 2022-04-01 N	2022-04-04	-	0.0056	0.00083	0.00027	0.0567	< 0.020	< 0.000050	0.026		0.000156	211	< 0.00010	0.00058	0.00098				
FR EC1	FR EC1 WEK 2022-04-11 N	2022-04-14	-	0.0043	0.00068	< 0.00020	0.0459	< 0.040	< 0.000100	0.03		0.000197	221	< 0.00020	0.0005	0.00042				
FR EC1	FR EC1 WEK 2022-04-18 N	2022-04-19	-	-	-	-	-	-	-	-		-	-	-	-	-				
FR EC1	FR EC1 WEK 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	-		-	-	-	-	-				
FR EC1	FR EC1 MON 2022-05-01 N	2022-05-02	-	0.0031	0.0006	< 0.00020	0.0279	< 0.040	< 0.000100	0.035		0.0000112	274	< 0.00020	0.00032	< 0.00040				
FR EC1	FR EC1 WEK 2022-05-09 N	2022-05-12	-	-	-	-	-	-	-	-		-	-	-	-	-				
FR EC1	FR EC1 WEK 2022-05-16 N	2022-05-16	-	-	-	-	-	-	-	-		-	-	-	-	-				
FR EC1	FR EC1 WEK 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-		-	-	-	-	-				
FR EC1	FR EC1 WEK 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-		-	-	-	-	-				
FR EC1	FR EC1 MON 2022-06-01 N	2022-06-08	-	0.0025	0.00065	< 0.00020	0.0189	< 0.040	< 0.000100	0.035		< 0.0100	325	< 0.00020	< 0.20	< 0.00040				
FR EC1	FR EC1 WEK 2022-06-13 N	2022-06-13	-	-	-	-	-	-	-	-		-	-	-	-	-				
FR EC1	FR EC1 WEK 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-		-	-	-	-	-				
FR EC1	FR EC1 WEK 2022-06-27 N	2022-06-29	-	-	-	-	-	-	-	-		-	-	-	-	-				
FR EC1	FR EC1 MON 2022-07-01 N	2022-07-04	-	0.0052	0.00064	0.00032	0.0372	< 0.040	< 0.000100	0.039		0.0000985	286	< 0.00020	0.00046	0.0007				
FR EC1	FR EC1 WEK 2022-07-11 N	2022-07-12	-	-	-	-	-	-	-	-		-	-	-	-	-				
FR FR1	FR FR1 WEK 2022-03-28 N	2022-03-30	-	0.0197	< 0.00010	0.00012	0.0506	< 0.020	< 0.000050	< 0.010		0.0000258	54.5	0.0001	< 0.10	0.00038				
FR FR1	FR FR1 MON 2022-04-01 N	2022-04-04	-	0.0093	< 0.00010	0.00012	0.0501	< 0.020	< 0.000050	< 0.010		0.0000233	75.7	< 0.00010	< 0.10	< 0.00020				
FR FR1	FR FR1 WEK 2022-04-11 N	2022-04-11	-	0.0143	< 0.00010	0.00011	0.0482	< 0.020	< 0.000050	< 0.010		0.0000287	76.9	0.00012	< 0.10	0.00035				
FR FR1	FR FR1 WEK 2022-04-18 NP	2022-04-20	-	0.0159	< 0.00010	0.00012	0.0483	< 0.020	< 0.000050	< 0.010		0.0000234	62.4	< 0.00010	< 0.10	0.00031				
FR FR1	FR FR1 WS 2022-04-25 NP	2022-04-25	-	0.0622	< 0.00010	0.00018	0.0452	< 0.020	< 0.000050	< 0.010		0.0000568	37.1	0.00011	0.00023	0.00083				
FR FR1	FR FR1 WS 2022-04-26 NP	2022-04-26	-	-	-	-	-	-	-	-		-	-	-	-	-				
FR FR1	FR FR1 WEK 2022-04-25 NP	2022-04-26	-	0.0359	< 0.00010	0.00013	0.045	< 0.020	< 0.000050	< 0.010		0.0000342	48.5	0.00011	0.00014	0.00047				
FR FR1	FR FR1 MON 2022-05-02 NP	2022-05-03	-	0.0103	< 0.00010	0.0001	0.0421	< 0.020	< 0.000050	< 0.010		0.0000193	56.5	0.0001	< 0.10	0.00026				
FR FR1	FR FR1 WEK 2022-05-09 NP	2022-05-10	-	0.0081	< 0.00010	0.00011	0.0374	< 0.020	< 0.000050	< 0.010		0.0000138	54.8	0.00018	< 0.10	0.00038				
FR FR1	FR FR1 WEK 2022-05-16 NP	2022-05-17	-	0.0042	< 0.00010	0.00012	0.0369	< 0.020	< 0.000050	< 0.010		0.0000184	58.2	0.00012	< 0.10	0.00032				
FR FR1	FR FR1 WEK 2022-05-23 NP	2022-05-25	-	0.0044	< 0.00010	< 0.00010	0.0341	< 0.020	< 0.000050	< 0.010		0.0000163	49.2	0.00011	< 0.10	0.00034				
FR FR1	FR FR1 WEK 2022-05-30 NP	2022-05-31	-	0.004	< 0.00010	< 0.00010	0.0344	< 0.020	< 0.000050	< 0.010		0.0000112	40.7	0.0001	< 0.10	0.00024				
FR FR1	FR FR1 MON 2022-06-06 NP	2022-06-07	-	0.0036	0.00012	0.00011	0.0369	< 0.020	< 0.000050	< 0.010		0.0000476	57.3	< 0.00010	< 0.10	0.00024				
FR FR1	FR FR1 WEK 2022-06-13 NP	2022-06-14	-	0.0039	< 0.00010	< 0.00010	0.0274	< 0.020	< 0.000050	< 0.010		0.000008	37.2	< 0.00010	< 0.10	< 0.00020				
FR FR1	FR DC1 WEK 2022-06-20 NP	2022-06-21	-	0.0036	< 0.00010	< 0.00010	0.01823333	< 0.020	< 0.000050	< 0.010		9.66667E-06	25.82	< 0.00010	< 0.10	0.000206667				
FR FR1	FR FR1 WEK 2022-06-27 NP	2022-06-28	-	0.0033	< 0.00010	< 0.00010	0.0237	< 0.020	< 0.000050	< 0.010		0.0000096	35.2	< 0.00010	< 0.10	< 0.00020				

< Denotes concentration less than indicated detection limit  
 - Denotes pH analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL



APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fording River Operation																			
FR CC1	FR FLD1 2022-09-19 N	2022-09-19	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.0010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	0.0001	< 0.00030	< 0.000010	< 0.0010
FR CC1	FR CC1 CC1A 2022-09-20 N	2022-09-20	-	0.019	< 0.000050	0.442	157	0.00087	0.0624	6.88	218	< 0.000010	13	0.468	0.000044	< 0.00010	< 0.00030	0.0154	0.0141
FR CC1	FR CC1 CC1A 2022-09-21 N	2022-09-21	-	< 0.020	0.000276	0.37	163	0.00085	0.0554	6.12	169	< 0.000020	11.4	0.447	0.00004	< 0.00020	< 0.00060	0.0153	0.0189
FR CC1	FR CC1 CC1A 2022-09-22 N	2022-09-22	-	< 0.020	< 0.000100	0.306	149	0.00162	0.0569	6.13	173	< 0.000020	11.7	0.424	0.000041	< 0.00020	< 0.00060	0.0152	0.0148
FR CC1	FR CC1 RD-WS 2022-09-01 NP	2022-09-22	-	< 0.020	0.000864	0.407	152	0.00062	0.0569	6.02	171	< 0.000020	12	0.425	0.000043	< 0.00020	< 0.00060	0.0147	0.0177
FR CC1	FR CC1 CC1A 2022-09-23 N	2022-09-23	-	< 0.010	0.000194	0.463	152	0.00057	0.055	6.53	222	< 0.000010	11.9	0.448	0.000041	< 0.00010	< 0.00030	0.0155	0.0167
FR CC1	FR CC1 CC1A 2022-09-24 N	2022-09-24	-	< 0.010	0.000533	0.354	131	0.00076	0.0452	5.99	178	< 0.000010	10.3	0.396	0.000035	< 0.00010	< 0.00030	0.0119	0.0291
FR CC1	FR CC1 CC1A 2022-09-25 N	2022-09-25	-	< 0.020	< 0.000100	0.39	144	0.00053	0.0503	5.99	171	< 0.000020	10.5	0.428	0.000043	< 0.00020	< 0.00060	0.0138	0.0197
FR CC1	FR CC1 CC1A 2022-09-26 N	2022-09-26	-	< 0.020	< 0.000100	0.42	161	0.00067	0.0585	6.64	181	< 0.000020	12.4	0.437	0.000039	< 0.00020	< 0.00060	0.0139	0.0298
FR CC1	FR CC1 CC1A 2022-10-03 N	2022-10-03	-	< 0.010	< 0.000050	0.35	143	0.00333	0.0478	5.69	182	< 0.000010	10.8	0.439	0.000041	0.00029	< 0.00030	0.0124	0.0372
FR CC1	FR CC1 CC1A 2022-10-11 N	2022-10-11	-	< 0.010	< 0.000050	0.304	114	0.00101	0.0394	4.69	159	< 0.000010	8.32	0.356	0.000032	< 0.00010	< 0.00030	0.0108	0.028
FR CC1	FR CC1 CC1A 2022-10-17 N	2022-10-17	-	< 0.020	< 0.000100	0.298	119	0.00098	0.0448	4.95	146	< 0.000020	8.71	0.362	0.000031	< 0.00020	< 0.00060	0.012	0.0305
FR CC1	FR CC1 2022-10-24 N	2022-10-24	-	< 0.020	0.000106	0.309	130	0.00112	0.0438	5.09	143	< 0.000020	9.25	0.376	0.000032	< 0.00020	< 0.00060	0.0116	0.0357
FR CC1	FR CC1A 2022-10-31 N	2022-10-31	-	< 0.010	< 0.000050	0.263	120	0.00094	0.0393	4.86	167	< 0.000010	8.47	0.33	0.00003	< 0.00010	< 0.00030	0.0115	0.0231
FR CC1	FR CC1 2022-11-07 N	2022-11-07	-	< 0.010	< 0.000050	0.258	120	0.00084	0.0414	5.01	152	< 0.000010	8.92	0.351	0.000029	< 0.00010	< 0.00030	0.0106	0.0273
FR CC1	FR CC1 2022-11-14 N	2022-11-14	-	< 0.020	< 0.000100	0.318	144	0.00089	0.051	6.26	182	< 0.000020	11.2	0.42	0.000045	< 0.00020	< 0.00060	0.0143	0.0287
FR CC1	FR CC1 2022-11-21 N	2022-11-21	-	< 0.020	< 0.000100	0.387	171	0.00116	0.0583	6.63	205	< 0.000020	12.5	0.476	0.00005	< 0.00020	< 0.00060	0.0163	0.0392
FR EC1	FR EC1 MON 2022-01-01 N	2022-03-23	-	< 0.010	< 0.000050	0.0406	98.8	0.0199	0.00642	3.86	112	< 0.000010	6.88	0.219	0.00002	< 0.00010	< 0.00030	0.00736	0.0048
FR EC1	FR EC1 MON 2022-03-01 N	2022-03-28	-	< 0.010	< 0.000050	0.0251	58.8	0.0271	0.00492	3.21	67.8	< 0.000010	5.48	0.244	0.000018	< 0.00010	< 0.00030	0.00414	0.0023
FR EC1	FR EC1 MON 2022-04-01 N	2022-04-04	-	< 0.010	< 0.000050	0.0737	166	0.0161	0.0124	4.26	190	< 0.000010	9.21	0.284	0.000023	< 0.00010	< 0.00030	0.013	0.007
FR EC1	FR EC1 WEK 2022-04-11 N	2022-04-14	-	< 0.020	< 0.000100	0.0882	177	0.014	0.0126	4.39	203	< 0.000020	11.3	0.321	0.000023	< 0.00020	< 0.00060	0.0137	0.0081
FR EC1	FR EC1 WEK 2022-04-18 N	2022-04-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 WEK 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 MON 2022-05-01 N	2022-05-02	-	< 0.020	< 0.000100	0.114	245	0.00154	0.0166	5.49	283	< 0.000020	14.6	0.362	0.000027	< 0.00020	< 0.00060	0.0178	< 0.0020
FR EC1	FR EC1 WEK 2022-05-09 N	2022-05-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 WEK 2022-05-16 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 WEK 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 WEK 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 MON 2022-06-01 N	2022-06-08	-	< 0.020	< 0.000100	0.159	295	0.00063	0.0163	5.58	355	< 0.000020	16	0.416	0.000023	< 0.00020	< 0.00060	0.0196	< 0.0020
FR EC1	FR EC1 WEK 2022-06-13 N	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 WEK 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 WEK 2022-06-27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 MON 2022-07-01 N	2022-07-04	-	< 0.020	< 0.000100	0.118	247	0.00761	0.016	5.61	290	< 0.000020	14.8	0.372	0.00003	< 0.00020	< 0.00060	0.0172	0.0057
FR EC1	FR EC1 WEK 2022-07-11 N	2022-07-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR FR1	FR FR1 WEK 2022-03-28 N	2022-03-30	-	0.018	< 0.000050	0.0056	19.7	0.00436	0.00067	0.614	13.4	< 0.000010	0.67	0.0887	< 0.000010	< 0.00010	0.00035	0.000757	0.0015
FR FR1	FR FR1 MON 2022-04-01 N	2022-04-04	-	< 0.010	< 0.000050	0.0098	31.1	0.00185	0.00075	0.8	25.5	< 0.000010	0.733	0.117	< 0.000010	< 0.00010	< 0.00030	0.00125	< 0.0010
FR FR1	FR FR1 WEK 2022-04-11 N	2022-04-11	-	0.017	< 0.000050	0.0114	33.2	0.00226	0.00088	0.851	33.5	< 0.000010	0.75	0.115	< 0.000010	< 0.00010	< 0.00030	0.00134	0.003
FR FR1	FR FR1 WEK 2022-04-18 NP	2022-04-20	-	0.017	< 0.000050	0.0084	25	0.0013	< 0.00050	0.75	21.9	< 0.000010	0.718	0.104	< 0.000010	< 0.00010	< 0.00030	0.00104	0.0025
FR FR1	FR FR1 WS 2022-04-25 NP	2022-04-25	-	0.076	< 0.000050	0.0043	15	0.0196	0.00116	0.616	10	< 0.000010	0.6	0.0651	< 0.000010	< 0.00010	0.00073	0.000579	0.0022
FR FR1	FR FR1 WS 2022-04-26 NP	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR FR1	FR FR1 WEK 2022-04-25 NP	2022-04-26	-	0.056	< 0.000050	0.0056	18.6	0.0138	0.00086	0.608	13.9	< 0.000010	0.669	0.0836	< 0.000010	< 0.00010	0.00048	0.000762	0.0026
FR FR1	FR FR1 MON 2022-05-02 NP	2022-05-03	-	0.011	< 0.000050	0.0066	22	0.00203	0.00071	0.657	18.2	< 0.000010	0.723	0.095	< 0.000010	< 0.00010	< 0.00030	0.000955	< 0.0010
FR FR1	FR FR1 WEK 2022-05-09 NP	2022-05-10	-	< 0.010	< 0.000050	0.0064	20.4	0.00132	0.00056	0.621	14.4	< 0.000010	0.655	0.0919	< 0.000010	< 0.00010	< 0.00030	0.000861	< 0.0010
FR FR1	FR FR1 WEK 2022-05-16 NP	2022-05-17	-	< 0.010	< 0.000050	0.0055	18.9	0.00115	< 0.00050	0.552	10.7	< 0.000010	0.642	0.0989	< 0.000010	< 0.00010	< 0.00030	0.000861	< 0.0010
FR FR1	FR FR1 WEK 2022-05-23 NP	2022-05-25	-	< 0.010	< 0.000050	0.0052	18	0.001	0.00051	0.526	11.3	< 0.000010	0.626	0.0941	< 0.000010	< 0.00010	< 0.00030	0.000795	0.004
FR FR1	FR FR1 WEK 2022-05-30 NP	2022-05-31	-	< 0.010	< 0.000050	0.0034	13.6	0.00056	< 0.00050	0.432	5.81	< 0.000010	0.562	0.0788	< 0.000010	< 0.00010	< 0.00030	0.000586	< 0.0010
FR FR1	FR FR1 MON 2022-06-06 NP	2022-06-07	-	< 0.010	< 0.000050	0.0032	26	0.00125	0.00227	1.03	25.1	< 0.000010	1.42	0.094	< 0.000010	< 0.00010	< 0.00030	0.00151	0.0021
FR FR1	FR FR1 WEK 2022-06-13 NP	2022-06-14	-	< 0.010	< 0.000050	0.0031	10.6	0.00079	< 0.00050	0.401	4.23	< 0.000010	0.464	0.0676	< 0.000010	< 0.00010	< 0.00030	0.000507	< 0.0010
FR FR1	FR DC1 WEK 2022-06-20 NP	2022-06-21	-	< 0.010	< 0.000050	0.0028	8.001666667	0.000866667	< 0.00050	0.309866667	3.436666667	< 0.000010	0.400333333	0.045466667	< 0.000010	< 0.00010	&lt		

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper	
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Acute		Chronic								Acute	Chronic				Acute	Chronic		
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>d</sup>	
<b>Fording River Operation</b>																		
FR FR1	FR FR1 QTR 2022-07-04 NP	2022-07-05	-	0.0034	< 0.00010	< 0.00010	0.0219	< 0.020	< 0.000050	< 0.010		0.0000071		36.1	< 0.00010	< 0.10	< 0.00020	
FR FR1	FR FR1 WEK 2022-07-11 NP	2022-07-13	-	0.0022	< 0.00010	< 0.00010	0.0228	< 0.020	< 0.000050	< 0.010		0.0000095		35.6	< 0.00010	< 0.10	< 0.00020	
FR FR1	FR FR1 MON 2022-08-01 NP	2022-08-09	-	0.0019	< 0.00010	0.00011	0.0376	< 0.020	< 0.000050	< 0.010		0.0000184		54.7	0.00012	< 0.10	< 0.00020	
FR FR1	FR FR1 MON 2022-09-05 NP	2022-09-13	-	0.0046	< 0.00010	< 0.00010	0.041	< 0.020	< 0.000050	< 0.010		0.0000183		64.3	0.00013	< 0.10	< 0.00020	
FR FR1	FR FR1 QTR 2022-10-03 NP	2022-10-12	-	< 0.0010	< 0.00010	< 0.00010	0.0392	< 0.020	< 0.000050	< 0.010		0.0000216		74.4	< 0.00010	< 0.10	< 0.00020	
FR FR1	FR FR1 MON 2022-11-07 NP	2022-11-03	-	0.0014	< 0.00010	0.0338	0.0329	< 0.020	< 0.000050	< 0.010		0.0000237		67.9	< 0.00010	< 0.10	0.00055	
FR FR2	FR FR2 MON 2022-01-04 N	2022-01-08	-	0.0013	0.00023	0.00017	0.0965	< 0.020	< 0.000050	0.016		0.0000237		148	0.00012	< 0.00010	< 0.00020	
FR FR2	FR FR2 MON 2022-02-01 N	2022-02-09	-	0.0011	0.00022	< 0.00010	0.0958	< 0.020	< 0.000050	0.011		0.0000801		168	< 0.00010	< 0.00010	0.00029	
FR FR2	FR FR2 WS 2022-02-28 N	2022-02-28	-	< 0.0010	0.00026	0.00011	0.11	< 0.020	< 0.000050	0.013		0.0000894		159	< 0.00010	< 0.00010	0.00029	
FR FR2	FR FR2 MON 2022-03-01 N	2022-03-03	-	< 0.0010	0.00022	< 0.00010	0.0946	< 0.020	< 0.000050	0.011		0.0000911		154	0.00011	< 0.10	< 0.00020	
FR FR2	FR FR2 WEK 2022-03-14 N	2022-03-14	-	0.0039	0.00024	< 0.00010	0.0991	< 0.020	< 0.000050	0.011		0.0000753		169	0.0001	< 0.10	0.00031	
FR FR2	FR FR2 WEK 2022-03-15 NP	2022-03-15	-	0.004	0.00023	< 0.00010	0.101	< 0.020	< 0.000050	0.011		0.0000762		147	< 0.00010	< 0.10	0.00032	
FR FR2	FR FR2 WS 2022-03-16 NP	2022-03-16	-	0.0012	0.00021	< 0.00010	0.0786	< 0.020	< 0.000050	0.012		0.0000599		149	< 0.00010	< 0.10	0.00054	
FR FR2	FR FR2 WEK 2022-03-16 NP	2022-03-16	-	0.0016	0.00023	< 0.00010	0.0916	< 0.020	< 0.000050	0.012		0.0000663		153	< 0.00010	< 0.10	< 0.00020	
FR FR2	FR FR2 2 WS 2022-03-17 NP	2022-03-17	-	0.0035	0.00025	< 0.00010	0.0926	< 0.020	< 0.000050	0.012		0.0000735		162	0.00015	0.00012	0.00138	
FR FR2	FR FR2 WEK 2022-03-17 NP	2022-03-17	-	0.0015	0.00024	< 0.00010	0.0938	< 0.020	< 0.000050	0.011		0.0000791		134	< 0.00010	0.0001	< 0.00020	
FR FR2	FR FR2 2 WS 2022-03-18 NP	2022-03-18	-	0.0011	0.00026	< 0.00010	0.101	< 0.020	< 0.000050	0.011		0.0000754		145	< 0.00010	0.0001	0.00021	
FR FR2	FR FR2 WEK 2022-03-18 NP	2022-03-18	-	0.0029	0.00027	< 0.00010	0.0943	< 0.020	< 0.000050	0.012		0.0000759		148	< 0.00010	0.00011	0.00026	
FR FR2	FR FR2 WS 2022-03-19 NP	2022-03-19	-	0.0016	0.00025	< 0.00010	0.0964	< 0.020	< 0.000050	0.012		0.0000827		148	< 0.00010	< 0.10	< 0.00020	
FR FR2	FR FR2 WS 2022-03-20 NP	2022-03-20	-	0.0028	0.00028	< 0.00010	0.093	< 0.020	< 0.000050	0.012		0.0000765		145	< 0.00010	0.00011	< 0.00020	
FR FR2	FR FR2 2 WS 2022-03-21 NP	2022-03-21	-	0.002	0.00028	< 0.00010	0.0934	< 0.020	< 0.000050	0.012		0.0000821		146	< 0.00010	0.00011	< 0.00020	
FR FR2	FR FR2 2 WS 2022-03-22 NP	2022-03-22	-	0.0014	0.00028	< 0.00010	0.0887	< 0.020	< 0.000050	0.012		0.000078		146	< 0.00010	0.00012	< 0.00020	
FR FR2	FR FR2 2 WS 2022-03-23 NP	2022-03-23	-	< 0.0010	0.00034	0.00013	0.0966	< 0.020	< 0.000050	0.012		0.0000959		143	0.0001	0.00017	< 0.00020	
FR FR2	FR DC1 WEK 2022-03-28 N	2022-03-30	-	0.00355	0.00079	0.00017	0.1115	< 0.020	< 0.000050	0.012		0.000122		137.5	< 0.00010	0.0005	0.000355	
FR FR2	FR FR2 MON 2022-04-01 N	2022-04-05	-	0.0018	0.00074	0.00014	0.1	< 0.020	< 0.000050	0.011		0.000127		137	< 0.00010	0.0008	0.00027	
FR FR2	FR FR2 WEK 2022-04-11 N	2022-04-12	-	0.0035	0.00066	0.00012	0.0929	< 0.020	< 0.000050	0.012		0.000171		146	< 0.00010	0.0005	0.00032	
FR FR2	FR DC1 WEK 2022-04-16 N	2022-04-18	-	0.00165	0.00032	< 0.00010	0.08025	< 0.020	< 0.000050	0.012		0.000149		144.5	< 0.00010	0.000195	0.00028	
FR FR2	FR FLD WEK 2022-04-18 N	2022-04-19	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010		< 0.0050		< 0.050	< 0.00010	< 0.10	< 0.00020	
FR FR2	FR FLD WEK 2022-04-25 N	2022-04-27	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010		< 0.0050		< 0.050	< 0.00010	< 0.10	< 0.00020	
FR FR2	FR FR2 MON 2022-05-01 N	2022-05-04	-	0.0043	0.00022	0.00011	0.0549	< 0.020	< 0.000050	< 0.010		0.000153		101	< 0.00010	0.00025	0.00044	
FR FR2	FR FR2 WEK 2022-05-09 N	2022-05-10	-	0.0032	0.00024	0.00011	0.0513	< 0.020	< 0.000050	< 0.010		0.000151		98.7	< 0.00010	0.00021	0.0004	
FR FR2	FR FR2 WEK 2022-05-16 N	2022-05-19	-	0.0023	0.00019	< 0.00010	0.0514	< 0.020	< 0.000050	< 0.010		0.000107		88.1	< 0.00010	< 0.10	0.00032	
FR FR2	FR FLD WEK 2022-05-23 N	2022-05-26	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010		< 0.0050		< 0.050	< 0.00010	< 0.10	< 0.00020	
FR FR2	FR FR2 WS 2022-05-27 NP	2022-05-27	-	0.0023	0.00014	0.0001	0.041	< 0.020	< 0.000050	< 0.010		0.0000569		67.4	< 0.00010	< 0.10	0.00022	
FR FR2	FR FR2 WEK 2022-05-30 N	2022-06-01	-	0.0039	0.00014	< 0.00010	0.0409	< 0.020	< 0.000050	< 0.010		0.0000578		57.7	< 0.00010	< 0.10	0.00034	
FR FR2	FR DC3 MON 2022-06-01 N	2022-06-08	-	0.00345	0.000115	0.0001	0.0359	< 0.020	< 0.000050	< 0.010		0.00003855		52.8	< 0.00010	< 0.10	0.00027	
FR FR2	FR FR2 MON 2022-06-01 N	2022-06-08	-	-	-	-	-	-	-	-		-		-	-	-	-	
FR FR2	FR DC1 WEK 2022-06-13 N	2022-06-13	-	0.00755	0.000105	0.000105	0.028	< 0.020	< 0.000050	< 0.010		0.00003155		47.35	< 0.00010	< 0.10	0.000265	
FR FR2	FR FR2 WEK 2022-06-20 N	2022-06-21	-	0.0067	0.00011	0.00011	0.0338	< 0.020	< 0.000050	< 0.010		0.0000449		45.9	< 0.00010	< 0.10	0.00031	
FR FR2	FR DC1 WEK 2022-06-20 N	2022-06-21	-	0.0061	0.00011	0.00012	0.0329	< 0.020	< 0.000050	< 0.010		0.0000408		46	< 0.00010	< 0.10	0.00029	
FR FR2	FR FR2 WEK 2022-06-27 N	2022-06-28	-	0.00245	< 0.00010	< 0.00010	0.0311	< 0.020	< 0.000050	< 0.010		0.0000464		50.25	< 0.00010	< 0.10	< 0.00020	
FR FR2	FR FR2 MON 2022-07-01 N	2022-07-04	-	0.0018	0.00013	< 0.00010	0.0326	< 0.020	< 0.000050	< 0.010		0.0000549		55.3	< 0.00010	< 0.10	0.0002	
FR FR2	FR FR2 WEK 2022-07-05 N	2022-07-05	-	0.003	< 0.00010	< 0.00010	0.031	< 0.020	< 0.000050	< 0.010		0.0000556		54.5	< 0.00010	< 0.10	0.00026	
FR FR2	FR FR2 WEK 2022-07-06 N	2022-07-06	-	0.0026	< 0.00010	< 0.00010	0.0323	< 0.020	< 0.000050	< 0.010		0.0000472		58.3	< 0.00010	< 0.10	0.00025	
FR FR2	FR DC1 WEK 2022-07-07 N	2022-07-07	-	0.0023	0.00012	< 0.00010	0.0343	< 0.020	< 0.000050	< 0.010		0.000054		55	< 0.00010	< 0.10	< 0.00020	
FR FR2	FR FR3 WEK 2022-07-07 N	2022-07-07	-	0.0023	0.00013	< 0.00010	0.0341	< 0.020	< 0.000050	< 0.010		0.0000459		55.2	0.00011	< 0.10	0.00031	
FR FR2	FR DC1 WEK 2022-07-08 N	2022-07-08	-	0.0133	0.00012	0.00011	0.0329	< 0.020	< 0.000050	< 0.010		0.0000562		52.4	< 0.00010	< 0.10	0.00058	
FR FR2	FR FR3 WEK 2022-07-08 N	2022-07-08	-	0.0047	0.00011	< 0.00010	0.0324	< 0.020	< 0.000050	< 0.010		0.0000474		51.9	< 0.00010	< 0.10	0.00023	
FR FR2	FR FR2 WS 2022-07-09 N	2022-07-09	-	0.004	0.00013	< 0.00010	0.0347	< 0.020	< 0.000050	< 0.010		0.000052		55.1	< 0.00010	< 0.10	< 0.00020	
FR FR2	FR FR2 WEK 2022-07-11 N	2022-07-12	-	0.0055	0.00018	< 0.00010	0.0382	< 0.020	< 0.000050	< 0.010		0.0019131		65.1	0.000			

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
				Acute																
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Fording River Operation																				
FR FR1	FR FR1 QTR 2022-07-04 NP	2022-07-05	-	< 0.010	< 0.000050	0.003	10.9	0.00064	< 0.00050	0.374	4.38	< 0.000010	0.404	0.0674	< 0.000010	0.00325	< 0.00030	0.000499	< 0.0010	
FR FR1	FR FR1 WEK 2022-07-11 NP	2022-07-13	-	< 0.010	< 0.000050	0.0033	10.6	0.00071	< 0.00050	0.399	5.63	< 0.000010	0.375	0.0672	< 0.000010	< 0.00010	< 0.00030	0.000546	< 0.0010	
FR FR1	FR FR1 MON 2022-08-01 NP	2022-08-09	-	< 0.010	< 0.000050	0.007	20.9	0.00124	< 0.00050	0.692	14.5	< 0.000010	0.528	0.0999	< 0.000010	< 0.00010	< 0.00030	0.000905	< 0.0010	
FR FR1	FR FR1 MON 2022-09-05 NP	2022-09-13	-	< 0.010	< 0.000050	0.0075	24.3	0.00081	0.0005	0.698	19.1	< 0.000010	0.598	0.117	< 0.000010	< 0.00010	< 0.00030	0.00108	< 0.0010	
FR FR1	FR FR1 QTR 2022-10-03 NP	2022-10-12	-	< 0.010	< 0.000050	0.0106	26.7	0.00049	0.00075	0.766	33.3	< 0.000010	0.63	0.124	< 0.000010	< 0.00010	< 0.00030	0.00111	< 0.0010	
FR FR1	FR FR1 MON 2022-11-07 NP	2022-11-03	-	< 0.010	< 0.000050	0.0086	28.2	0.00059	0.00052	0.658	32.1	< 0.000010	0.619	0.118	< 0.000010	< 0.00010	< 0.00030	0.00113	0.0014	
FR FR2	FR FR2 MON 2022-01-04 N	2022-01-08	-	0.014	< 0.000050	0.0792	70.6	0.0153	0.0648	2.32	92.6	< 0.000010	3.5	0.224	< 0.000010	< 0.00010	< 0.00030	0.00439	0.0036	
FR FR2	FR FR2 MON 2022-02-01 N	2022-02-09	-	0.019	< 0.000050	0.0834	74.7	0.0167	0.0614	2.29	82.9	< 0.000010	3.67	0.23	< 0.000010	< 0.00010	< 0.00030	0.0045	0.0025	
FR FR2	FR FR2 WS 2022-02-28 N	2022-02-28	-	0.02	< 0.000050	0.0908	77	0.0172	0.06574	2.92	88	< 0.000010	4.1	0.242	< 0.000010	< 0.00010	< 0.00030	0.00468	0.0032	
FR FR2	FR FR2 MON 2022-03-01 N	2022-03-03	-	0.019	< 0.000050	0.0821	77.1	0.0178	0.06532	2.36	85.1	< 0.000010	3.76	0.223	< 0.000010	< 0.00010	< 0.00030	0.00457	0.0021	
FR FR2	FR FR2 WEK 2022-03-14 N	2022-03-14	-	0.021	< 0.000050	0.0873	81.8	0.0197	0.06534	2.38	92.3	< 0.000010	3.55	0.228	< 0.000010	< 0.00010	< 0.00030	0.00477	0.0039	
FR FR2	FR FR2 WEK 2022-03-15 NP	2022-03-15	-	0.019	< 0.000050	0.0774	73	0.0212	0.06549	2.34	84.8	< 0.000010	3.57	0.217	< 0.000010	< 0.00010	< 0.00030	0.00455	0.0044	
FR FR2	FR FR2 WS 2022-03-16 NP	2022-03-16	-	< 0.010	< 0.000050	0.0742	62.6	0.0149	0.06402	1.97	74.6	< 0.000010	3.01	0.211	< 0.000010	< 0.00010	< 0.00030	0.00413	0.0028	
FR FR2	FR FR2 WEK 2022-03-16 NP	2022-03-16	-	< 0.010	< 0.000050	0.0837	71.4	0.0192	0.06531	2.25	83.4	< 0.000010	3.6	0.225	< 0.000010	< 0.00010	< 0.00030	0.00481	0.0026	
FR FR2	FR FR2 2 WS 2022-03-17 NP	2022-03-17	-	0.011	< 0.000050	0.0813	75	0.0174	0.06494	2.36	85	< 0.000010	3.82	0.229	< 0.000010	< 0.00010	< 0.00030	0.00454	0.0045	
FR FR2	FR FR2 WEK 2022-03-17 NP	2022-03-17	-	0.01	< 0.000050	0.069	68.7	0.0187	0.06549	2.36	90.7	< 0.000010	3.8	0.209	< 0.000010	< 0.00010	< 0.00030	0.00465	0.0034	
FR FR2	FR FR2 2 WS 2022-03-18 NP	2022-03-18	-	< 0.010	< 0.000050	0.0806	77.4	0.018	0.06511	2.38	85.4	< 0.000010	3.91	0.231	< 0.000010	< 0.00010	< 0.00030	0.00459	0.0027	
FR FR2	FR FR2 WEK 2022-03-18 NP	2022-03-18	-	< 0.010	< 0.000050	0.0824	75.3	0.0202	0.06547	2.51	89.7	< 0.000010	3.96	0.227	< 0.000010	< 0.00010	< 0.00030	0.00484	0.0044	
FR FR2	FR FR2 WS 2022-03-19 NP	2022-03-19	-	0.011	< 0.000050	0.0828	72.1	0.018	0.06524	2.38	89.2	< 0.000010	3.87	0.222	< 0.000010	< 0.00010	< 0.00030	0.00479	0.0033	
FR FR2	FR FR2 WS 2022-03-20 NP	2022-03-20	-	< 0.010	< 0.000050	0.0796	68.8	0.0178	0.06554	2.39	86.8	< 0.000010	3.8	0.216	< 0.000010	< 0.00010	< 0.00030	0.00455	0.0032	
FR FR2	FR FR2 2 WS 2022-03-21 NP	2022-03-21	-	0.016	< 0.000050	0.0798	68.4	0.0174	0.06553	2.43	88.2	< 0.000010	3.62	0.221	< 0.000010	< 0.00010	< 0.00030	0.00483	0.0037	
FR FR2	FR FR2 WEK 2022-03-22 NP	2022-03-22	-	0.012	< 0.000050	0.0764	68.8	0.0168	0.06573	2.28	80.5	< 0.000010	3.48	0.215	< 0.000010	< 0.00010	< 0.00030	0.00452	0.0035	
FR FR2	FR FR2 2 WS 2022-03-23 NP	2022-03-23	-	0.013	< 0.000050	0.0813	72.7	0.0181	0.06673	2.42	93.1	< 0.000010	3.63	0.222	< 0.000010	< 0.00010	< 0.00030	0.00427	0.004	
FR FR2	FR DC1 WEK 2022-03-28 N	2022-03-30	-	< 0.010	< 0.000050	0.06055	60.8	0.0104	0.06976	2.41	82.15	< 0.000010	2.55	0.212	< 0.000010	< 0.00010	< 0.00030	0.003685	0.0053	
FR FR2	FR FR2 MON 2022-04-01 N	2022-04-05	-	< 0.010	< 0.000050	0.0693	63.1	0.0106	0.0124	2.35	82.2	< 0.000010	2.69	0.229	< 0.000010	< 0.00010	< 0.00030	0.00389	0.0061	
FR FR2	FR FR2 WEK 2022-04-11 N	2022-04-12	-	0.013	< 0.000050	0.0773	65.4	0.0109	0.0126	2.86	91.1	< 0.000010	2.94	0.236	< 0.000010	< 0.00010	< 0.00030	0.00421	0.0085	
FR FR2	FR DC1 WEK 2022-04-18 N	2022-04-18	-	< 0.010	< 0.000050	0.08495	66.55	0.00923	0.06915	2.405	104	< 0.000010	3.16	0.2115	< 0.000010	< 0.00010	< 0.00030	0.004755	0.0087	
FR FR2	FR FLD WEK 2022-04-18 N	2022-04-19	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.00010	< 0.00030	< 0.000010	< 0.0010	
FR FR2	FR FLD WEK 2022-04-25 N	2022-04-27	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.00010	< 0.00030	< 0.000010	< 0.0010	
FR FR2	FR FR2 MON 2022-05-01 N	2022-05-04	-	< 0.010	< 0.000050	0.0344	46.2	0.0638	0.008	1.64	63.3	< 0.000010	1.59	0.137	< 0.000010	< 0.00010	< 0.00030	0.00262	0.0055	
FR FR2	FR FR2 WEK 2022-05-09 N	2022-05-10	-	< 0.010	< 0.000050	0.0396	45.6	0.06599	0.0083	1.79	67.2	< 0.000010	1.72	0.132	< 0.000010	< 0.00010	< 0.00030	0.0028	0.0069	
FR FR2	FR FR2 WEK 2022-05-16 N	2022-05-19	-	< 0.010	< 0.000050	0.0328	38.8	0.06416	0.0056	1.61	54.4	< 0.000010	1.57	0.125	< 0.000010	< 0.00010	< 0.00030	0.00247	0.0044	
FR FR2	FR FLD WEK 2022-05-23 N	2022-05-26	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.00010	< 0.00030	< 0.000010	< 0.0010	
FR FR2	FR FR2 WS 2022-05-27 NP	2022-05-27	-	< 0.010	< 0.000050	0.021	28.5	0.06231	0.00298	1.04	34.8	< 0.000010	1.12	0.107	< 0.000010	< 0.00010	< 0.00030	0.00164	0.0026	
FR FR2	FR FR2 WEK 2022-05-30 N	2022-06-01	-	< 0.010	< 0.000050	0.0172	25.7	0.06248	0.00276	0.94	25.5	< 0.000010	1.13	0.095	< 0.000010	< 0.00010	< 0.00030	0.00145	0.0033	
FR FR2	FR DC3 MON 2022-06-01 N	2022-06-08	-	< 0.010	< 0.000050	0.0155	19.3	0.00175	0.00205	0.825	16.85	< 0.000010	0.881	0.08815	< 0.000010	< 0.00010	< 0.00030	0.00105	0.0024	
FR FR2	FR FR2 MON 2022-06-01 N	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR FR2	FR DC1 WEK 2022-06-13 N	2022-06-13	-	< 0.010	< 0.000050	0.0132	15.8	0.001705	0.001645	0.7395	12.3	< 0.000010	0.8075	0.07685	< 0.000010	< 0.00010	< 0.00030	0.000974	0.0055	
FR FR2	FR FR2 WEK 2022-06-20 N	2022-06-21	-	< 0.010	< 0.000050	0.0118	17.3	0.00203	0.00242	0.766	17.2	< 0.000010	0.771	0.0736	< 0.000010	< 0.00010	< 0.00030	0.000995	0.0021	
FR FR2	FR DC1 WEK 2022-06-20 N	2022-06-21	-	< 0.010	< 0.000050	0.0117	17.3	0.00205	0.00245	0.738	16.6	< 0.000010	0.76	0.0723	< 0.000010	< 0.00010	< 0.00030	0.000993	0.0019	
FR FR2	FR DC1 WEK 2022-06-27 N	2022-06-28	-	< 0.010	< 0.000050	0.01515	19.7	0.001825	0.00224	0.8155	17.4	< 0.000010	0.872	0.08135	< 0.000010	< 0.00010	< 0.00030	0.00107	0.00275	
FR FR2	FR FR2 MON 2022-07-01 N	2022-07-04	-	< 0.010	< 0.000050	0.0203	21.5	0.0023	0.0024	0.934	23.4	< 0.000010	1.02	0.0862	< 0.000010	< 0.00010	< 0.00030	0.00136	0.0022	
FR FR2	FR FR2 WEK 2022-07-05 N	2022-07-05	-	< 0.010	< 0.000050	0.0169	21.1	0.00221	0.00251	0.844	21.4	< 0.000010	1	0.084	< 0.000010	< 0.00010	< 0.00030	0.00124	0.0024	
FR FR2	FR FR2 WEK 2022-07-06 N	2022-07-06	-	< 0.010	< 0.000050	0.019	22.4	0.0023	0.00272											

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum mg/L		Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L		Calcium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	
				Acute	Chronic							Acute	Chronic				Acute	Chronic
<b>BC WQG FWAL</b>			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>b</sup>
<b>Fording River Operation</b>																		
FR FR2	FR DC2 MON 2022-08-01 N	2022-08-10	-	0.00105	0.000195	< 0.00010	0.07405	< 0.020	< 0.000050	0.0105		0.00007645	96.7	< 0.00010	< 0.10	< 0.00020		
FR FR2	FR FR2 MON 2022-08-01 N	2022-08-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR FR2	FR FR2 WS SEPT-2022 N	2022-09-06	-	< 0.0010	0.00022	< 0.00010	0.0768	< 0.020	< 0.000050	0.013		0.0000707	127	< 0.00010	< 0.10	0.00027		
FR FR2	FR DC1 WS SEPT-2022 N	2022-09-06	-	< 0.0010	0.00022	< 0.00010	0.075	< 0.020	< 0.000050	0.012		0.0000721	119	0.00011	< 0.10	< 0.00020		
FR FR2	FR FLD1 WS SEPT-2022 N	2022-09-06	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010		< 0.0050	< 0.050	< 0.00010	< 0.10	0.00048		
FR FR2	FR FR2 MON 2022-09-01 N	2022-09-07	-	0.0039	0.00025	0.00012	0.083	< 0.020	< 0.000050	0.013		0.0000736	119	0.0001	< 0.10	0.00022		
FR FR2	FR FR2 MON 2022-10-01 N	2022-10-04	-	< 0.0010	0.00027	< 0.00010	0.0885	< 0.020	< 0.000050	0.013		0.000105	141	< 0.00010	< 0.10	0.00032		
FR LMP1	FR LMP1 MON 2022-01-04 N	2022-01-07	-	0.0016	0.001	0.0005	0.106	< 0.020	< 0.000050	0.019		0.00036	237	< 0.00010	0.00113	0.00057		
FR LMP1	FR LMP1 WS 2022-01-15 NP	2022-01-15	-	0.0025	0.00108	0.00055	0.0976	< 0.020	< 0.000050	0.019		0.000341	227	< 0.00010	0.00112	0.00058		
FR LMP1	FR LMP1 WS 2022-01-20 NP	2022-01-20	-	0.002	0.00095	0.00055	0.0953	< 0.020	< 0.000050	0.019		0.000337	228	< 0.00010	0.00087	0.00055		
FR LMP1	FR LMP1 WS 2022-01-27 NP	2022-01-27	-	0.0089	0.00126	0.00059	0.103	< 0.020	< 0.000050	0.018		0.00035	239	< 0.00010	0.00125	0.00052		
FR LMP1	FR LMP1 WS 2022-02-04 NP	2022-02-04	-	< 0.0010	0.00106	0.00068	0.11	< 0.020	< 0.000050	0.018		0.000367	247	< 0.00010	0.00098	0.00062		
FR LMP1	FR LMP1 WS 2022-02-10 NP	2022-02-10	-	0.002	0.0009	0.00058	0.107	< 0.020	< 0.000050	0.018		0.000346	248	< 0.00010	0.00072	0.00056		
FR LMP1	FR LMP1 WS 2022-02-17 NP	2022-02-17	-	0.0037	0.00126	0.00051	0.112	< 0.020	< 0.000050	0.023		0.000303	237	< 0.00010	0.00146	0.00051		
FR LMP1	FR LMP1 WS 2022-02-24 NP	2022-02-24	-	0.0029	0.00141	0.00056	0.1	< 0.020	< 0.000050	0.02		0.000354	236	< 0.00010	0.00167	0.00053		
FR LMP1	FR LMP1 WS 2022-03-03 NP	2022-03-03	-	0.0019	0.00121	0.00051	0.0868	< 0.020	< 0.000050	0.018		0.000341	245	0.00011	0.00158	0.00081		
FR LMP1	FR LMP1 WS 2022-03-09 NP	2022-03-09	-	0.0017	0.00146	0.00059	0.102	< 0.020	< 0.000050	0.02		0.000362	248	< 0.00010	0.00147	0.00063		
FR LMP1	FR LMP1 WS 2022-03-16 NP	2022-03-16	-	0.0014	0.00104	0.00048	0.0983	< 0.020	< 0.000050	0.018		0.000324	226	< 0.00010	0.0007	0.00051		
FR LMP1	FR LMP1 WEK 2022-03-21 N	2022-03-22	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
FR LMP1	FR FLD WEK 2022-03-21 N	2022-03-22	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010		< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00020		
FR LMP1	FR LMP1 WS 2022-03-24 NP	2022-03-24	-	0.0022	0.00213	0.00046	0.108	< 0.020	< 0.000050	0.017		0.000248	197	< 0.00010	0.00214	0.00041		
FR LMP1	FR LMP1 WS 2022-03-30 NP	2022-03-30	-	0.0026	0.00494	0.00081	0.352	< 0.020	< 0.000050	0.022		0.000321	203	< 0.00010	0.00473	0.00068		
FR LMP1	FR LMP1 MON 2022-04-01 N	2022-04-01	-	0.0024	0.00547	0.00067	0.264	< 0.020	< 0.000050	0.022		0.000328	186	< 0.00010	0.00838	0.00061		
FR LMP1	FR LMP1 WS 2022-04-05 NP	2022-04-05	-	0.0021	0.00512	0.00062	0.32	< 0.020	< 0.000050	0.021		0.000243	184	< 0.00010	0.00845	0.00065		
FR LMP1	FR LMP1 WS 2022-04-12 NP	2022-04-12	-	0.0033	0.00368	0.00053	0.19	< 0.020	< 0.000050	0.02		0.000297	219	< 0.00010	0.00316	0.00059		
FR LMP1	FR LMP1 WEK 2022-04-18 N	2022-04-20	-	0.0024	0.00086	0.00028	0.0624	< 0.020	< 0.000050	0.013		0.000357	212	< 0.00010	0.00055	0.0006		
FR LMP1	FR LMP1 WS 2022-04-28 NP	2022-04-28	-	0.0032	0.00065	0.00022	0.0468	< 0.020	< 0.000050	0.013		0.000348	169	< 0.00010	0.00039	0.00075		
FR LMP1	FR LMP1 WEK 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
FR LMP1	FR LMP1 MON 2022-05-01 N	2022-05-05	-	0.0022	0.00062	0.00018	0.0365	< 0.020	< 0.000050	0.012		0.000428	158	< 0.00010	0.00053	0.00083		
FR LMP1	FR LMP1 WS 2022-05-10 NP	2022-05-10	-	0.0025	0.00051	0.00017	0.0365	< 0.020	< 0.000050	0.011		0.000396	133	< 0.00030	0.00037	0.00117		
FR LMP1	FR LMP1 WEK 2022-05-09 N	2022-05-12	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
FR LMP1	FR LMP1 WEK 2022-05-16 N	2022-05-16	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
FR LMP1	FR LMP1 WS 2022-05-23 NP	2022-05-23	-	0.0026	0.00044	0.00018	0.0341	< 0.020	< 0.000050	< 0.010		0.000347	142	< 0.00010	0.00019	0.00074		
FR LMP1	FR LMP1 WEK 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
FR LMP1	FR LMP1 WS 2022-06-08 NP	2022-06-08	-	0.0027	0.00045	0.00016	0.0286	< 0.020	< 0.000050	< 0.010		0.00026	104	< 0.00010	0.00013	0.0009		
FR LMP1	FR LMP1 WEK 2022-06-13 N	2022-06-14	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
FR LMP1	FR LMP1 WS 2022-06-22 NP	2022-06-22	-	0.0039	0.00059	0.00022	0.0383	< 0.020	< 0.000050	< 0.010		0.000388	87.8	< 0.00010	0.00046	0.0013		
FR LMP1	FR LMP1 WEK 2022-06-27 N	2022-06-30	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
FR LMP1	FR LMP1 WS 2022-07-05 NP	2022-07-05	-	0.0042	0.00041	0.00015	0.0371	< 0.020	< 0.000050	< 0.010		0.00038	119	< 0.00010	0.00017	0.00112		
FR LMP1	FR LMP1 WEK 2022-07-11 N	2022-07-13	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
FR LMP1	FR LMP1 WS 2022-07-19 NP	2022-07-19	-	0.0015	0.00044	0.00018	0.0424	< 0.020	< 0.000050	< 0.010		0.000476	156	< 0.00010	0.00018	0.00081		
FR LMP1	FR LMP1 MON 2022-08-01 N	2022-08-04	-	0.002	0.00056	0.00023	0.0589	< 0.020	< 0.000050	0.011		0.000563	221	< 0.00010	0.00022	0.00074		
FR LMP1	FR LMP1 WS 2022-08-17 NP	2022-08-17	-	< 0.0010	0.00066	0.00023	0.0604	< 0.020	< 0.000050	0.014		0.000464	248	< 0.00010	0.0003	0.00074		
FR LMP1	FR LMP1 WS SESMP 2022-08 N	2022-08-22	-	< 0.0010	0.00065	0.00022	0.0598	< 0.020	< 0.000050	0.012		0.000438	244	< 0.00010	0.0003	0.00071		
FR LMP1	FR LMP1 WS 2022-09-01 NP	2022-09-01	-	0.0016	0.0006	0.00026	0.0623	< 0.020	< 0.000050	0.012		0.000251	252	< 0.00010	0.00027	0.00072		
FR LMP1	FR LMP1 WS SEPT-2022 N	2022-09-07	-	< 0.0010	0.0007	0.00023	0.0619	< 0.020	< 0.000050	< 0.010		0.000243	245	< 0.00010	0.00027	0.00058		
FR LMP1	FR LMP1 WS 2022-09-13 NP	2022-09-13	-	0.0019	0.00071	0.00027	0.0722	< 0.020	< 0.000050	0.015		0.000473	305	< 0.00010	0.00025	0.001		
FR LMP1	FR LMD MON 2022-10-01 N	2022-10-13	-	0.0022	0.0008	0.00023	0.0577	< 0.040	< 0.000100	< 0.020		0.000544	289	< 0.00020	0.0002	0.00063		
FR LMP1	FR LMD WS 2022-11-15 NP	2022-11-15	-	< 0.0010	0.00087	0.00027	0.0531	< 0.020	< 0.000050	0.014		0.000399	332	< 0.00010	0.00025	0.00058		
FR LPT	FR LPT WS 2022-05-22 N	2022-05-22	-	0.0022	0.0006	0.00022	0.0662	< 0.020	< 0.000050	0.018		0.00008	93.6	< 0.00010	0.00025	0.00065		

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
				Acute																
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Fording River Operation																				
FR FR2	FR DC2 MON 2022-08-01 N	2022-08-10	-	0.012	< 0.000050	0.05105	51.3	0.00829	0.005305	1.95	52.4	< 0.000010	2.67	0.148	< 0.000010	< 0.000010	< 0.000030	0.002865	0.0035	
FR FR2	FR FR2 MON 2022-08-01 N	2022-08-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR FR2	FR FR2 WS SEPT-2022 N	2022-09-06	-	0.014	< 0.000050	0.0588	55.6	0.00848	0.00697	1.84	77.2	< 0.000010	2.42	0.181	< 0.000010	< 0.000010	< 0.000030	0.00302	0.0034	
FR FR2	FR DC1 WS SEPT-2022 N	2022-09-06	-	0.014	< 0.000050	0.0566	57.5	0.00812	0.00701	1.85	81.7	< 0.000010	2.66	0.171	< 0.000010	< 0.000010	< 0.000030	0.00327	0.0032	
FR FR2	FR FLD1 WS SEPT-2022 N	2022-09-06	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.0020	< 0.000010	< 0.000010	< 0.000030	< 0.00010	< 0.0010	
FR FR2	FR FR2 MON 2022-10-01 N	2022-09-07	-	0.015	< 0.000050	0.0655	57.9	0.00856	0.00651	2.03	78	< 0.000010	2.65	0.159	< 0.000010	< 0.000010	< 0.000030	0.00344	0.0032	
FR FR2	FR FR2 MON 2022-10-01 N	2022-10-04	-	0.018	< 0.000050	0.0928	61.6	0.00969	0.00766	2.47	82.2	< 0.000010	3.51	0.212	< 0.000010	< 0.000010	< 0.000030	0.00451	0.0039	
FR LMP1	FR LMP1 MON 2022-01-04 N	2022-01-07	-	0.01	< 0.000050	0.0381	109	0.0148	0.0237	4.62	216	< 0.000010	1.49	0.216	0.000059	< 0.000010	< 0.000030	0.00595	0.0156	
FR LMP1	FR LMP1 WS 2022-01-15 NP	2022-01-15	-	0.017	< 0.000050	0.0357	108	0.0188	0.0231	4.36	233	< 0.000010	1.41	0.206	0.000054	0.00014	< 0.000030	0.00582	0.0198	
FR LMP1	FR LMP1 WS 2022-01-20 NP	2022-01-20	-	0.014	< 0.000050	0.0356	104	0.0167	0.0227	4.45	222	< 0.000010	1.31	0.21	0.000054	< 0.000010	< 0.000030	0.00589	0.0148	
FR LMP1	FR LMP1 WS 2022-01-27 NP	2022-01-27	-	0.013	< 0.000050	0.0359	104	0.0161	0.0248	4.59	228	< 0.000010	1.47	0.231	0.000066	< 0.000010	< 0.000030	0.00567	0.0145	
FR LMP1	FR LMP1 WS 2022-02-04 NP	2022-02-04	-	0.013	< 0.000050	0.037	116	0.0127	0.0247	4.68	262	< 0.000010	1.38	0.216	0.000058	< 0.000010	< 0.000030	0.00589	0.0166	
FR LMP1	FR LMP1 WS 2022-02-10 NP	2022-02-10	-	0.016	< 0.000050	0.0368	114	0.011	0.0223	4.5	250	< 0.000010	1.32	0.228	0.000053	< 0.000010	< 0.000030	0.00603	0.0164	
FR LMP1	FR LMP1 WS 2022-02-17 NP	2022-02-17	-	0.01	< 0.000050	0.0431	105	0.0166	0.0231	5.83	205	< 0.000010	1.4	0.297	0.000073	< 0.000010	< 0.000030	0.00556	0.015	
FR LMP1	FR LMP1 WS 2022-02-24 NP	2022-02-24	-	0.011	< 0.000050	0.0375	111	0.0155	0.0269	5.23	219	< 0.000010	1.47	0.253	0.000074	< 0.000010	< 0.000030	0.00604	0.0155	
FR LMP1	FR LMP1 WS 2022-03-03 NP	2022-03-03	-	0.012	< 0.000050	0.0362	123	0.0144	0.0253	5.2	242	< 0.000010	1.42	0.228	0.000063	< 0.000010	< 0.000030	0.00616	0.0148	
FR LMP1	FR LMP1 WS 2022-03-09 NP	2022-03-09	-	0.014	< 0.000050	0.0389	110	0.0186	0.028	5.23	247	< 0.000010	1.74	0.243	0.000067	< 0.000010	< 0.000030	0.00657	0.0149	
FR LMP1	FR LMP1 WS 2022-03-16 NP	2022-03-16	-	0.014	< 0.000050	0.0336	96.4	0.0107	0.0216	4.35	234	< 0.000010	1.28	0.226	0.000054	< 0.000010	< 0.000030	0.00617	0.0137	
FR LMP1	FR LMP1 WEK 2022-03-21 N	2022-03-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR FLD WEK 2022-03-21 N	2022-03-22	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.0020	< 0.000010	< 0.000010	< 0.000030	< 0.00010	< 0.0010	
FR LMP1	FR LMP1 WS 2022-03-24 NP	2022-03-24	-	< 0.010	< 0.000050	0.0416	88.8	0.0144	0.0279	5.14	189	< 0.000010	1.27	0.226	0.000059	0.00014	< 0.000030	0.00524	0.0117	
FR LMP1	FR LMP1 WS 2022-03-30 NP	2022-03-30	-	< 0.010	< 0.000050	0.0482	97.1	0.0239	0.0391	6.2	195	< 0.000010	1.6	0.438	0.000072	< 0.000010	< 0.000030	0.00569	0.014	
FR LMP1	FR LMP1 MON 2022-04-01 N	2022-04-01	-	< 0.010	< 0.000050	0.0554	86.2	0.0286	0.0577	5.87	154	< 0.000010	1.79	0.624	0.000077	< 0.000010	< 0.000030	0.0054	0.0127	
FR LMP1	FR LMP1 WS 2022-04-05 NP	2022-04-05	-	< 0.010	< 0.000050	0.058	87.5	0.0281	0.0569	5.94	155	< 0.000010	1.81	0.634	0.000079	< 0.000010	< 0.000030	0.0048	0.0124	
FR LMP1	FR LMP1 WS 2022-04-12 NP	2022-04-12	-	< 0.010	< 0.000050	0.0485	91.7	0.0147	0.0318	5.46	197	< 0.000010	1.57	0.456	0.000052	< 0.000010	< 0.000030	0.00529	0.0144	
FR LMP1	FR LMP1 WEK 2022-04-18 N	2022-04-20	-	< 0.010	< 0.000050	0.0241	109	0.00396	0.0206	3.74	234	< 0.000010	1.27	0.188	0.000032	< 0.000010	< 0.000030	0.00565	0.0156	
FR LMP1	FR LMP1 WS 2022-04-28 NP	2022-04-28	-	< 0.010	< 0.000050	0.0181	79.2	0.00362	0.0174	3.37	193	< 0.000010	0.971	0.134	0.000031	< 0.000010	< 0.000030	0.00448	0.0194	
FR LMP1	FR LMP1 WEK 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 MON 2022-05-01 N	2022-05-05	-	< 0.010	< 0.000050	0.0162	75.4	0.00322	0.0219	2.97	160	< 0.000010	0.802	0.118	0.00003	< 0.000010	< 0.000030	0.00382	0.0231	
FR LMP1	FR LMP1 WS 2022-05-10 NP	2022-05-10	-	< 0.010	< 0.000050	0.0132	67	0.00306	0.0197	2.86	141	< 0.000010	0.748	0.101	0.000027	< 0.000010	< 0.000030	0.00302	0.0223	
FR LMP1	FR LMP1 WEK 2022-05-09 N	2022-05-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 WEK 2022-05-16 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 WS 2022-05-23 NP	2022-05-23	-	< 0.010	< 0.000050	0.013	65.5	0.00179	0.0146	2.61	151	< 0.000010	0.756	0.107	0.000023	< 0.000010	< 0.000030	0.0033	0.0184	
FR LMP1	FR LMP1 WEK 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 WS 2022-06-08 NP	2022-06-08	-	< 0.010	< 0.000050	0.0099	43.7	0.0016	0.0108	1.98	90.3	< 0.000010	0.544	0.0784	0.000022	< 0.000010	< 0.000030	0.00221	0.0168	
FR LMP1	FR LMP1 WEK 2022-06-13 N	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 WS 2022-06-22 NP	2022-06-22	-	< 0.010	< 0.000050	0.0106	42.2	0.00236	0.0201	2.14	85	< 0.000010	0.635	0.0778	0.000023	< 0.000010	< 0.000030	0.00206	0.0214	
FR LMP1	FR LMP1 WEK 2022-06-27 N	2022-06-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 WS 2022-07-05 NP	2022-07-05	-	< 0.010	< 0.000050	0.0101	57.7	0.00316	0.0162	2.27	117	< 0.000010	0.656	0.0912	0.000024	< 0.000010	< 0.000030	0.00256	0.0218	
FR LMP1	FR LMP1 WEK 2022-07-11 N	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 WS 2022-07-19 NP	2022-07-19	-	< 0.010	< 0.000050	0.0123	67.6	0.00337	0.0211	2.42	177	< 0.000010	0.738	0.122	0.000026	< 0.000010	< 0.000030	0.00375	0.0251	
FR LMP1	FR LMP1 MON 2022-08-01 N	2022-08-04	-	< 0.010	< 0.000050	0.0176	107	0.00286	0.0301	3.46	286	< 0.000010	1.05	0.175	0.000035	< 0.000010	< 0.000030	0.00562	0.0318	
FR LMP1	FR LMP1 WS 2022-08-17 NP	2022-08-17	-	< 0.010	< 0.000050	0.0212	121	0.00298	0.039	3.45	332	< 0.000010	1.11	0.183	0.000039	< 0.000010	< 0.000030	0.00702	0.0284	
FR LMP1	FR LMP1 WS WS SESMP 2022-08 N	2022-08-22	-	< 0.010	< 0.000050	0.0181	120	0.0032	0.0386	3.58	361	< 0.000010	1.16	0.184	0.000038	< 0.000010	< 0.000030	0.00709	0.0255	
FR LMP1	FR LMP1 WS 2022-09-01 NP	2022-09-01	-	< 0.010	< 0.000050	0.02	131	0.00265	0.0424	3.61	344	< 0.000010	1.18	0.193	0.000036	< 0.000010	< 0.000030	0.00663	0.0149	
FR LMP1	FR LMP1 WS SEPT-2022 N	2022-09-07	-	< 0.010	< 0.000050	0.0181	123	0.00289	0.035	3.65	313	< 0.000010	1.18	0.202	0.000023	< 0.000010	< 0.000030	0.00755	0.0118	
FR LMP1	FR LMP1 WS 2022-09-13 NP	2022-09-13	-	< 0.010	< 0.000050	0.0222	140	0.00454	0.0391	3.88	374	< 0.000010	1.29	0.216	0.000043	< 0.000010	< 0.000030	0.008	0.0233	
FR LMP1	FR LMD MON 2022-10-01 N	2022-10-13	-	< 0.020	< 0.000100	0.0211	132	0.00417												

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper		
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL			n/a	Acute 0.020-0.10 <sup>a</sup>	Chronic 0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	Acute 0.00004-0.0028 <sup>a</sup>	Chronic 0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	Acute BLM <sup>d</sup>	Chronic
<b>Fording River Operation</b>																			
FR LP1	FR LP1 WS 2022-05-23 N	2022-05-23	-	0.0022	0.00057	0.00025	0.0649	< 0.020	< 0.000050	0.017			0.0000861		91.3	< 0.00010	0.00025	0.0006	
FR LP1	FR LP1 WS 2022-05-24 N	2022-05-24	-	0.0028	0.00055	0.00023	0.069	< 0.020	< 0.000050	0.019			0.0000786		94.6	< 0.00010	0.00025	0.00062	
FR LP1	FR LP1 WS 2022-05-25 N	2022-05-25	-	0.0045	0.00057	0.00021	0.0662	< 0.020	< 0.000050	0.017			0.0000784		91.9	< 0.00010	0.00022	0.00056	
FR LP1	FR LP1 WS 2022-05-26 N	2022-05-26	-	0.0025	0.00054	0.00022	0.069	< 0.020	< 0.000050	0.017			0.000074		87.3	< 0.00010	0.00018	0.00058	
FR LP1	FR LP1 WS 2022-05-27 N	2022-05-27	-	0.0029	0.00052	0.00021	0.0922	< 0.020	< 0.000050	0.016			0.00007		86.7	< 0.00010	0.00016	0.00054	
FR LP1	FR LP1 WS 2022-05-28 N	2022-05-28	-	0.0034	0.00049	0.00022	0.0738	< 0.020	< 0.000050	0.016			0.0000704		85	< 0.00010	0.00013	0.00057	
FR LP1	FR LP1 WS 2022-05-29 N	2022-05-29	-	0.0048	0.00048	0.00023	0.0698	< 0.020	< 0.000050	0.017			0.0000697		80.7	< 0.00010	0.00014	0.00086	
FR LP1	FR LP1 WS 2022-05-30 N	2022-05-30	-	0.0023	0.00049	0.0002	0.0724	< 0.020	< 0.000050	0.017			0.000071		80.4	< 0.00010	0.00013	0.00056	
FR LP1	FR LP1 WS 2022-06-07 NP	2022-06-07	-	0.0019	0.00064	0.00021	0.068	< 0.020	< 0.000050	0.016			0.0000665		84.8	< 0.00010	0.00031	0.00056	
FR LP1	FR LP1 WS 2022-06-08 NP	2022-06-08	-	0.0017	0.00062	0.00019	0.0567	< 0.020	< 0.000050	0.018			0.0000767		94	< 0.00010	0.00021	0.00062	
FR LP1	FR LP1 MON 2022-06-01 NP	2022-06-09	-	0.0016	0.00052	0.0002	0.0707	< 0.020	< 0.000050	0.018			0.0000775		91	< 0.00010	0.00012	0.00058	
FR LP1	FR LP1 WS 2022-06-10 NP	2022-06-10	-	0.0029	0.00045	0.00018	0.0718	< 0.020	< 0.000050	0.015			0.0000752		82.1	< 0.00010	0.00019	0.00066	
FR LP1	FR LP1 WS 2022-06-11 NP	2022-06-11	-	0.0016	0.00042	0.00018	0.077	< 0.020	< 0.000050	0.014			0.0000738		76.1	< 0.00010	0.00014	0.0006	
FR LP1	FR LP1 WS 2022-06-12 NP	2022-06-12	-	0.0017	0.00054	0.00018	0.077	< 0.020	< 0.000050	0.015			0.0000519		78.3	< 0.00010	0.00012	0.00056	
FR LP1	FR LP1 MON 2022-06-13 NP	2022-06-13	-	0.002	0.00049	0.00021	0.0778	< 0.020	< 0.000050	0.016			0.0000634		81.7	< 0.00010	0.00021	0.00099	
FR LP1	FR LP1 WS 2022-06-20 NP	2022-06-20	-	0.0027	0.00041	0.0002	0.0703	< 0.020	< 0.000050	0.02			0.0000886		71.2	< 0.00010	0.00051	0.00297	
FR LP1	FR LP1 WS 2022-06-28 NP	2022-06-28	-	0.0012	0.00043	0.0002	0.0611	< 0.020	< 0.000050	0.023			0.0000357		79.2	< 0.00010	0.00012	0.00204	
FR LP1	FR LP1 WS 2022-07-05 NP	2022-07-05	-	0.0033	0.00049	0.0002	0.0614	< 0.020	< 0.000050	0.021			0.0000576		88.1	< 0.00010	0.00023	0.0015	
FR LP1	FR LP1 WS 2022-07-12 N	2022-07-12	-	0.0018	0.00053	0.00022	0.0644	< 0.020	< 0.000050	0.025			0.0000724		99	< 0.00010	< 0.10	0.00172	
FR LP1	FR LP1 WEK 2022-07-11 N	2022-07-12	-	-	-	-	-	-	-	-			-		-	-	-	-	
FR LP1	FR LP1 WS 2022-08-18 N	2022-08-18	-	0.0103	0.00104	0.00087	0.0588	< 0.020	< 0.000050	0.028			0.0000181		112	0.00014	0.00025	0.00103	
FR LP1	FR LP1 WS 2022-08-24 N	2022-08-24	-	0.0053	0.0008	0.0004	0.056	< 0.020	< 0.000050	0.03			0.0000138		123	< 0.00010	0.00017	0.00072	
FR LP1	FR LP1 WS 2022-09-01 N	2022-09-01	-	0.0049	0.00065	0.00032	0.0506	< 0.020	< 0.000050	0.028			< 0.0050		122	< 0.00010	< 0.10	0.00053	
FR LP1	FR LP1 WS 2022-09-05 N	2022-09-05	-	0.0051	0.00072	0.00039	0.0543	< 0.020	< 0.000050	0.03			< 0.0050		134	< 0.00010	0.00011	0.00058	
FR LP1	FR LP1 WS SEPT1-2022 N	2022-09-06	-	0.0038	0.00069	0.00034	0.0518	< 0.020	< 0.000050	0.03			< 0.0050		131	< 0.00010	0.00011	0.00059	
FR LP1	FR LP1 MON 2022-10-01 N	2022-10-12	-	0.0033	0.0007	0.00034	0.0462	< 0.020	< 0.000050	0.027			0.0000052		142	< 0.00010	0.00014	0.0005	
FR LP1	FR LP1 MON 2022-11-01 N	2022-11-03	-	0.0026	0.00066	0.00036	0.0445	< 0.020	< 0.000050	0.026			0.0000292		145	< 0.00010	0.00018	0.00048	
FR PP1	FR PP1 MON 2022-01-04 N	2022-01-07	-	0.0035	0.00064	0.00027	0.0621	< 0.040	< 0.000100	< 0.020			0.0000986		342	< 0.00020	0.00038	0.0012	
FR PP1	FR PP1 MON 2022-02-01 N	2022-02-06	-	0.0025	0.00063	0.00026	0.0637	< 0.040	< 0.000100	< 0.020			0.0000907		402	< 0.00020	0.00032	0.00111	
FR PP1	FR PP1 WS MON 2022-03-01 N	2022-03-08	-	0.0031	0.00067	0.00031	0.0644	< 0.040	< 0.000100	< 0.020			0.0000891		388	< 0.00020	0.00033	0.00113	
FR PP1	FR PP1 WEK 2022-03-14 N	2022-03-14	-	-	-	-	-	-	-	-			-		337	-	-	-	
FR PP1	FR PP1 WEK 2022-03-21 N	2022-03-21	-	-	-	-	-	-	-	-			-		-	-	-	-	
FR PP1	FR DC WEK 2022-03-28 N	2022-03-28	-	-	-	-	-	-	-	-			-		-	-	-	-	
FR PP1	FR PP1 MON 2022-04-01 N	2022-04-04	-	0.018	0.00066	0.00027	0.0477	< 0.020	< 0.000050	0.01			0.0000988		166	< 0.00010	0.00182	0.00184	
FR PP1	FR PP1 WEK 2022-04-11 N	2022-04-11	-	-	-	-	-	-	-	-			-		-	-	-	-	
FR PP1	FR DC2 WEK 2022-04-18 N	2022-04-19	-	-	-	-	-	-	-	-			-		-	-	-	-	
FR PP1	FR PP1 WEK 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	-			-		-	-	-	-	
FR PP1	FR PP1 MON 2022-05-01 N	2022-05-05	-	0.0119	0.00071	0.00022	0.0406	< 0.020	< 0.000050	0.014			0.00163		182	< 0.00010	0.00435	0.00188	
FR PP1	FR PP1 WEK 2022-05-09 N	2022-05-11	-	-	-	-	-	-	-	-			-		-	-	-	-	
FR PP1	FR PP1 WEK 2022-05-16 N	2022-05-18	-	-	-	-	-	-	-	-			-		-	-	-	-	
FR PP1	FR DC2 WEK 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-			-		-	-	-	-	
FR PP1	FR PP1 WEK 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-			-		-	-	-	-	
FR PP1	FR DC2 MON 2022-06-01 N	2022-06-07	-	0.0107	0.000645	0.00025	0.0583	< 0.020	< 0.000050	0.011			0.00124		254.5	< 0.00010	0.001005	0.00202	
FR PP1	FR DC2 WEK 2022-06-13 N	2022-06-15	-	-	-	-	-	-	-	-			-		-	-	-	-	
FR PP1	FR PP1 WEK 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-			-		-	-	-	-	
FR PP1	FR PP1 WEK 2022-06-27 N	2022-06-28	-	-	-	-	-	-	-	-			-		-	-	-	-	
FR PP1	FR DC2 MON 2022-07-01 N	2022-07-04	5.7	0.00465	0.00058	0.000235	0.05575	< 0.020	< 0.000050	0.0145			0.00127		281	< 0.00010	0.00102	0.00179	
FR PP1	FR PP1 WEK 2022-07-11 N	2022-07-12	-	-	-	-	-	-	-	-			-		-	-	-	-	
FR PP1	FR DC1 MON 2022-08-01 N	2022-08-02	-	0.00305	0.000645	0.000275	0.05785	< 0.040	< 0.000100	< 0.020			0.0009595		361	< 0.00020	0.00054	0.001115	
FR PP1	FR PP1 WS SEPT1-2022 N	2022-09-07	-	0.0015	0.00068	0.00033	0.0603	< 0.020	< 0.000050	0.016			0.000611		442	< 0.00010	0.00032	0.001	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Fording River Operation</b>																				
FR LP1	FR LP1 WS 2022-05-23 N	2022-05-23	-	< 0.010	< 0.000050	0.0231	64.6	0.0047	0.00265	2.57	60.1	< 0.000010	1.87	0.0995	0.000013	< 0.000010	< 0.000030	0.002	0.0113	
FR LP1	FR LP1 WS 2022-05-24 N	2022-05-24	-	< 0.010	< 0.000050	0.027	62.5	0.00332	0.00262	2.59	61.5	< 0.000010	1.95	0.107	0.000014	< 0.000010	< 0.000030	0.00207	0.01	
FR LP1	FR LP1 WS 2022-05-25 N	2022-05-25	-	< 0.010	< 0.000050	0.0238	64.3	0.0018	0.00279	2.49	57.3	< 0.000010	1.82	0.103	0.000012	< 0.000010	< 0.000030	0.00183	0.0089	
FR LP1	FR LP1 WS 2022-05-26 N	2022-05-26	-	< 0.010	< 0.000050	0.0222	63.6	0.00127	0.00256	2.46	57.2	< 0.000010	1.84	0.099	0.000012	< 0.000010	< 0.000030	0.00187	0.0087	
FR LP1	FR LP1 WS 2022-05-27 N	2022-05-27	-	< 0.010	< 0.000050	0.0226	58.2	0.00104	0.00226	2.43	56.3	< 0.000010	1.73	0.1	0.00001	< 0.000010	< 0.000030	0.00178	0.0076	
FR LP1	FR LP1 WS 2022-05-28 N	2022-05-28	-	< 0.010	< 0.000050	0.0223	56	0.00098	0.00209	2.38	52.7	< 0.000010	1.66	0.097	0.00001	< 0.000010	< 0.000030	0.0017	0.0086	
FR LP1	FR LP1 WS 2022-05-29 N	2022-05-29	-	0.038	< 0.000050	0.0227	58.2	0.00282	0.00222	2.36	59	< 0.000010	1.78	0.0917	0.000011	< 0.000010	< 0.000030	0.00168	0.0084	
FR LP1	FR LP1 WS 2022-05-30 N	2022-05-30	-	< 0.010	< 0.000050	0.0225	57.6	0.00099	0.00237	2.37	56.5	< 0.000010	1.77	0.0917	0.00001	< 0.000010	< 0.000030	0.00167	0.0089	
FR LP1	FR LP1 WS 2022-06-07 NP	2022-06-07	-	< 0.010	< 0.000050	0.0224	60.2	0.00164	0.00423	2.34	51.4	< 0.000010	1.78	0.0989	0.000014	< 0.000010	< 0.000030	0.0019	0.011	
FR LP1	FR LP1 WS 2022-06-08 NP	2022-06-08	-	< 0.010	< 0.000050	0.0269	67.6	0.00114	0.00445	2.73	69	< 0.000010	2.06	0.104	0.000016	< 0.000010	< 0.000030	0.00204	0.0165	
FR LP1	FR LP1 MON 2022-06-01 NP	2022-06-09	-	< 0.010	< 0.000050	0.0282	70.3	0.00147	0.0025	2.75	59.7	< 0.000010	2.2	0.105	0.000015	< 0.000010	< 0.000030	0.00196	0.0098	
FR LP1	FR LP1 WS 2022-06-10 NP	2022-06-10	-	< 0.010	< 0.000050	0.0221	58.1	0.00203	0.00216	2.34	51.2	< 0.000010	1.72	0.0902	0.000012	< 0.000010	< 0.000030	0.00154	0.013	
FR LP1	FR LP1 WS 2022-06-11 NP	2022-06-11	-	< 0.010	< 0.000050	0.0208	58.9	0.00193	0.00212	2.36	50.7	< 0.000010	1.73	0.0843	0.000012	< 0.000010	< 0.000030	0.00148	0.0074	
FR LP1	FR LP1 WS 2022-06-12 NP	2022-06-12	-	< 0.010	< 0.000050	0.0208	55.4	0.00078	0.00257	2.29	51.2	< 0.000010	1.66	0.0872	0.000012	< 0.000010	< 0.000030	0.00154	0.0049	
FR LP1	FR LP1 MON 2022-06-13 NP	2022-06-13	-	< 0.010	< 0.000050	0.0217	55.8	0.00144	0.00219	2.37	52.9	< 0.000010	1.66	0.0916	0.000012	< 0.000010	< 0.000030	0.00156	0.0068	
FR LP1	FR LP1 WS 2022-06-20 NP	2022-06-20	-	< 0.010	< 0.000050	0.0174	49.6	0.0144	0.00266	2.26	38.4	< 0.000010	1.48	0.0797	0.000015	< 0.000010	< 0.000030	0.00144	0.0172	
FR LP1	FR LP1 WS 2022-06-28 NP	2022-06-28	-	< 0.010	< 0.000050	0.0218	57.8	0.00081	0.00208	2.6	46.5	< 0.000010	1.71	0.0871	0.000015	< 0.000010	< 0.000030	0.00157	0.0131	
FR LP1	FR LP1 WS 2022-07-05 NP	2022-07-05	-	0.013	< 0.000050	0.0242	64.3	0.00211	0.00292	2.8	49	< 0.000010	1.9	0.0997	0.000017	< 0.000010	< 0.000030	0.00159	0.0131	
FR LP1	FR LP1 WS 2022-07-12 N	2022-07-12	-	< 0.010	< 0.000050	0.029	71	0.0009	0.00301	2.82	54.4	< 0.000010	2.15	0.109	0.000019	< 0.000010	< 0.000030	0.00205	0.0209	
FR LP1	FR LP1 WEK 2022-07-11 N	2022-07-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LP1	FR LP1 WS 2022-08-18 N	2022-08-18	-	< 0.010	< 0.000050	0.0373	97.2	0.00383	0.0041	4.44	74.8	< 0.000010	3.08	0.149	0.000038	< 0.000010	< 0.000030	0.00336	0.0237	
FR LP1	FR LP1 WS 2022-08-24 N	2022-08-24	-	< 0.010	< 0.000050	0.0454	108	0.00077	0.00472	3.6	84	< 0.000010	3.05	0.144	0.000032	< 0.000010	< 0.000030	0.00302	0.0117	
FR LP1	FR LP1 WS 2022-09-01 N	2022-09-01	-	< 0.010	< 0.000050	0.0374	104	0.00042	0.0034	3.23	77.6	< 0.000010	2.88	0.132	0.000024	< 0.000010	< 0.000030	0.00253	0.0048	
FR LP1	FR LP1 WS 2022-09-05 N	2022-09-05	-	< 0.010	< 0.000050	0.0476	113	0.00042	0.00378	3.7	85	< 0.000010	3.48	0.149	0.000032	< 0.000010	< 0.000030	0.0032	0.0048	
FR LP1	FR LP1 WS SEPT1-2022 N	2022-09-06	-	< 0.010	< 0.000050	0.0439	108	0.00034	0.00347	3.36	87	< 0.000010	3.18	0.153	0.000025	< 0.000010	< 0.000030	0.00265	0.0043	
FR LP1	FR LP1 MON 2022-10-01 N	2022-10-12	-	< 0.010	< 0.000050	0.0428	129	0.00045	0.00364	3.89	95.5	< 0.000010	3.47	0.151	0.000021	< 0.000010	< 0.000030	0.0035	0.0042	
FR LP1	FR LP1 MON 2022-11-01 N	2022-11-03	-	< 0.010	< 0.000050	0.0461	125	0.00128	0.00549	3.72	121	< 0.000010	3.69	0.182	0.00002	< 0.000010	< 0.000030	0.00347	0.0101	
FR PP1	FR PP1 MON 2022-01-04 N	2022-01-07	-	< 0.020	< 0.000100	0.0182	134	0.0132	0.0594	4.12	244	< 0.000020	1.43	0.241	0.000057	< 0.000020	< 0.000060	0.00991	0.0481	
FR PP1	FR PP1 MON 2022-02-01 N	2022-02-06	-	< 0.020	< 0.000100	0.0194	152	0.0157	0.0537	4	289	< 0.000020	1.44	0.276	0.000057	< 0.000020	< 0.000060	0.00983	0.0438	
FR PP1	FR PP1 WS MON 2022-03-01 N	2022-03-08	-	< 0.020	< 0.000100	0.019	145	0.0153	0.0522	4.11	283	< 0.000020	1.56	0.268	0.000063	< 0.000020	< 0.000060	0.0116	0.0555	
FR PP1	FR PP1 WEK 2022-03-14 N	2022-03-14	-	-	-	147	-	-	-	3.89	-	-	1.55	-	-	-	-	-	-	
FR PP1	FR PP1 WEK 2022-03-21 N	2022-03-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR PP1	FR DC WEK 2022-03-28 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR PP1	FR PP1 MON 2022-04-01 N	2022-04-04	-	0.028	< 0.000050	0.0119	62.6	0.0269	0.0467	2.54	124	< 0.000010	0.954	0.13	0.000043	< 0.000010	0.000034	0.00394	0.0567	
FR PP1	FR PP1 WEK 2022-04-11 N	2022-04-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR PP1	FR DC2 WEK 2022-04-18 N	2022-04-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR PP1	FR PP1 WEK 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR PP1	FR PP1 MON 2022-05-01 N	2022-05-05	-	0.018	< 0.000050	0.0152	70.2	0.0781	0.0717	2.88	150	< 0.000010	0.916	0.131	0.000048	< 0.000010	< 0.000030	0.00431	0.0787	
FR PP1	FR PP1 WEK 2022-05-09 N	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR PP1	FR PP1 WEK 2022-05-16 N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR PP1	FR DC2 WEK 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR PP1	FR PP1 WEK 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR PP1	FR DC2 MON 2022-06-01 N	2022-06-07	-	0.02	< 0.000050	0.01995	98.9	0.0315	0.0659	3.395	240	< 0.000010	1.21	0.194	0.00005	< 0.000010	< 0.000030	0.006945	0.065	
FR PP1	FR DC2 WEK 2022-06-13 N	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR PP1	FR PP1 WEK 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR PP1	FR PP1 WEK 2022-06-27 N	2022-06-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR PP1	FR DC2 MON 2022-07-01 N	2022-07-04	5.7	0.0135	< 0.000050	0.0233	113.5	0.0303	0.06815	3.745	281.5	< 0.000010	1.375	0.196	0.0000535	< 0.000010	< 0.000030	0.00828	0.0633	
FR PP1	FR PP1 WEK 2022-07-11 N	2022-07-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR PP1	FR DC1 MON 2022-08-01 N	2022-08-02	-	< 0.020	< 0.000100	0.0276	148.5	0.013	0.06935	4.535	347.5	0.000328	1.495	0.255	0.000065	< 0.000020	< 0.000060	0.01095	0.05885	
FR PP1	FR PP1 WS SEPT1-2022 N	2022-09-07	-	< 0.010	< 0.000050	0.0368	186	0.00788	0.0705	4.77	522	< 0.000010	1.72	0.295	0.000067	< 0.000010	< 0.000030	0.0129	0.038	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum mg/L		Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L		Calcium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	
				Acute	Chronic							Acute	Chronic				Acute	Chronic
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>b</sup>
<b>Fording River Operation</b>																		
FR PP1	FR PP1 MON 2022-10-25 NP	2022-10-24	-	< 0.0020	0.00051	0.00027	0.0564	< 0.040	< 0.000100	< 0.020		0.000998	364	< 0.00020	0.00046	0.00091		
FR PP1	FR PP1 MON 2022-11-01 N	2022-11-02	-	< 0.0020	0.00061	0.00027	0.0555	< 0.040	< 0.000100	< 0.020		0.000681	414	< 0.00020	0.00038	0.00098		
FR SCOUT	FR SCOUT WS 2022-1-06 N 0900	2022-01-06	-	0.0029	0.00066	0.00021	0.0272	< 0.040	< 0.000100	< 0.020		0.000339	348	< 0.00020	0.00029	0.00065		
FR SCOUT	FR SCOUT WS 2022-01-13 N	2022-01-13	-	< 0.0020	0.00072	0.00022	0.0279	< 0.040	< 0.000100	< 0.020		0.000505	390	< 0.00020	0.00028	0.00069		
FR SCOUT	FR SCOUT WS 2022-02-10 N 0900	2022-02-10	-	0.0026	0.00071	< 0.00020	0.0271	< 0.040	< 0.000100	< 0.020		0.000454	364	< 0.00020	0.00024	0.00065		
FR SCOUT	FR SCOUT WS 2022-02-16 N	2022-02-16	-	< 0.0010	0.0003	< 0.00010	0.0858	< 0.020	< 0.000050	0.012		0.000115	187	0.00012	0.00011	0.0003		
FR SCOUT	FR SCOUT WS 2022-03-10 N	2022-03-10	-										390					
FR SCOUT	FR SCOUT 2022-03-10 N 0900	2022-03-10	-	0.0004	< 0.00020	0.0167	< 0.000040	< 0.000100	< 0.020			0.000101		< 0.00020	< 0.00020	< 0.00100		
FR SCOUT	FR SCOUT 2022-04-07 N 0900	2022-04-07	-	< 0.0060	0.00051	< 0.00020	0.0266	< 0.000040	< 0.000100	< 0.020		0.000033	325.5	< 0.00020	0.00031	< 0.00100		
FR SCOUT	FR SCOUT WS 2022-04-07 N	2022-04-07	-															
FR SCOUT	FR SCOUT 2022-05-05 N 0900	2022-05-05	-	0.0166	0.00028	0.00021	0.0363	< 0.000020	< 0.000050	< 0.010		0.000231	94.55	< 0.00010	0.00016	0.00077		
FR SCOUT	FR SCOUT 2022-06-02 N 0900	2022-06-02	-	0.0049	0.00018	0.00011	0.038	< 0.000020	< 0.000050	< 0.010		0.00006	54.45	< 0.00010	< 0.00010	< 0.00050		
FR SCOUT	FR SCOUT WS 2022-06-04 N	2022-06-04	-	0.0064	0.00011	0.00011	0.0357	< 0.020	< 0.000050	< 0.010		0.000036	59.9	< 0.00010	< 0.10	0.00025		
FR SCOUT	FR SCOUT 2022-07-14 N 0900	2022-07-14	-	0.0041	0.00041	0.0003	0.0411	< 0.000020	< 0.000050	< 0.010		0.000521	160	< 0.00010	0.00043	< 0.00050		
FR SCOUT	FR SCOUT WS 2022 07 25 N	2022-07-25	-	0.0011	0.00018	< 0.00010	0.0465	< 0.020	< 0.000050	< 0.010		0.00012	88.9	< 0.00010	< 0.10	< 0.00020		
FR SCOUT	FR SCOUT 2022-08-11 N 0900	2022-08-11	-	< 0.0060	0.0006	0.00022	0.0401	< 0.000040	< 0.000100	< 0.020		0.00102	294	< 0.00020	0.00073	< 0.00100		
FR SCOUT	FR SCOUT 2022-09-08 N 0900	2022-09-08	-	< 0.0060	0.00079	0.00046	0.0353	< 0.000040	< 0.000100	< 0.020		0.00139	387	< 0.00020	0.00079	0.00126		
FR SCOUT	FR SCOUT 2022-10-06 N 0900	2022-10-06	-	< 0.0060	0.0006	< 0.00020	0.0397	< 0.000040	< 0.000100	< 0.020		0.00117	386.5	< 0.00020	0.00055	0.00102		
FR SCOUT	FR SCOUT 2022-11-03 N 0900	2022-11-03	-	< 0.0060	0.00068	0.00021	0.0318	< 0.000040	< 0.000100	< 0.020		0.00119	388	< 0.00020	0.0006	< 0.00100		
FR SCOUT	FR SCOUT 2022-12-01 N 0900 CALC	2022-12-01	-	< 0.0060	0.00063	0.0002	0.0276	< 0.000040	< 0.000100	< 0.020		0.000753	421.5	< 0.00020	0.00036	< 0.00100		
FR SCOUT	FR SCOUT 2022-12-22 N 0900	2022-12-22	-	< 0.0060	0.00072	< 0.00020	0.025	< 0.000040	< 0.000100	< 0.020		0.00072	432	< 0.00020	0.0003	< 0.00100		
FR SCOUT	FR SCOUT 2022-12-29 N 0900	2022-12-29	-	< 0.0060	0.00064	0.00024	0.031	< 0.000040	< 0.000100	< 0.020		0.000773	452.5	< 0.00020	0.00035	< 0.00100		
FR SP1	FR SP1 MON 2022-01-04 N	2022-01-08	-	0.0013	0.00015	< 0.00010	0.0227	< 0.020	< 0.000050	0.019		0.000119	139	< 0.00010	0.00013	< 0.00020		
FR SP1	FR SP1 MON 2022-02-01 N	2022-02-06	-	0.0032	0.00063	0.00026	0.0631	< 0.040	< 0.000100	< 0.020		0.000893	407	< 0.00020	0.00034	0.00111		
FR SP1	FR SP1 MON 2022-03-01 N	2022-03-04	-	0.002	0.00016	< 0.00010	0.0233	< 0.020	< 0.000050	0.019		0.000126	147	< 0.00010	0.0001	< 0.00020		
FR SP1	FR SP1 WEK 2022-03-14 N	2022-03-19	-	-	-	-	-	-	-	-		-	-	-	-	-		
FR SP1	FR SP1 WEK 2022-03-21 N	2022-03-23	-	-	-	-	-	-	-	-		-	-	-	-	-		
FR SP1	FR SP1 WEK 2022-03-28 N	2022-03-31	-	-	-	-	-	-	-	-		-	-	-	-	-		
FR SP1	FR SP1 MON 2022-04-01 N	2022-04-05	-	0.0012	0.00018	< 0.00010	0.0242	< 0.020	< 0.000050	0.017		0.0000577	149	< 0.00010	0.00017	< 0.00020		
FR SP1	FR SP1 WEK 2022-04-11 N	2022-04-14	-	-	-	-	-	-	-	-		-	-	-	-	-		
FR SP1	FR SP1 WEK 2022-04-18 N	2022-04-19	-	-	-	-	-	-	-	-		-	-	-	-	-		
FR SP1	FR DC2 WEK 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	-		-	-	-	-	-		
FR SP1	FR DC2 MON 2022-05-01 N	2022-05-02	-	0.0022	0.000175	< 0.00010	0.0231	< 0.020	< 0.000050	0.019		0.00008275	153	< 0.00010	0.000165	< 0.00020		
FR SP1	FR SP1 WEK 2022-05-09 N	2022-05-12	-	-	-	-	-	-	-	-		-	-	-	-	-		
FR SP1	FR SP1 WEK 2022-05-16 N	2022-05-16	-	-	-	-	-	-	-	-		-	-	-	-	-		
FR SP1	FR SP1 WEK 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-		-	-	-	-	-		
FR SP1	FR SP1 WEK 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-		-	-	-	-	-		
FR SP1	FR SP1 MON 2022-06-01 N	2022-06-08	-	< 0.0010	0.00022	< 0.00010	0.0231	< 0.020	< 0.000050	0.018		0.000139	147	< 0.00010	< 0.10	< 0.00020		
FR SP1	FR FLD1 2022-06-13 N	2022-06-13	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010		< 0.0050	< 0.0050	< 0.00010	< 0.10	< 0.00020		
FR SP1	FR SP1 WEK 2022-06-13 N	2022-06-13	-	-	-	-	-	-	-	-		-	-	-	-	-		
FR SP1	FR SP1 WEK 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-		-	-	-	-	-		
FR SP1	FR SP1 WEK 2022-06-27 N	2022-06-29	-	-	-	-	-	-	-	-		-	-	-	-	-		
FR SP1	FR SP1 MON 2022-07-01 N	2022-07-04	-	0.0011	0.00017	< 0.00010	0.0212	< 0.020	< 0.000050	0.019		0.000158	144	< 0.00010	< 0.10	0.00028		
FR SP1	FR SP1 WEK 2022-07-11 N	2022-07-12	-	-	-	-	-	-	-	-		-	-	-	-	-		
FR SP1	FR SP1 MON 2022-08-01 N	2022-08-02	-	0.0014	0.00021	< 0.00010	0.0204	< 0.020	< 0.000050	0.017		0.000099	135	< 0.00010	< 0.10	0.00021		
FR SP1	FR DC2 MON 2022-09-01 NP	2022-09-08	-	0.00405	0.0002	< 0.00010	0.02245	< 0.020	< 0.000050	0.0195		0.00007815	148.5	< 0.00010	0.00011	< 0.00020		
FR SP1	FR SP1 WS 2022-09-30 NP	2022-09-30	-	0.0014	0.00024	< 0.00010	0.0245	< 0.020	< 0.000050	0.019		0.000091	152	< 0.00010	0.00013	0.00021		
FR SP1	FR SP1 MON 2022-10-01 N	2022-10-19	-	0.0012	0.0002	< 0.00010	0.0218	< 0.020	< 0.000050	0.02		0.000101	168	< 0.00010	0.00011	< 0.00020		
FR SP1	FR SP1 MON 2022-11-01 N	2022-11-03	-	< 0.0010	0.00017	< 0.00010	0.0215	< 0.020	< 0.000050	0.017		0.000092	146	< 0.00010	0.0001	0.00061		

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL



APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
				Acute																
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Fording River Operation																				
FR PP1	FR PP1 MON 2022-10-25 NP	2022-10-24	-	< 0.020	< 0.000100	0.0243	182	0.0138	0.068	4.47	371	< 0.000020	1.61	0.233	0.000058	< 0.00020	< 0.00060	0.0106	0.0612	
FR PP1	FR PP1 MON 2022-11-01 N	2022-11-02	-	< 0.020	< 0.000100	0.0286	161	0.0119	0.0674	4.44	413	< 0.000020	1.61	0.291	0.000061	< 0.00020	< 0.00060	0.0123	0.0437	
FR SCOUT	FR SCOUT WS 2022-1-06 N 0900	2022-01-06	-	< 0.020	< 0.000100	0.0643	286	0.00345	0.0389	5.02	514	< 0.000020	7.55	0.215	0.000046	< 0.00020	< 0.00060	0.0173	0.0203	
FR SCOUT	FR SCOUT WS 2022-01-13 N	2022-01-13	-	< 0.020	< 0.000100	0.0759	304	0.00448	0.0438	4.89	524	< 0.000020	3.12	0.245	0.000048	< 0.00020	< 0.00060	0.0159	0.0308	
FR SCOUT	FR SCOUT WS 2022-02-10 N 0900	2022-02-10	-	< 0.020	< 0.000100	0.073	282	0.00547	0.0413	4.23	522	< 0.000020	3.06	0.236	0.000049	< 0.00020	< 0.00060	0.0176	0.0297	
FR SCOUT	FR SCOUT WS 2022-02-16 N	2022-02-16	-	0.016	< 0.000050	0.0817	103	0.0138	0.00988	32.2	134	< 0.000010	3.59	0.241	0.00001	< 0.00010	< 0.00030	0.00588	0.0053	
FR SCOUT	FR SCOUT WS 2022-03-10 N	2022-03-10	-	-	-	-	293.5	-	-	-	6.125	-	14.25	-	-	-	-	-	-	
FR SCOUT	FR SCOUT 2022-03-10 N 0900	2022-03-10	-	< 0.020	< 0.000100	0.104	0.0121	0.0148	-	158	< 0.000020	2.58	< 0.000020	< 0.00020	< 0.0100	< 0.00020	< 0.0100	0.0157	0.008	
FR SCOUT	FR SCOUT 2022-04-07 N 0900	2022-04-07	-	< 0.020	< 0.000100	0.0866	239.5	0.0162	0.0246	4.16	258	< 0.000020	9.885	0.22	0.000026	< 0.00020	< 0.0200	0.0138	0.0185	
FR SCOUT	FR SCOUT WS 2022-04-07 N	2022-04-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SCOUT	FR SCOUT 2022-05-05 N 0900	2022-05-05	-	0.013	< 0.000050	0.0168	70.05	0.0016	0.0111	1.47	119	< 0.000010	0.925	0.0685	0.000017	< 0.00010	< 0.0100	0.00336	0.0136	
FR SCOUT	FR SCOUT 2022-06-02 N 0900	2022-06-02	-	< 0.010	< 0.000050	0.0181	31.7	0.00188	0.00316	0.888	30.3	< 0.000010	0.8965	0.085	< 0.000010	< 0.00010	< 0.00030	0.00149	0.005	
FR SCOUT	FR SCOUT WS 2022-06-04 N	2022-06-04	-	< 0.010	< 0.000050	0.0151	26	0.00167	0.00207	0.931	19	< 0.000010	1.38	0.0869	< 0.000010	< 0.00010	< 0.00030	0.00128	0.0014	
FR SCOUT	FR SCOUT 2022-07-14 N 0900	2022-07-14	-	< 0.010	< 0.000050	0.0308	115	0.00392	0.0207	2.17	176	< 0.000010	1.195	0.104	0.000026	< 0.00010	< 0.00030	0.00574	0.0267	
FR SCOUT	FR SCOUT WS 2022 07 25 N	2022-07-25	-	< 0.010	< 0.000050	0.0369	41.2	0.00385	0.00517	1.5	54.5	< 0.000010	1.65	0.116	< 0.000010	< 0.00010	< 0.00030	0.00243	0.005	
FR SCOUT	FR SCOUT 2022-08-11 N 0900	2022-08-11	-	< 0.020	< 0.000100	0.0593	225	0.00659	0.0462	3.795	350	< 0.000020	2.025	0.174	0.000041	< 0.00020	< 0.00060	0.0122	0.052	
FR SCOUT	FR SCOUT 2022-09-08 N 0900	2022-09-08	-	< 0.020	< 0.000100	0.087	300	0.00652	0.0603	4.75	508	< 0.000020	2.855	0.237	0.000057	< 0.00020	< 0.00060	0.016	0.0745	
FR SCOUT	FR SCOUT 2022-10-06 N 0900	2022-10-06	-	< 0.020	< 0.000100	0.0688	281.5	0.00466	0.0512	4.215	466	< 0.000020	2.63	0.221	0.000047	< 0.00020	< 0.00060	0.0134	0.0652	
FR SCOUT	FR SCOUT 2022-11-03 N 0900	2022-11-03	-	< 0.020	< 0.000100	0.0784	327.5	0.00414	0.0572	4.71	503	< 0.000020	2.83	0.209	0.000052	< 0.00020	< 0.00060	0.0163	0.0698	
FR SCOUT	FR SCOUT 2022-12-01 N 0900 CALC	2022-12-01	-	< 0.020	< 0.000100	0.102	329.5	0.0073	0.0476	4.98	579	< 0.000020	4.27	0.254	0.000052	< 0.00020	< 0.00060	0.0198	0.0404	
FR SCOUT	FR SCOUT 2022-12-22 N 0900	2022-12-22	-	< 0.020	< 0.000100	0.0894	369	0.00417	0.0545	4.935	662	< 0.000020	2.955	0.247	0.000056	< 0.00020	< 0.00060	0.0205	0.0393	
FR SCOUT	FR SCOUT 2022-12-29 N 0900	2022-12-29	-	< 0.020	< 0.000100	0.0867	357	0.0035	0.0542	4.78	632	< 0.000020	2.96	0.245	0.000051	< 0.00020	< 0.00060	0.0183	0.0455	
FR SP1	FR SP1 MON 2022-01-04 N	2022-01-08	-	< 0.010	< 0.000050	0.0521	78.8	0.00066	0.00195	3.64	39.7	< 0.000010	2.06	0.164	0.000015	< 0.00010	< 0.00030	0.0043	0.0014	
FR SP1	FR SP1 MON 2022-02-01 N	2022-02-06	-	< 0.020	< 0.000100	0.0197	151	0.0161	0.0533	4.02	294	< 0.000020	1.43	0.275	0.000057	< 0.00020	< 0.00060	0.0101	0.0455	
FR SP1	FR SP1 MON 2022-03-01 N	2022-03-04	-	< 0.010	< 0.000050	0.0545	74.5	0.00065	0.00199	3.86	29.1	< 0.000010	1.76	0.165	0.000016	< 0.00010	< 0.00030	0.00435	0.0021	
FR SP1	FR SP1 WED 2022-03-14 N	2022-03-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WED 2022-03-21 N	2022-03-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WED 2022-03-28 N	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 MON 2022-04-01 N	2022-04-05	-	< 0.010	< 0.000050	0.0585	86.8	0.00219	0.00207	3.33	79.2	< 0.000010	2.82	0.163	0.000015	< 0.00010	< 0.00030	0.00457	< 0.0010	
FR SP1	FR SP1 WED 2022-04-11 N	2022-04-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WED 2022-04-18 N	2022-04-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR DC2 WED 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR DC2 MON 2022-05-01 N	2022-05-02	-	< 0.010	< 0.000050	0.0588	86.85	0.00056	0.002345	4.05	47.55	< 0.000010	2.385	0.17	0.000021	< 0.00010	< 0.00030	0.00518	0.00165	
FR SP1	FR SP1 WED 2022-05-09 N	2022-05-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WED 2022-05-16 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WED 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WED 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 MON 2022-06-01 N	2022-06-08	-	< 0.010	< 0.000050	0.0614	81.7	0.00042	0.0021	3.77	74.4	< 0.000010	1.86	0.178	0.000016	< 0.00010	< 0.00030	0.00411	0.0025	
FR SP1	FR FLD1 WED 2022-06-13 N	2022-06-13	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.000050	< 0.0050	< 0.0050	< 0.000010	< 0.0050	< 0.000020	< 0.000010	< 0.00010	< 0.00030	< 0.000010	< 0.0010	
FR SP1	FR SP1 WED 2022-06-13 N	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WED 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WED 2022-06-27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 MON 2022-07-01 N	2022-07-04	-	< 0.010	< 0.000050	0.057	80.6	0.00034	0.00196	3.85	85.2	< 0.000010	1.82	0.164	0.000019	< 0.00010	< 0.00030	0.00377	0.0023	
FR SP1	FR SP1 WED 2022-07-11 N	2022-07-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 MON 2022-08-01 N	2022-08-02	-	0.014	< 0.000050	0.0484	71.6	0.00069	0.0017	3.72	56.3	0.000112	1.64	0.152	0.000018	< 0.00010	< 0.00030	0.00379	0.0022	
FR SP1	FR DC2 MON 2022-09-01 NP	2022-09-08	-	< 0.010	< 0.000050	0.05635	84.35	0.00046	0.001945	3.555	54.7	< 0.000010	1.98	0.1675	0.0000205	< 0.00010	< 0.00030	0.004275	0.0012	
FR SP1	FR SP1 WED 2022-09-30 NP	2022-09-23	-	< 0.010	< 0.000050	0.0575	84.1	0.00071	0.00243	4.08	55.7	< 0.000010	2.31	0.168	0.000023	< 0.00010	< 0.00030	0.00458	0.0016	
FR SP1	FR SP1 MON 2022-10-01 N	2022-10-19	-	< 0.010	< 0.000050	0.0597	81.8	0.00055	0.00203	3.84	39	< 0.000010	1.9	0.171	0.000019	< 0.00010	< 0.00030	0.00491	0.0012	
FR SP1	FR SP1 MON 2022-11-01 N	2022-11-03	-	< 0.010	< 0.000050	0.0503	81.2	0.00076	0.00207	3.47	39.6	< 0.000010	1.86	0.168	0.000015	< 0.00010	< 0.00030	0.00474	0.0014	

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

<sup>e</sup> Guid

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper	
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>b</sup>
<b>Greenhills Operation</b>																		
GH_FC1	GH_FC1_WS_2022-01-03_NP	2022-01-10	-	0.0028	< 0.00010	0.0002	0.0675	< 0.020	< 0.000050	< 0.010			< 0.0050	78.3	< 0.00010	< 0.00010	0.00025	
GH_FC1	GH_FC1_WS_2022-02-07_NP	2022-02-07	-	0.0028	< 0.00010	0.00016	0.0626	< 0.020	< 0.000050	< 0.010			< 0.0050	77.1	< 0.00010	< 0.00010	0.00024	
GH_FC1	GH_FC1_WS_2022-03-07_N	2022-03-07	-	0.0016	< 0.00010	0.00016	0.0583	< 0.020	< 0.000050	< 0.010			< 0.0050	72.4	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-03-14_NP	2022-03-17	-	0.0016	< 0.00010	0.00014	0.0697	< 0.020	< 0.000050	< 0.010			< 0.0050	71.6	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-03-20_NP	2022-03-20	-	0.0022	< 0.00010	0.00018	0.0689	< 0.020	< 0.000050	< 0.010			< 0.0050	80.9	< 0.00010	< 0.10	0.00021	
GH_FC1	GH_FC1_WS_2022-03-21_NP	2022-03-22	-	0.0016	< 0.00010	0.00012	0.0504	< 0.020	< 0.000050	< 0.010			< 0.0050	62.8	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-03-28_NP	2022-03-29	-	0.0026	< 0.00010	0.00016	0.0449	< 0.020	< 0.000050	< 0.010			< 0.0050	63.9	< 0.00010	< 0.10	0.00023	
GH_FC1	GH_FC1_WS_2022-04-04_NP	2022-04-06	-	0.0022	< 0.00010	0.00016	0.0457	< 0.020	< 0.000050	< 0.010			< 0.0050	59.5	< 0.00010	< 0.10	0.00024	
GH_FC1	GH_FC1_WS_2022-04-11_NP	2022-04-13	-	0.0014	< 0.00010	0.00015	0.0502	< 0.020	< 0.000050	< 0.010			< 0.0050	61.2	< 0.00010	< 0.10	0.00024	
GH_FC1	GH_FC1_WS_2022-04-18_NP	2022-04-21	-	0.0019	< 0.00010	0.00016	0.0453	< 0.020	< 0.000050	< 0.010			< 0.0050	67.5	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-04-25_NP	2022-04-27	-	0.0013	< 0.00010	0.00014	0.0506	< 0.020	< 0.000050	< 0.010			< 0.0050	63	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-05-02_NP	2022-05-04	-	0.0018	< 0.00010	0.00017	0.0552	< 0.020	< 0.000050	< 0.010			< 0.0050	64.2	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-05-09_NP	2022-05-11	-	0.0018	< 0.00010	0.00016	0.0532	< 0.020	< 0.000050	< 0.010			< 0.0050	61.6	< 0.00030	< 0.10	0.00021	
GH_FC1	GH_FC1_WS_2022-05-16_NP	2022-05-18	-	0.0016	< 0.00010	0.00015	0.0553	< 0.020	< 0.000050	< 0.010			< 0.0050	64.4	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-05-23_NP	2022-05-27	-	0.0025	< 0.00010	0.00018	0.0648	< 0.020	< 0.000050	< 0.010			< 0.0050	66.6	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-05-30_NP	2022-06-01	-	0.0019	< 0.00010	0.00016	0.0586	< 0.020	< 0.000050	< 0.010			< 0.0050	64.8	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-06-06_NP	2022-06-08	-	0.0017	< 0.00010	0.00019	0.0616	< 0.020	< 0.000050	< 0.010			< 0.0050	65.5	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-06-13_NP	2022-06-15	-	0.0015	< 0.00010	0.00017	0.0506	< 0.020	< 0.000050	< 0.010			< 0.0050	61.5	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-06-20_NP	2022-06-22	-	< 0.0010	< 0.00010	0.0002	0.0677	< 0.020	< 0.000050	0.013			< 0.0050	76.1	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-06-27_NP	2022-06-29	-	0.0015	< 0.00010	0.00016	0.0613	< 0.020	< 0.000050	< 0.010			< 0.0050	70.2	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-07-04_NP	2022-07-06	-	0.0016	< 0.00010	0.00018	0.0609	< 0.020	< 0.000050	< 0.010			< 0.0050	68.2	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-07-11_NP	2022-07-13	-	0.0019	< 0.00010	0.0002	0.0649	< 0.020	< 0.000050	0.011			< 0.0050	68.5	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-08-01_NP	2022-08-04	-	0.002	< 0.00010	0.00022	0.0718	< 0.020	< 0.000050	0.01			< 0.0050	74	< 0.00010	< 0.10	< 0.00020	
GH_FC1	GH_FC1_WS_2022-09-05_NP	2022-09-08	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_FC1	GH_FC1_WS_2022-10-03_NP	2022-10-05	-	0.001	< 0.00010	0.00025	0.0654	< 0.020	< 0.000050	< 0.010			< 0.0050	79.7	< 0.00010	< 0.10	< 0.00020	
GH_GH1	GH_GH1_WS_2022-11-07_NP	2022-11-09	-	< 0.0010	< 0.00010	0.0003	0.0507	< 0.020	< 0.000050	< 0.010			< 0.0050	64.3	< 0.00010	< 0.10	< 0.00020	
GH_GH1	GH_GH1_WS_2022-01-03_N	2022-01-04	-	< 0.0010	0.00038	0.00016	0.0443	< 0.020	< 0.000050	< 0.010			0.0000064	188	0.00011	< 0.00010	0.0002	
GH_GH1	GH_GH1_WS_2022-02-07_N	2022-02-04	-	0.0011	0.00039	0.00017	0.039	< 0.020	< 0.000050	< 0.010			< 0.0050	176	< 0.00010	< 0.00010	< 0.00020	
GH_GH1	GH_GH1_WS_2022-02-19_N	2022-02-19	-	0.0012	0.00037	0.00016	0.0436	< 0.020	< 0.000050	< 0.010			< 0.0050	172	< 0.00010	< 0.00010	< 0.00020	
GH_GH1	GH_GH1_WS_2022-02-20_NP	2022-02-20	-	< 0.0010	0.00039	0.00017	0.0462	< 0.020	< 0.000050	< 0.010			< 0.0050	180	0.00011	< 0.00010	0.00029	
GH_GH1	GH_GH1_WS_2022-02-21_N	2022-02-21	-	0.0013	0.00037	0.00016	0.043	< 0.020	< 0.000050	0.013			0.0000073	173	0.00016	< 0.00010	0.0005	
GH_GH1	GH_GH1_WS_2022-03-07_N	2022-03-04	-	< 0.0010	0.00036	0.00019	0.0438	< 0.020	< 0.000050	< 0.010			0.000006	186	< 0.00010	< 0.10	< 0.00020	
GH_GH1	GH_GH1_WS_2022-03-14_N	2022-03-15	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_GH1_WS_2022-03-21_N	2022-03-21	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_GH1_WS_2022-03-28_N	2022-03-28	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_FOX3_WS_2022-04-04_N	2022-04-04	-	0.00325	0.0003	0.00016	0.0406	< 0.020	< 0.000050	< 0.010			0.0000211	116	0.00017	< 0.10	0.000445	
GH_GH1	GH_GH1_WS_2022-04-04_N	2022-04-04	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_GH1_WS_2022-04-11_N	2022-04-11	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_GH1_WS_2022-04-18_N	2022-04-19	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_GH1_WS_2022-04-25_N	2022-04-26	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_GH1_WS_2022-05-09_N	2022-05-10	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_GH1_WS_2022-05-16_N	2022-05-17	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_GH1_WS_2022-05-23_N	2022-05-23	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_GH1_WS_2022-05-30_N	2022-05-30	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_GH1_WS_2022-06-06_N	2022-06-06	-	0.0018	0.00035	0.00022	0.0474	< 0.020	< 0.000050	0.011			0.000102	112	< 0.00010	< 0.10	0.00043	
GH_GH1	GH_GH1_WS_2022-06-13_N	2022-06-14	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_GH1_WS_2022-06-17_N	2022-06-17	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_GH1_WS_2022-06-18_N	2022-06-18	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_GH1_WS_2022-06-19_N	2022-06-19	-	-	-	-	-	-	-	-			-	-	-	-	-	
GH_GH1	GH_GH1_WS_2022-06-20_N	2022-06-20	-	-	-	-	-	-	-	-			-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
				Acute																
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Greenhills Operation</b>																				
GH FC1	GH FC1 WS 2022-01-03 NP	2022-01-10	-	0.038	< 0.000050	0.003	33.2	0.014	< 0.00050	0.77	0.17	< 0.000010	3.02	0.0956	< 0.000010	< 0.000010	0.00031	0.000417	< 0.0010	
GH FC1	GH FC1 WS 2022-02-07 NP	2022-02-07	-	0.026	< 0.000050	0.0033	29.3	0.00814	< 0.00050	0.739	0.123	< 0.000010	2.68	0.089	< 0.000010	< 0.000010	< 0.00030	0.000464	0.0022	
GH FC1	GH FC1 WS 2022-03-07 N	2022-03-07	-	0.021	< 0.000050	0.0034	28.7	0.00702	< 0.00050	0.954	0.111	< 0.000010	2.66	0.0852	< 0.000010	< 0.000010	< 0.00030	0.00033	< 0.0010	
GH FC1	GH FC1 WS 2022-03-14 NP	2022-03-17	-	0.037	< 0.000050	0.0024	26.4	0.0284	< 0.00050	0.958	0.221	< 0.000010	5.31	0.128	< 0.000010	< 0.000010	< 0.00030	0.000288	< 0.0010	
GH FC1	GH FC1 WS 2022-03-20 NP	2022-03-20	-	0.032	< 0.000050	0.0024	29	0.0291	< 0.00050	1.12	0.227	< 0.000010	5.11	0.136	< 0.000010	< 0.000010	< 0.00030	0.000259	0.001	
GH FC1	GH FC1 WS 2022-03-21 NP	2022-03-22	-	0.015	< 0.000050	0.0034	25.7	0.00367	< 0.00050	1.16	0.093	< 0.000010	2.59	0.0783	< 0.000010	< 0.000010	< 0.00030	0.000266	0.0014	
GH FC1	GH FC1 WS 2022-03-28 NP	2022-03-28	-	0.011	< 0.000050	0.0026	26.2	0.00293	< 0.00050	1.47	0.116	< 0.000010	1.82	0.0716	< 0.000010	< 0.000010	< 0.00030	0.000282	0.001	
GH FC1	GH FC1 WS 2022-04-04 NP	2022-04-06	-	< 0.010	< 0.000050	0.0031	24.2	0.00125	< 0.00050	1.34	0.08	< 0.000010	2.16	0.0691	< 0.000010	< 0.000010	< 0.00030	0.00031	< 0.0010	
GH FC1	GH FC1 WS 2022-04-11 NP	2022-04-13	-	< 0.010	< 0.000050	0.0032	24.8	0.00133	< 0.00050	1.23	0.104	< 0.000010	2.23	0.0742	< 0.000010	< 0.000010	< 0.00030	0.000338	0.00034	
GH FC1	GH FC1 WS 2022-04-18 NP	2022-04-21	-	< 0.010	< 0.000050	0.0032	23.8	0.00099	< 0.00050	1.06	0.071	< 0.000010	2.2	0.079	< 0.000010	< 0.000010	< 0.00030	0.000378	0.00034	
GH FC1	GH FC1 WS 2022-04-25 NP	2022-04-27	-	< 0.010	< 0.000050	0.0035	24.6	0.0013	< 0.00050	1.12	0.062	< 0.000010	2.29	0.0751	< 0.000010	< 0.000010	< 0.00030	0.000344	< 0.0010	
GH FC1	GH FC1 WS 2022-05-02 NP	2022-05-04	-	< 0.010	< 0.000050	0.0034	24.8	0.00155	< 0.00050	1.2	0.132	< 0.000010	2.28	0.0788	< 0.000010	< 0.000010	< 0.00030	0.000318	< 0.0010	
GH FC1	GH FC1 WS 2022-05-09 NP	2022-05-11	-	< 0.010	< 0.000050	0.0036	25	0.0014	< 0.00050	1.15	0.105	< 0.000010	2.34	0.0767	< 0.000010	< 0.000010	< 0.00030	0.00032	< 0.0010	
GH FC1	GH FC1 WS 2022-05-16 NP	2022-05-18	-	< 0.010	< 0.000050	0.0036	25.1	0.00208	< 0.00050	1.22	0.08	< 0.000010	2.39	0.0796	< 0.000010	< 0.000010	< 0.00030	0.000343	< 0.0010	
GH FC1	GH FC1 WS 2022-05-23 NP	2022-05-27	-	< 0.010	< 0.000050	0.0039	29.3	0.00299	< 0.00050	1.2	0.094	< 0.000010	2.48	0.0854	< 0.000010	< 0.000010	< 0.00030	0.000313	< 0.0010	
GH FC1	GH FC1 WS 2022-05-30 NP	2022-06-01	-	0.011	< 0.000050	0.0042	26.4	0.00362	< 0.00050	1.16	0.077	< 0.000010	2.44	0.0831	< 0.000010	< 0.000010	< 0.00030	0.000277	< 0.0010	
GH FC1	GH FC1 WS 2022-06-06 NP	2022-06-08	-	< 0.010	< 0.000050	0.004	25	0.0038	< 0.00050	1	0.085	< 0.000010	2.24	0.0813	< 0.000010	< 0.000010	< 0.00030	0.000254	< 0.0010	
GH FC1	GH FC1 WS 2022-06-13 NP	2022-06-15	-	< 0.010	< 0.000050	0.0037	24.6	0.00174	< 0.00050	0.901	0.088	< 0.000010	2.36	0.0715	< 0.000010	< 0.000010	< 0.00030	0.000273	< 0.0010	
GH FC1	GH FC1 WS 2022-06-20 NP	2022-06-22	-	0.011	< 0.000050	0.0046	30.2	0.00415	< 0.00050	0.807	0.175	< 0.000010	2.49	0.0872	< 0.000010	< 0.000010	< 0.00030	0.000271	< 0.0010	
GH FC1	GH FC1 WS 2022-06-27 NP	2022-06-29	-	0.011	< 0.000050	0.0038	25.7	0.00512	< 0.00050	0.587	0.131	< 0.000010	2.21	0.0824	< 0.000010	< 0.000010	< 0.00030	0.000262	< 0.0010	
GH FC1	GH FC1 WS 2022-07-04 NP	2022-07-06	-	0.015	< 0.000050	0.0043	26.8	0.00468	< 0.00050	0.693	0.084	< 0.000010	2.35	0.0878	< 0.000010	< 0.000010	< 0.00030	0.000241	< 0.0010	
GH FC1	GH FC1 WS 2022-07-11 NP	2022-07-13	-	0.021	< 0.000050	0.0044	27.5	0.00788	< 0.00050	0.608	0.127	< 0.000010	2.4	0.0891	< 0.000010	< 0.000010	< 0.00030	0.000242	< 0.0010	
GH FC1	GH FC1 WS 2022-08-01 NP	2022-08-04	-	0.046	< 0.000050	0.005	28.4	0.0186	< 0.00050	0.82	0.107	< 0.000010	2.63	0.0962	< 0.000010	< 0.000010	< 0.00030	0.000196	< 0.0010	
GH FC1	GH FC1 WS 2022-09-05 NP	2022-09-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH FC1	GH FC1 WS 2022-10-03 NP	2022-10-05	-	0.048	< 0.000050	0.0038	26.3	0.0442	< 0.00050	1.07	0.139	< 0.000010	2.6	0.0852	< 0.000010	< 0.000010	< 0.00030	0.000171	< 0.0010	
GH FC1	GH FC1 WS 2022-11-07 NP	2022-11-09	-	0.062	< 0.000050	0.0039	24.8	0.0482	< 0.00050	0.738	0.083	< 0.000010	2.11	0.0792	< 0.000010	< 0.000010	< 0.00030	0.000218	< 0.0010	
GH GH1	GH GH1 WS 2022-01-03 N	2022-01-04	-	< 0.010	< 0.000050	0.0142	129	0.00158	0.00789	2.09	143	< 0.000010	2.81	0.199	< 0.000010	< 0.000010	< 0.00030	0.00758	< 0.0010	
GH GH1	GH GH1 WS 2022-02-07 N	2022-02-04	-	< 0.010	< 0.000050	0.0164	136	0.00027	0.00702	2.17	153	< 0.000010	2.62	0.206	< 0.000010	< 0.000010	< 0.00030	0.00792	< 0.0010	
GH GH1	GH GH1 WS 2022-02-19 N	2022-02-19	-	< 0.010	< 0.000050	0.0159	139	0.00117	0.00797	2.36	162	< 0.000010	2.93	0.204	< 0.000010	< 0.000010	< 0.00030	0.00813	< 0.0010	
GH GH1	GH GH1 WS 2022-02-20 NP	2022-02-20	-	< 0.010	< 0.000050	0.0167	142	0.00121	0.00805	2.42	176	< 0.000010	3.07	0.21	< 0.000010	< 0.000010	< 0.00030	0.00869	< 0.0010	
GH GH1	GH GH1 WS 2022-02-21 N	2022-02-21	-	< 0.010	< 0.000050	0.016	129	0.00117	0.00744	2.35	162	< 0.000010	3.16	0.202	< 0.000010	0.00014	< 0.00030	0.00802	0.0052	
GH GH1	GH GH1 WS 2022-03-07 N	2022-03-04	-	< 0.010	< 0.000050	0.0173	139	0.00186	0.00795	2.33	157	< 0.000010	3.02	0.216	< 0.000010	< 0.000010	< 0.00030	0.00801	< 0.0010	
GH GH1	GH GH1 WS 2022-03-14 N	2022-03-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-03-21 N	2022-03-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-03-28 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH FOX3 WS 2022-04-04 N	2022-04-04	-	< 0.010	< 0.000050	0.00995	78.85	0.001755	0.004625	1.59	71.05	< 0.000010	2.615	0.154	< 0.000010	< 0.000010	< 0.00030	0.00439	0.00155	
GH GH1	GH GH1 WS 2022-04-04 N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-04-11 N	2022-04-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-04-18 N	2022-04-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-04-25 N	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-05-09 N	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-05-16 N	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-05-30 N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-06-06 N	2022-06-06	-	< 0.010	< 0.000050	0.0115	71.8	0.00103	0.00636	1.5	82.6	< 0.000010	2.12	0.134	< 0.000010	< 0.000010	< 0.00030	0.00421	0.0059	
GH GH1	GH GH1 WS 2022-06-13 N	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-06-17 N	2022-06-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-06-18 N	2022-06-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-06-19 N	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper	
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Acute	Chronic								Acute	Chronic				Acute	Chronic		
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>b</sup>
<b>Greenhills Operation</b>																		
GH GH1	GH GH1 WS 2022-06-21 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-06-22 N	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-06-27 N	2022-06-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-07-04 N	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH FOX3 WS 2022-07-04 N	2022-07-04	-	0.002033333	0.00026	0.00016333	0.03726667	< 0.020	< 0.000050	0.01	-	7.16667E-05	70.68	< 0.00010	< 0.10	0.000386667	-	-
GH GH1	GH GH1 WS 2022-07-11 N	2022-07-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-08-01 N	2022-08-04	-	< 0.0010	0.00048	0.00023	0.0586	< 0.020	< 0.000050	0.012	0.0000094	151	< 0.00010	< 0.10	0.00041	-	-	
GH GH1	GH GH1 WS 2022-09-05 N	2022-09-06	-	< 0.0010	0.000435	0.00018	0.04235	< 0.020	< 0.000050	0.0115	0.0000063	156	< 0.00010	< 0.10	0.00023	-	-	
GH GH1	GH GH1 WS 2022-10-03 N	2022-10-03	-	0.0012	0.00045	0.0002	0.0465	< 0.020	< 0.000050	< 0.010	0.00000735	175	< 0.00010	< 0.10	0.00045	-	-	
GH GH1	GH GH1 WS 2022-11-07 N	2022-11-03	-	< 0.0010	0.0004	0.00016	0.0443	< 0.020	< 0.000050	< 0.010	< 0.000050	170	< 0.00010	< 0.10	0.00029	-	-	
GH GH1	GH GH1 WS 2022-11-07 N	2022-11-07	-	< 0.0010	0.00043	0.00017	0.0453	< 0.020	< 0.000050	< 0.010	0.0000054	185	< 0.00010	< 0.10	< 0.00020	-	-	
GH GH1	GH GH1 WS 2022-11-10 N	2022-11-10	-	< 0.0010	0.00038	0.00018	0.0452	< 0.020	< 0.000050	< 0.010	0.0000071	138	< 0.00010	< 0.10	< 0.00020	-	-	
GH GH1	GH FOX1 WS 2022-11-17 FD	2022-11-17	-	< 0.0010	0.0003	0.00014333	0.031	< 0.020	< 0.000050	< 0.010	0.000006	112.7	0.00010333	< 0.10	0.000216667	-	-	
GH LC1	GH LC1 WS 2022-06 06 N	2022-06-19	-	0.0023	0.00042	0.00025	0.0693	< 0.020	< 0.000050	0.021	0.0000322	83.2	< 0.00010	0.00014	0.00063	-	-	
GH LC1	GH LC1 WS 2022-06-20 N	2022-06-20	-	0.0027	0.00031	0.00022	0.0764	< 0.020	< 0.000050	0.021	0.0000282	67.3	0.0001	0.00011	0.00064	-	-	
GH PC1	GH PC1 WS 2022-08-01 N	2022-08-08	-	0.0012	< 0.00010	0.00021	0.0948	< 0.020	< 0.000050	< 0.010	0.0000306	104	0.00034	< 0.10	< 0.00020	-	-	
GH PC1	GH PC1 WS SESMP 2022-08 N	2022-08-17	-	0.0019	< 0.00010	0.00022	0.0846	< 0.020	< 0.000050	< 0.010	0.0000288	104	0.00027	< 0.10	< 0.00020	-	-	
GH PC1	GH PC1 DS WS 2022-08-24 NP	2022-08-24	-	0.0018	< 0.00010	0.00025	0.0836	< 0.020	< 0.000050	< 0.010	0.0000292	105	0.00025	< 0.10	< 0.00020	-	-	
GH PC1	GH PC1 DS WS 2022-08-25 NP	2022-08-25	-	< 0.0010	< 0.00010	0.00023	0.0857	< 0.020	< 0.000050	< 0.010	0.000026	102	0.00026	< 0.10	< 0.00020	-	-	
GH PC1	GH PC1 DS WS 2022-08-26 NP	2022-08-26	-	0.0011	< 0.00010	0.00022	0.0868	< 0.020	< 0.000050	< 0.010	0.000026	108	0.00028	< 0.10	< 0.00020	-	-	
GH PC1	GH PC1 DS WS 2022-08-27 NP	2022-08-27	-	< 0.0010	< 0.00010	0.0002	0.0784	< 0.020	< 0.000050	< 0.010	0.0000242	93	0.00029	< 0.10	< 0.00020	-	-	
GH PC1	GH PC1 DS WS 2022-08-28 NP	2022-08-28	-	< 0.0010	< 0.00010	0.00022	0.0741	< 0.020	< 0.000050	< 0.010	0.0000181	90.8	0.00026	< 0.10	< 0.00020	-	-	
GH TC2	GH TC2 WS 2022-01-03 N	2022-01-12	-	0.0012	0.00017	0.00014	0.0595	< 0.020	< 0.000050	0.02	0.0000258	215	< 0.00010	< 0.00010	0.00034	-	-	
GH TC2	GH TC2 WS 2022-02-07 N	2022-02-08	-	0.0019	0.00016	0.00016	0.0653	< 0.020	< 0.000050	0.021	0.000023	224	0.00299	< 0.00010	0.00035	-	-	
GH TC2	GH TC2 WS 2022-03-07 N	2022-03-08	-	0.0015	0.00016	0.00015	0.061	< 0.020	< 0.000050	0.019	0.0000177	226	< 0.00010	< 0.10	0.00021	-	-	
GH TC2	GH TC2 WS 2022-03-14 N	2022-03-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-03-20 N	2022-03-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-03-21 N	2022-03-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-03-28 N	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-04-04 N	2022-04-06	-	0.0056	0.00014	0.00017	0.0742	< 0.020	< 0.000050	0.02	0.0000238	147	0.00013	< 0.10	0.00064	-	-	
GH TC2	GH TC2 WS 2022-04-11 N	2022-04-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-04-18 N	2022-04-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-04-25 N	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-05-02 N	2022-05-04	-	0.0038	0.00013	0.00018	0.0603	< 0.020	< 0.000050	0.018	0.0000204	98.8	< 0.00010	< 0.10	0.00042	-	-	
GH TC2	GH TC2 WS 2022-05-09 N	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-05-16 N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-05-23 N	2022-05-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-06-06 N	2022-06-08	-	0.0013	0.00016	0.00017	0.0626	< 0.020	< 0.000050	0.019	0.0000165	118	< 0.00010	< 0.10	0.00032	-	-	
GH TC2	GH TC2 WS 2022-06-13 N	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-06-20 N	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-06-27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-07-04 N	2022-07-06	-	0.0031	0.00014	0.00022	0.0771	< 0.020	< 0.000050	0.025	0.0000217	127	< 0.00010	< 0.10	0.00041	-	-	
GH TC2	GH TC2 WS 2022-07-11 N	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-08-01 N	2022-08-03	-	0.0012	0.00025	0.00024	0.077	< 0.020	< 0.000050	0.025	0.0000109	162	< 0.00010	< 0.10	0.00031	-	-	
GH TC2	GH TC2 WS SESMP 2022-08 N	2022-08-22	-	< 0.0010	0.0003	0.00024	0.0672	< 0.020	< 0.000050	0.028	0.0000096	226	< 0.00010	< 0.10	0.00038	-	-	
GH TC2	GH TC2 WS 2022-09-05 N	2022-09-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-09-14 N	2022-09-14	-	0.0017	0.0003	0.00021	0.0588	< 0.020	< 0.000050	0.03	0.0000068	281	< 0.00010	< 0.10	0.00021	-	-	
GH TC2	GH TC2 WS 2022-09-21 N	2022-09-21	-	< 0.0020	0.00031	0.00022	0.0601	< 0.040	< 0.000100	0.028	< 0.0100	234	< 0.00020	< 0.20	< 0.00040	-	-	
GH TC2	GH TC2 WS 2022-09-22 N	2022-09-22	-	< 0.0020	0.00028	0.00022	0.061	< 0.040	< 0.000100	0.028	< 0.0100	234	< 0.00020	< 0.20	< 0.00040	-	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
				Acute																
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Greenhills Operation</b>																				
GH GH1	GH GH1 WS 2022-06-21 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-06-22 N	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-06-27 N	2022-06-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-07-04 N	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH FOX3 WS 2022-07-04 N	2022-07-04	-	< 0.010	< 0.000050	0.0071	43.46833333	0.001146667	0.004653333	1.026666667	44.98333333	< 0.000010	1.37	0.084066667	< 0.000010	< 0.000010	< 0.000030	0.002506667	0.0037	
GH GH1	GH GH1 WS 2022-07-11 N	2022-07-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-08-01 N	2022-08-04	-	< 0.010	< 0.000050	0.0159	136	0.00074	0.00942	2.27	139	< 0.000010	2.66	0.179	< 0.000010	< 0.000010	< 0.000030	0.00788	< 0.0010	
GH GH1	GH GH1 WS 2022-09-05 N	2022-09-06	-	< 0.010	< 0.000050	0.0166	146	0.00055	0.00867	2.215	172	< 0.000010	2.395	0.187	< 0.000010	< 0.000010	< 0.000030	0.00827	< 0.0010	
GH GH1	GH GH1 WS 2022-10-03 N	2022-10-03	-	< 0.010	< 0.000050	0.0178	169	0.00051	0.00876	2.52	190	< 0.000010	2.52	0.212	< 0.000010	< 0.000010	< 0.000030	0.0092	< 0.0010	
GH GH1	GH GH1 WS 2022-11-07 N	2022-11-03	-	< 0.010	< 0.000050	0.0168	158	0.0006	0.00813	2.43	211	< 0.000010	2.47	0.192	< 0.000010	< 0.000010	< 0.000030	0.00805	< 0.0010	
GH GH1	GH GH1 WS 2022-11-07 N CALC	2022-11-07	-	< 0.010	< 0.000050	0.0169	163	0.00051	0.00825	2.51	186	< 0.000010	2.61	0.2	< 0.000010	< 0.000010	< 0.000030	0.00833	< 0.0010	
GH GH1	GH GH1 WS 2022-11-10 N	2022-11-10	-	< 0.010	< 0.000050	0.0174	152	0.00041	0.00792	2.59	218	< 0.000010	2.42	0.174	< 0.000010	< 0.000010	< 0.000030	0.0076	< 0.0010	
GH GH1	GH FOX1 WS 2022-11-17 FD	2022-11-17	-	< 0.010	< 0.000050	0.012933333	105.0016667	0.000336667	0.005813333	1.78	145.6833333	< 0.000010	1.87	0.1304	< 0.000010	< 0.000010	< 0.000030	0.005456667	< 0.0010	
GH LC1	GH LC1 WS 2022-06 06 N	2022-06-19	-	< 0.010	< 0.000050	0.0436	43.6	0.00673	0.0112	1.87	65.1	< 0.000010	10.4	0.278	< 0.000010	< 0.000010	< 0.000030	0.00303	< 0.0010	
GH LC1	GH LC1 WS 2022-06-20 N	2022-06-20	-	< 0.010	< 0.000050	0.0277	29.8	0.00716	0.00616	1.51	30.3	< 0.000010	8.06	0.231	< 0.000010	< 0.000010	< 0.000030	0.00177	< 0.0010	
GH PC1	GH PC1 WS 2022-08-01 N	2022-08-08	-	< 0.010	< 0.000050	0.0074	84.9	0.00052	0.00131	1.16	69.4	< 0.000010	0.826	0.139	0.000012	< 0.000010	< 0.000030	0.00555	0.006	
GH PC1	GH PC1 WS SESMP 2022-08 N	2022-08-17	-	< 0.010	< 0.000050	0.0075	80.6	0.00064	0.00121	1.05	80.1	< 0.000010	0.775	0.137	0.000011	< 0.000010	< 0.000030	0.00504	0.006	
GH PC1	GH PC1 DS WS 2022-08-24 NP	2022-08-24	-	< 0.010	< 0.000050	0.0078	81.1	0.00066	0.00127	1.07	72.5	< 0.000010	0.789	0.135	0.000012	< 0.000010	< 0.000030	0.00495	0.0073	
GH PC1	GH PC1 DS WS 2022-08-25 NP	2022-08-25	-	< 0.010	< 0.000050	0.0078	75.3	0.00059	0.00119	1.09	84.9	< 0.000010	0.804	0.136	0.000012	< 0.000010	< 0.000030	0.00502	0.008	
GH PC1	GH PC1 DS WS 2022-08-26 NP	2022-08-26	-	< 0.010	< 0.000050	0.0074	79.1	0.00051	0.00119	1.1	81.1	< 0.000010	0.797	0.131	0.000012	< 0.000010	< 0.000030	0.00493	0.0062	
GH PC1	GH PC1 DS WS 2022-08-27 NP	2022-08-27	-	< 0.010	< 0.000050	0.0072	74.1	0.0006	0.00109	0.996	67.7	< 0.000010	0.748	0.118	< 0.000010	< 0.000010	< 0.000030	0.00444	0.0051	
GH PC1	GH PC1 DS WS 2022-08-28 NP	2022-08-28	-	< 0.010	< 0.000050	0.0066	72.3	0.00053	0.00108	0.962	67.7	< 0.000010	0.727	0.117	< 0.000010	< 0.000010	< 0.000030	0.00427	0.005	
GH TC2	GH TC2 WS 2022-01-03 N	2022-01-12	-	< 0.010	< 0.000050	0.0291	132	0.00414	0.004	1.94	144	< 0.000010	9.89	0.586	< 0.000010	< 0.000010	< 0.000030	0.00556	< 0.0010	
GH TC2	GH TC2 WS 2022-02-07 N	2022-02-08	-	0.017	< 0.000050	0.0292	130	0.00622	0.00473	1.92	132	< 0.000010	10.7	0.559	< 0.000010	< 0.000010	< 0.000030	0.0059	0.0044	
GH TC2	GH TC2 WS 2022-03-07 N	2022-03-08	-	< 0.010	< 0.000050	0.0295	132	0.00719	0.00388	1.89	145	< 0.000010	10.4	0.547	< 0.000010	0.00037	< 0.000030	0.00614	< 0.0010	
GH TC2	GH TC2 WS 2022-03-14 N	2022-03-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-03-20 N	2022-03-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-03-21 N	2022-03-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-03-28 N	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-04-04 N	2022-04-06	-	0.016	0.00007	0.0189	77.2	0.00748	0.00287	1.68	68.2	< 0.000010	7.98	0.371	< 0.000010	0.00016	< 0.000030	0.00287	0.0033	
GH TC2	GH TC2 WS 2022-04-11 N	2022-04-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-04-18 N	2022-04-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-04-25 N	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-05-02 N	2022-05-04	-	0.011	< 0.000050	0.0135	53.7	0.0028	0.00182	1.35	52.4	< 0.000010	5.76	0.306	< 0.000010	< 0.000010	< 0.000030	0.00211	< 0.0010	
GH TC2	GH TC2 WS 2022-05-09 N	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-05-16 N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-05-23 N	2022-05-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-06-06 N	2022-06-08	-	< 0.010	< 0.000050	0.0225	75.7	0.00195	0.00363	1.43	86.4	< 0.000010	6.69	0.39	< 0.000010	< 0.000010	< 0.000030	0.00327	< 0.0010	
GH TC2	GH TC2 WS 2022-06-13 N	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-06-20 N	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-06-27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-07-04 N	2022-07-06	-	< 0.010	< 0.000050	0.0234	78.4	0.00338	0.00411	1.6	78.3	< 0.000010	7.11	0.4	< 0.000010	< 0.000010	< 0.000030	0.00311	< 0.0010	
GH TC2	GH TC2 WS 2022-07-11 N	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-08-01 N	2022-08-03	-	< 0.010	< 0.000050	0.0325	122	0.00345	0.0055	2.08	125	< 0.000010	7.63	0.474	< 0.000010	< 0.000010	< 0.000030	0.00516	< 0.0010	
GH TC2	GH TC2 WS SESMP 2022-08 N	2022-08-22	-	< 0.010	< 0.000050	0.046	190	0.00254	0.00738	2.7	201	< 0.000010	9.97	0.567	< 0.000010	< 0.000010	< 0.000030	0.00772	< 0.0010	
GH TC2	GH TC2 WS 2022-09-05 N	2022-09-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-09-14 N	2022-09-14	-	< 0.010	< 0.000050	0.0524	188	0.00114	0.00788	2.92	250	< 0.000010	10.6	0.64	< 0.000010	< 0.000010	< 0.000030	0.00841	0.0011	
GH TC2	GH TC2 WS 2022-09-21 N	2022-09-21	-	< 0.020	< 0.000100	0.0455	177	0.00128	0.00758	2.59	187	< 0.000020	9.9	0.587	< 0.000020	< 0.000020	< 0.000060	0.00811	< 0.0020	
GH TC2	GH TC2 WS 2022-09-22 N	2022-09-22	-	< 0.020	< 0.000100	0.0443	176	0.00098	0.00783	2.6	196	< 0.000020	9.98	0.587	< 0.000020	< 0.000020	< 0.000060	0.00809	< 0.0020	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals													
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>d</sup>
<b>Greenhills Operation</b>																	
GH_TC2	GH_TC2_WS_2022-09-23_N	2022-09-23	-	0.0026	0.00027	0.0002	0.0586	< 0.020	< 0.000050	0.026		0.0000078	226	< 0.00010	< 0.10	0.00023	
GH_TC2	GH_TC2_WS_2022-09-24_N	2022-09-24	-	< 0.0020	< 0.00020	< 0.00020	0.0552	< 0.040	< 0.000100	0.023	0.0000143	216	< 0.00020	< 0.20	< 0.00040		
GH_TC2	GH_TC2_WS_2022-09-25_N	2022-09-25	-	< 0.0020	< 0.00020	0.00028	0.0563	< 0.040	< 0.000100	0.025	< 0.0100	239	< 0.00020	< 0.20	< 0.00040		
GH_TC2	GH_TC2_WS_2022-09-26_N	2022-09-26	-	< 0.0020	< 0.00020	< 0.00020	0.0572	< 0.040	< 0.000100	0.025	< 0.0100	231	< 0.00020	< 0.20	< 0.00040		
GH_TC2	GH_TC2_WS_2022-09-27_N	2022-09-27	-	< 0.0010	0.00031	0.00021	0.0674	< 0.020	< 0.000050	0.026	0.0000074	254	< 0.00010	< 0.10	0.00029		
GH_TC2	GH_TC2_WS_2022-10-03_N	2022-10-03	-	0.0013	0.00027	0.00022	0.0672	< 0.020	< 0.000050	0.025	0.0000087	247	< 0.00010	< 0.10	0.00023		
GH_TC2	GH_TC2_WS_2022-11-07_N	2022-11-09	-	< 0.0010	0.00022	0.00021	0.0671	< 0.020	< 0.000050	0.022	0.0000122	239	< 0.00010	< 0.10	< 0.00020		
GH_WC1	GH_FOX1_WS_2022-01-03_N	2022-01-11	-	< 0.0010	0.00072	0.00016	0.04049333	< 0.020	< 0.000050	0.019333	2.47333E-05	211	< 0.00010	0.000147	0.000366687		
GH_WC1	GH_FOX2_WS_2022-02-07_N	2022-02-07	-	< 0.0020	0.00076333	< 0.00020	0.04163333	< 0.040	< 0.000100	0.019333	2.48333E-05	201.4	< 0.00020	< 0.00020	< 0.00040		
GH_WC1	GH_FOX2_WS_2022-03-07_N	2022-03-09	-	0.0023	0.00068333	< 0.00020	0.04063333	< 0.040	< 0.000100	0.018667	0.0000225	205	< 0.00020	< 0.20	0.000366687		
GH_WC1	GH_WC1_WS_2022-03-14_N	2022-03-16	-	0.0027	0.00092	0.00022	0.0627	< 0.040	< 0.000100	0.025	0.0000214	296	< 0.00020	< 0.20	< 0.00040		
GH_WC1	GH_WC1_WS_2022-03-21_N	2022-03-23	-	0.0022	0.00091	0.00016	0.06	< 0.020	< 0.000050	0.023	0.0000313	267	< 0.00010	0.00012	0.00034		
GH_WC1	GH_WC1_WS_2022-03-28_N	2022-03-30	-	0.0028	0.00065	0.00016	0.0649	< 0.020	< 0.000050	0.018	0.000032	169	< 0.00010	0.00013	0.00047		
GH_WC1	GH_WC1_WS_2022-04-04_N	2022-04-05	-	0.0028	0.00068	0.00017	0.0668	< 0.020	< 0.000050	0.017	0.0000365	182	< 0.00010	0.00017	0.00087		
GH_WC1	GH_WC1_WS_2022-04-11_N	2022-04-13	-	0.0022	0.00082	0.0002	0.0711	< 0.020	< 0.000050	0.019	0.0000377	213	< 0.00010	0.0002	0.00062		
GH_WC1	GH_WC1_WS_2022-04-18_N	2022-04-20	-	0.0017	0.00088	0.00016	0.0663	< 0.020	< 0.000050	0.02	0.0000434	238	< 0.00010	0.00019	0.00037		
GH_WC1	GH_WC1_WS_2022-04-25_N	2022-04-26	-	0.002	0.00085	0.00017	0.0691	< 0.020	< 0.000050	0.021	0.000037	223	< 0.00010	0.00017	0.00046		
GH_WC1	GH_WC1_WS_2022-05-02_N	2022-05-03	-	0.0011	0.0009	0.00019	0.0714	< 0.020	< 0.000050	0.022	0.0000368	249	< 0.00010	0.00019	0.00041		
GH_WC1	GH_WC1_WS_2022-05-09_N	2022-05-10	-	0.0032	0.0009	0.00019	0.077	< 0.020	< 0.000050	0.024	0.0000332	254	< 0.00010	0.00021	0.00064		
GH_WC1	GH_WC1_WS_2022-05-16_N	2022-05-17	-	< 0.0010	0.00105	0.0002	0.0714	< 0.020	< 0.000050	0.023	0.0000323	316	< 0.00010	0.00022	0.00042		
GH_WC1	GH_WC1_WS_2022-05-23_N	2022-05-25	-	< 0.0020	0.00112	< 0.00020	0.0673	< 0.040	< 0.000100	0.023	0.0000381	305	< 0.00020	0.00023	0.00046		
GH_WC1	GH_WC1_WS_2022-05-30_N	2022-05-31	-	0.004	0.00118	0.0002	0.0695	< 0.040	< 0.000100	0.027	0.0000321	308	< 0.00020	0.00024	0.00072		
GH_WC1	GH_WC1_WS_2022-06-06_N	2022-06-07	-	0.0022	0.00121	< 0.00020	0.0717	< 0.040	< 0.000100	0.026	0.0000226	314	< 0.00020	0.00023	0.00047		
GH_WC1	GH_WC1_WS_2022-06-13_N	2022-06-14	-	< 0.0010	0.00095	0.00021	0.0709	< 0.020	< 0.000050	0.025	0.0000355	262	< 0.00010	0.00018	0.00044		
GH_WC1	GH_WC1_WS_2022-06-20_N	2022-06-22	-	< 0.0020	0.00091	< 0.00020	0.0704	< 0.040	< 0.000100	0.026	0.0000399	232	< 0.00020	< 0.20	< 0.00040		
GH_WC1	GH_WC1_WS_2022-06-27_N	2022-06-29	-	0.0013	0.00121	0.0002	0.0714	< 0.020	< 0.000050	0.027	0.0000251	291	< 0.00010	0.0002	0.00045		
GH_WC1	GH_FOX2_WS_2022-07-04_N	2022-07-05	-	0.001968667	0.00075333	0.00019333	0.05347	< 0.040	< 0.000100	0.020667	0.0000321	180.4	< 0.00020	0.00017	0.001066667		
GH_WC1	GH_WC1_WS_2022-07-11_N	2022-07-12	-	< 0.0050	0.00128	< 0.00050	0.0665	< 0.100	< 0.000250	< 0.050	0.0000324	287	< 0.00050	< 0.50	< 0.00100		
GH_WC1	GH_WC1_WS_2022-08-01_N	2022-08-03	-	0.0057	0.00156	< 0.00050	0.0589	< 0.100	< 0.000250	< 0.050	< 0.0250	337	< 0.00050	< 0.50	< 0.00100		
GH_WC1	GH_FOX2_WS_2022-09-05_N	2022-09-07	-	< 0.0020	0.00103667	0.00017333	0.0345	< 0.040	< 0.000100	0.024	< 0.0100	231.4	< 0.00020	0.000233	< 0.00040		
GH_WC1	GH_WC1_WS_2022-09-12_N	2022-09-12	-	< 0.0020	0.00154	0.00023	0.0505	< 0.040	< 0.000100	0.031	0.0000128	361	< 0.00020	0.00031	< 0.00040		
GH_WC1	GH_WC1_WS_2022-10-03_N	2022-10-04	-	< 0.0020	0.00147	< 0.00020	0.0531	< 0.040	< 0.000100	0.03	< 0.0100	390	< 0.00020	0.00026	< 0.00040		
GH_WC1	GH_FOX2_WS_2022-11-07_N	2022-11-08	-	< 0.0010	0.00083	0.00013667	0.03923333	< 0.020	< 0.000050	0.019667	1.35667E-05	225	< 0.00010	0.000173	0.000353333		

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Greenhills Operation																				
GH_TC2	GH_TC2_WS_2022-09-23_N	2022-09-23	-	< 0.010	< 0.000050	0.0465	174	0.00064	0.00713	2.56	224	< 0.000010	9.8	0.585	< 0.000010	< 0.000010	< 0.00030	0.0079	< 0.0010	
GH_TC2	GH_TC2_WS_2022-09-24_N	2022-09-24	-	< 0.020	< 0.000100	0.0376	160	0.00076	0.007	2.34	154	< 0.000020	8.72	0.509	< 0.000020	< 0.00020	< 0.00060	0.00743	< 0.0020	
GH_TC2	GH_TC2_WS_2022-09-25_N	2022-09-25	-	< 0.020	< 0.000100	0.0407	173	0.00091	0.00754	2.45	168	< 0.000020	9.67	0.558	< 0.000020	< 0.00020	< 0.00060	0.00826	< 0.0020	
GH_TC2	GH_TC2_WS_2022-09-26_N	2022-09-26	-	< 0.020	< 0.000100	0.0397	167	0.00077	0.00802	2.4	167	< 0.000020	9.31	0.533	< 0.000020	< 0.00020	< 0.00060	0.00826	< 0.0020	
GH_TC2	GH_TC2_WS_2022-09-27_N	2022-09-27	-	< 0.010	< 0.000050	0.0369	194	0.0005	0.00885	2.91	199	< 0.000010	11.1	0.645	< 0.000010	< 0.00010	< 0.00030	0.009	< 0.0010	
GH_TC2	GH_TC2_WS_2022-10-03_N	2022-10-03	-	< 0.010	< 0.000050	0.0422	179	0.00293	0.00772	2.69	226	< 0.000010	10	0.56	< 0.000010	< 0.00010	< 0.00030	0.00749	< 0.0010	
GH_TC2	GH_TC2_WS_2022-11-07_N	2022-11-09	-	< 0.010	< 0.000050	0.042	171	0.00333	0.00875	2.35	128	< 0.000010	9.69	0.681	< 0.000010	< 0.00010	< 0.00030	0.00849	< 0.0010	
GH_WC1	GH_FOX1_WS_2022-01-03_N	2022-01-11	-	< 0.010	< 0.000050	0.090666667	142.0033	0.00063	0.039766667	3.41	173.6833333	< 0.000010	16.63766667	0.5824	1.53333E-05	< 0.00010	< 0.00030	0.009603333	0.0016	
GH_WC1	GH_FOX2_WS_2022-02-07_N	2022-02-07	-	< 0.020	< 0.000100	0.084333333	141.6683333	0.005333333	0.0406	3.363333333	172.35	< 0.000020	16.58333333	0.576066667	< 0.000020	< 0.00020	< 0.00060	0.00957	< 0.0020	
GH_WC1	GH_FOX2_WS_2022-03-07_N	2022-03-09	-	< 0.020	< 0.000100	0.083666667	136.6684333	0.004266667	0.036966667	3.18	156.35	< 0.000020	16.18333333	0.560403333	< 0.000020	< 0.00020	< 0.00060	0.009336667	< 0.0020	
GH_WC1	GH_WC1_WS_2022-03-14_N	2022-03-16	-	< 0.020	< 0.000100	0.116	186	0.00058	0.0502	4.44	215	< 0.000020	21.9	0.797	< 0.000020	< 0.00020	< 0.00060	0.0119	< 0.0020	
GH_WC1	GH_WC1_WS_2022-03-21_N	2022-03-23	-	< 0.010	< 0.000050	0.097	177	0.00062	0.046	4.19	215	< 0.000010	21.4	0.829	0.000014	< 0.00010	< 0.00030	0.013	0.0027	
GH_WC1	GH_WC1_WS_2022-03-28_N	2022-03-30	-	< 0.010	< 0.000050	0.0656	89.9	0.00105	0.0198	2.81	124	< 0.000010	12.3	0.522	< 0.000010	< 0.00010	< 0.00030	0.00557	0.0019	
GH_WC1	GH_WC1_WS_2022-04-04_N	2022-04-05	-	< 0.010	< 0.000050	0.0774	106	0.00053	0.0247	2.94	140	< 0.000010	14.3	0.537	< 0.000010	< 0.00010	< 0.00030	0.00683	0.0019	
GH_WC1	GH_WC1_WS_2022-04-11_N	2022-04-13	-	< 0.010	0.000063	0.0917	129	0.0007	0.0322	3.48	192	< 0.000010	16.8	0.623	0.000011	< 0.00010	< 0.00030	0.00843	0.0026	
GH_WC1	GH_WC1_WS_2022-04-18_N	2022-04-20	-	< 0.010	< 0.000050	0.11	147	0.00047	0.039	3.74	222	< 0.000010	18.2	0.675	0.000012	< 0.00010	< 0.00030	0.0104	0.0022	
GH_WC1	GH_WC1_WS_2022-04-25_N	2022-04-26	-	< 0.010	< 0.000050	0.0991	136	0.00061	0.0374	3.59	209	< 0.000010	17.6	0.657	0.000012	< 0.00010	< 0.00030	0.00966	0.0023	
GH_WC1	GH_WC1_WS_2022-05-02_N	2022-05-03	-	< 0.010	< 0.000050	0.106	154	0.00055	0.0464	4.2	250	< 0.000010	18.3	0.735	0.000015	< 0.00010	< 0.00030	0.0108	0.001	
GH_WC1	GH_WC1_WS_2022-05-09_N	2022-05-10	-	< 0.010	< 0.000050	0.114	157	0.00093	0.0494	4.27	242	< 0.000010	19.3	0.7	0.000014	0.00013	< 0.00030	0.0111	0.0029	
GH_WC1	GH_WC1_WS_2022-05-16_N	2022-05-17	-	< 0.010	< 0.000050	0.122	201	0.00068	0.0645	4.59	291	< 0.000010	22.1	0.804	0.000018	< 0.00010	< 0.00030	0.0134	0.001	
GH_WC1	GH_WC1_WS_2022-05-23_N	2022-05-25	-	< 0.020	< 0.000100	0.13	218	0.0008	0.0754	5.09	292	< 0.000020	22.1	0.757	< 0.000020	< 0.00020	< 0.00060	0.014	< 0.0020	
GH_WC1	GH_WC1_WS_2022-05-30_N	2022-05-31	-	< 0.020	< 0.000100	0.154	231	0.00079	0.0771	5.7	330	< 0.000020	23.5	0.828	0.000026	< 0.00020	< 0.00060	0.0157	0.004	
GH_WC1	GH_WC1_WS_2022-06-06_N	2022-06-07	-	< 0.020	< 0.000100	0.15	239	0.00088	0.0777	5.86	318	< 0.000020	23.1	0.868	< 0.000020	< 0.00020	< 0.00060	0.0161	< 0.0020	
GH_WC1	GH_WC1_WS_2022-06-13_N	2022-06-14	-	< 0.010	< 0.000050	0.113	194	0.00107	0.0575	4.72	292	< 0.000010	21.3	0.738	0.000018	< 0.00010	< 0.00030	0.0128	0.0014	
GH_WC1	GH_WC1_WS_2022-06-20_N	2022-06-22	-	< 0.020	< 0.000100	0.108	158	0.00064	0.0444	3.69	203	< 0.000020	16	0.61	< 0.000020	< 0.00020	< 0.00060	0.0103	< 0.0020	
GH_WC1	GH_WC1_WS_2022-06-27_N	2022-06-29	-	< 0.010	< 0.000050	0.14	204	0.00072	0.0631	5	289	< 0.000010	21.3	0.744	0.000015	< 0.00010	< 0.00030	0.0136	0.0017	
GH_WC1	GH_FOX2_WS_2022-07-04_N	2022-07-05	-	< 0.020	< 0.000100	0.073	122.0016667	0.00097	0.0379	3.103333333	176.35	< 0.000020	13.01566667	0.4754	< 0.000020	< 0.00020	< 0.00060	0.008303333	0.002466667	
GH_WC1	GH_WC1_WS_2022-07-11_N	2022-07-12	-	< 0.050	< 0.000250	0.159	222	0.00104	0.0813	5.38	298	< 0.000050	23.3	0.793	< 0.000050	< 0.00050	< 0.00150	0.0167	< 0.0050	
GH_WC1	GH_WC1_WS_2022-08-01_N	2022-08-03	-	< 0.050	< 0.000250	0.192	269	0.00122	0.1	6.53	371	< 0.000050	26.3	0.895	< 0.000050	< 0.00050	< 0.00150	0.0182	0.0065	
GH_WC1	GH_FOX2_WS_2022-09-05_N	2022-09-07	-	< 0.020	< 0.000100	0.145	208.6683333	0.000876667	0.0685	4.603333333	252.6833333	< 0.000020	19.48333333	0.539066667	2.13333E-05	< 0.00020	< 0.00060	0.01297	< 0.0020	
GH_WC1	GH_WC1_WS_2022-09-12_N	2022-09-12	-	< 0.020	< 0.000100	0.208	308	0.00096	0.101	6.77	460	< 0.000020	28.8	0.907	0.000029	< 0.00020	< 0.00060	0.0203	< 0.0020	
GH_WC1	GH_WC1_WS_2022-10-03_N	2022-10-04	-	< 0.020	< 0.000100	0.205	332	0.00103	0.1	7.23	424	< 0.000020	30.4	0.956	0.000027	< 0.00020	< 0.00060	0.0196	< 0.0020	
GH_WC1	GH_FOX2_WS_2022-11-07_N	2022-11-08	-	< 0.010	< 0.000050	0.122666667	178.335	0.000643333	0.044666667	3.86	176.6833333	< 0.000010	17.88333333	0.630733333	0.000016	< 0.00010	< 0.00030	0.011336667	< 0.0010	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

\* Guideline varies with hardness  
 \* Guideline varies with pH and water temperature  
 \* Guideline varies with chloride  
 \* Guideline varies with pH  
 \* Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals														
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper	
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>a</sup>	0.00002-0.00173 <sup>a</sup>	n/a	n/a	n/a	BLM <sup>b</sup>
Line Creek Operation																		
LC DCDS	LC DCDS WS Q1-2022 N	2022-01-05	-	0.0048	0.00052	0.00029	0.237	< 0.020	-	-	-	-	0.000258	127	< 0.00010	-	< 0.00020	
LC DCDS	LC DCDS WS 2022-01-10 N	2022-01-12	-	0.0023	0.00052	0.00027	0.226	< 0.020	< 0.000050	< 0.010	-	-	0.000247	123	< 0.00010	< 0.00010	0.00022	
LC DCDS	LC DCDS WS 2022-01-17 N	2022-01-19	-	0.0019	0.00057	0.00027	0.253	< 0.020	< 0.000050	< 0.010	-	-	0.000281	136	< 0.00010	< 0.00010	< 0.00020	
LC DCDS	LC DCDS WS 2022-01-24 N	2022-01-26	-	0.0016	0.00054	0.00026	0.225	< 0.020	< 0.000050	< 0.010	-	-	0.000257	127	< 0.00010	< 0.00010	0.00026	
LC DCDS	LC DCDS WS 2022-01-31 N	2022-02-01	-	0.0027	0.00057	0.00028	0.232	< 0.020	< 0.000050	< 0.010	-	-	0.000274	135	< 0.00010	< 0.00010	0.00026	
LC DCDS	LC DCDS MNT 2022-02-08 N	2022-02-09	-	0.0022	0.00058	0.00029	0.252	< 0.020	< 0.000050	< 0.010	-	-	0.000271	149	< 0.00010	< 0.00010	0.00024	
LC DCDS	LC DCDS WS 2022-02-14 N	2022-02-15	-	0.0027	0.00058	0.0003	0.238	< 0.020	< 0.000050	< 0.010	-	-	0.000271	138	< 0.00010	< 0.00010	0.00029	
LC DCDS	LC DCDS WS 2022-02-21 N	2022-02-22	-	0.0024	0.00055	0.00028	0.248	< 0.020	< 0.000050	< 0.010	-	-	0.000271	141	< 0.00010	< 0.00010	0.0002	
LC DCDS	LC DCDS WS 2022-02-28 N	2022-03-01	-	0.0021	0.00057	0.0003	0.257	< 0.020	< 0.000050	0.01	-	-	0.000243	131	< 0.00010	< 0.00010	< 0.00020	
LC DCDS	LC DCDS WS 2022-03-07 N	2022-03-08	-	0.0022	0.00055	0.0003	0.25	< 0.020	< 0.000050	< 0.010	-	-	0.000251	136	< 0.00010	< 0.00010	< 0.00020	
LC DCDS	LC DCDS WS 2022-03-14 N	2022-03-15	-	0.0021	0.00056	0.00029	0.251	< 0.020	< 0.000050	< 0.010	-	-	0.000281	132	< 0.00010	< 0.00010	0.0002	
LC DCDS	LC DCDS WS 2022-03-21 N	2022-03-23	-	0.0019	0.00056	0.00031	0.223	< 0.020	< 0.000050	< 0.010	-	-	0.000254	150	< 0.00010	< 0.10	< 0.00020	
LC DCDS	LC DCDS WS 2022-03-28 N	2022-03-30	-	0.00225	0.0003	0.00019	0.06705	< 0.020	< 0.000050	< 0.010	-	-	0.0000725	35.73	< 0.00010	< 0.10	0.000255	
LC DCDS	LC DCDS WS Q2-2022 N	2022-04-06	-	0.0036	0.00051	0.00026	0.132	< 0.020	< 0.000050	< 0.010	-	-	0.000153	73.6	< 0.00010	< 0.10	0.00036	
LC DCDS	LC DCDS WS 2022-04-11 N	2022-04-12	-	0.0033	0.00048	0.00029	0.143	< 0.020	< 0.000050	< 0.010	-	-	0.000138	63.1	< 0.00010	< 0.10	0.00032	
LC DCDS	LC DCDS WS 2022-04-18 N	2022-04-17	-	0.0026	0.00052	0.00029	0.142	< 0.020	< 0.000050	< 0.010	-	-	0.000165	77	< 0.00010	< 0.10	0.00027	
LC DCDS	LC DCDS WS 2022-04-25 N	2022-04-24	-	0.0036	0.00057	0.0003	0.125	< 0.020	< 0.000050	< 0.010	-	-	0.000173	75.2	< 0.00010	< 0.10	0.00025	
LC DCDS	LC DCDS MNT 2022-05-03 N	2022-05-03	-	0.0042	0.00062	0.0003	0.115	< 0.000020	< 0.000050	< 0.010	-	-	0.000171	66.2	< 0.00010	< 0.00010	0.0004	
LC DCDS	LC DCDS WS 2022-05-09 N	2022-05-11	-	0.0034	0.00065	0.0003	0.125	< 0.020	< 0.000050	< 0.010	-	-	0.00017	70.8	< 0.00010	< 0.10	0.00031	
LC DCDS	LC CC3 WS 2022-05-16 N	2022-05-17	-	0.01385	0.000645	0.00033	0.135	< 0.020	< 0.000050	< 0.010	-	-	0.0001835	49.62	0.000145	0.00011	0.000545	
LC DCDS	LC DCDS WS 2022-05-23 N	2022-05-24	-	0.0032	0.00063	0.00028	0.128	< 0.020	< 0.000050	< 0.010	-	-	0.000173	73.4	0.00011	< 0.10	0.00026	
LC DCDS	LC CC3 WS 2022-05-30 N	2022-05-31	-	0.0036	0.000655	0.000315	0.125	< 0.020	< 0.000050	0.01	-	-	0.0001795	68.8	< 0.00010	< 0.10	0.00033	
LC DCDS	LC DCDS MNT 2022-06-07 N	2022-06-07	-	0.0033	0.00066	0.0003	0.12	< 0.020	< 0.000050	< 0.010	-	-	0.000182	71.8	< 0.00010	< 0.10	0.00045	
LC DCDS	LC DCDS WS 2022-06-14 N	2022-06-14	-	0.0026	0.00062	0.00028	0.116	< 0.020	< 0.000050	< 0.010	-	-	0.000204	83.2	< 0.00010	< 0.10	0.00029	
LC DCDS	LC DCDS WS 2022-06-17 N	2022-06-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC DCDS	LC DCDS WS 2022-06-17 N#1	2022-06-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC DCDS	LC DCDS WS 2022-06-18 N	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC DCDS	LC CC3 WS 2022-06-20 N	2022-06-21	-	0.00455	0.00082	0.000325	0.1105	< 0.020	< 0.000050	0.01	-	-	0.000153	57.65	< 0.00010	0.000185	0.000405	
LC DCDS	LC DCDS WS 2022-06-27 N	2022-06-28	-	0.0038	0.0007	0.00037	0.134	< 0.020	< 0.000050	< 0.010	-	-	0.000199	67.7	< 0.00010	0.00011	0.00046	
LC DCDS	LC DCDS WS Q3-2022 N	2022-07-07	-	0.0037	0.00063	0.00028	0.15	< 0.020	< 0.000050	0.011	-	-	0.000196	82.4	< 0.00010	< 0.10	0.00031	
LC DCDS	LC CC3 WS 2022-07-11 N	2022-07-12	-	0.00305	0.000665	0.000315	0.1575	< 0.020	< 0.000050	0.0115	-	-	0.0002125	90.5	< 0.00010	< 0.10	0.00043	
LC DCDS	LC DCDS WS 2022-07-18 N	2022-07-18	-	0.003	0.00074	0.00036	0.159	< 0.020	< 0.000050	0.013	-	-	0.000246	98.2	< 0.00010	< 0.10	0.00188	
LC DCDS	LC DCDS WS 2022-07-25 N	2022-07-25	-	0.0028	0.0008	0.00034	0.162	< 0.020	< 0.000050	0.012	-	-	0.000226	97.9	0.0001	0.00011	0.00038	
LC DCDS	LC CC3 MNT 2022-08-02 N	2022-08-02	-	0.0024	0.000675	0.000355	0.1775	< 0.020	< 0.000050	0.012	-	-	0.0002655	103.5	< 0.00010	< 0.10	0.00041	
LC DCDS	LC DCDS WS 2022-08-08 N	2022-08-09	-	0.0073	0.00065	0.00029	0.188	< 0.020	< 0.000050	0.011	-	-	0.000246	113	< 0.00010	< 0.10	0.00023	
LC DCDS	LC DCDS WS SESMP 2022-08 N	2022-08-18	-	0.002	0.00067	0.00031	0.197	< 0.020	< 0.000050	0.011	-	-	0.000302	126	< 0.00010	< 0.10	0.00042	
LC DCDS	LC DCDS WS 2022-08-22 N	2022-08-23	-	0.0071	0.00066	0.00034	0.196	< 0.020	< 0.000050	0.012	-	-	0.000296	61.53	0.00075	0.0001	0.0003	
LC DCDS	LC DCDS WS 2022-08-29 N	2022-08-30	-	0.005	0.0007	0.0003	0.187	< 0.020	< 0.000050	0.012	-	-	0.000301	60.03	< 0.00010	< 0.10	0.00024	
LC DCDS	LC DCDS MNT 2022-09-06 N	2022-09-06	-	< 0.0010	0.0007	0.00037	0.206	< 0.020	< 0.000050	0.012	-	-	0.00019	138	< 0.00010	< 0.10	0.00026	
LC DCDS	LC DCDS WS 2022-09-12 N	2022-09-13	-	0.0023	0.00061	0.00029	0.242	< 0.020	< 0.000050	0.011	-	-	0.000312	136	< 0.00010	< 0.10	0.00024	
LC DCDS	LC DCDS WS 2022-09-19 N	2022-09-20	-	0.002	0.00062	0.00032	0.214	< 0.020	< 0.000050	0.011	-	-	0.000293	134	< 0.00010	< 0.10	0.00061	
LC DCDS	LC DCDS WS 2022-09-26 N	2022-09-27	-	0.002	0.0007	0.00033	0.234	< 0.020	< 0.000050	0.011	-	-	0.00033	76.53	< 0.00010	< 0.10	0.00022	
LC DCDS	MORTALITY PKG 8	2022-10-04	-	< 0.0010	0.00067	0.00036	0.226	< 0.020	< 0.000050	0.011	-	-	0.000354	143	< 0.00010	< 0.10	0.00026	
LC DCDS	LC DCDS MORTALITY 2022-10-05 N	2022-10-05	-	0.0016	0.00065	0.00036	0.217	< 0.020	< 0.000050	0.011	-	-	0.000322	142	0.00014	< 0.10	< 0.00020	
LC DCDS	LC DCDS MORTALITY 2022-10-06 N	2022-10-06	-	0.0015	0.00065	0.00037	0.235	< 0.020	< 0.000050	0.011	-	-	0.000339	146	< 0.00010	< 0.10	0.00025	
LC DCDS	LC DCDS MORTALITY 2022-10-07 N	2022-10-07	-	< 0.0010	0.00061	0.00028	0.199	< 0.020	< 0.000050	0.011	-	-	0.000315	142	< 0.00010	< 0.10	< 0.00020	
LC DCDS	LC DCDS WS 2022-10-10 N	2022-10-11	-	0.0014	0.00065	0.00027	0.238	< 0.020	< 0.000050	0.012	-	-	0.000324	150	< 0.00010	< 0.10	0.00021	
LC DCDS	LC CC3 WS 2022-10-17 N	2022-10-18	-	0.002	0.000635	0.000315	0.224	< 0.020	< 0.000050	0.01	-	-	0.0003295	147	< 0.00010	< 0.10	< 0.00020	
LC DCDS	LC DCDS WS 2022-10-24 N	2022-10-25	-	0.0014	0.00082	0.00031	0.227	< 0.020	< 0.000050	0.011	-	-	0.000322	154	< 0.00010	< 0.10	< 0.00020	
LC DCDS	LC SPDC WS 2022-10-31 N	2022-11-01	-	0.0015	0.00064	0.00035	0.212	< 0.020	< 0.000050	0.01	-	-	0.000358	150	< 0.00010	< 0.10	0.00033	

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup>



APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness (mg/L)	Dissolved Metals																
				Iron (mg/L)	Lead (mg/L)	Lithium (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Nickel (mg/L)	Potassium (mg/L)	Selenium (µg/L)	Silver (mg/L)	Sodium (mg/L)	Strontium (mg/L)	Thallium (mg/L)	Tin (mg/L)	Titanium (mg/L)	Uranium (mg/L)	Zinc (mg/L)	
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Line Creek Operation	LC DCDS WS Q1-2022 N	2022-01-05	-	< 0.010	-	0.04	47.5	0.00126	0.0126	2.72	84.3	< 0.000010	8.58	0.221	0.000017	-	< 0.00030	0.0028	0.0092	
	LC DCDS WS 2022-01-10 N	2022-01-12	-	< 0.010	< 0.000050	0.0399	46.7	0.00168	0.0116	2.65	71.9	< 0.000010	8.73	0.225	0.000016	< 0.00019	< 0.00030	0.00261	0.0181	
	LC DCDS WS 2022-01-17 N	2022-01-19	-	< 0.010	< 0.000050	0.0428	52.8	0.00126	0.0124	2.98	79.1	< 0.000010	9.64	0.25	0.000016	< 0.00010	< 0.00030	0.0029	0.0096	
	LC DCDS WS 2022-01-24 N	2022-01-26	-	< 0.010	< 0.000050	0.0386	48.4	0.00132	0.0115	2.74	78	< 0.000010	8.36	0.215	0.000016	< 0.00010	< 0.00030	0.00289	0.0089	
	LC DCDS WS 2022-01-31 N	2022-02-01	-	0.012	< 0.000050	0.04	52.2	0.00133	0.0122	2.86	82.4	< 0.000010	8.95	0.234	0.000015	< 0.00010	< 0.00030	0.00308	0.0096	
	LC DCDS WS 2022-02-08 N	2022-02-09	-	< 0.010	< 0.000050	0.0424	54.9	0.00132	0.012	2.93	85.4	< 0.000010	8.8	0.236	0.000016	< 0.00010	< 0.00030	0.00291	0.0095	
	LC DCDS WS 2022-02-14 N	2022-02-15	-	< 0.010	< 0.000050	0.0372	50.1	0.00148	0.0118	2.9	78.5	< 0.000010	8.64	0.218	0.000016	0.00059	< 0.00030	0.00277	0.0099	
	LC DCDS WS 2022-02-21 N	2022-02-22	-	< 0.010	< 0.000050	0.0381	52.4	0.00122	0.0112	2.84	90	< 0.000010	8.55	0.219	0.000016	< 0.00010	< 0.00030	0.00285	0.0081	
	LC DCDS WS 2022-02-28 N	2022-03-01	-	< 0.010	< 0.000050	0.0391	48.6	0.00117	0.0097	3.21	74.2	< 0.000010	8.36	0.223	0.000017	< 0.00010	< 0.00030	0.00292	0.0087	
	LC DCDS WS 2022-03-07 N	2022-03-08	-	< 0.010	< 0.000050	0.0385	51.7	0.00096	0.0103	2.92	85.6	< 0.000010	8.51	0.222	0.000015	< 0.00010	< 0.00030	0.00317	0.0086	
	LC DCDS WS 2022-03-14 N	2022-03-15	-	< 0.010	< 0.000050	0.0379	51.4	0.00124	0.0109	3.02	78	< 0.000010	8.45	0.228	0.000016	< 0.00010	< 0.00030	0.00325	0.008	
	LC DCDS WS 2022-03-21 N	2022-03-23	-	< 0.010	< 0.000050	0.0379	55.9	0.00108	0.00994	2.82	78.8	< 0.000010	7.74	0.22	0.000015	< 0.00010	< 0.00030	0.00295	0.0074	
	LC DCDS WS 2022-03-28 N	2022-03-30	-	< 0.010	< 0.000050	0.0117	12.9525	0.00177	0.003415	1.055	16.225	< 0.000010	1.965	0.0541	0.0000105	< 0.00010	< 0.00030	0.000755	0.0033	
	LC DCDS WS Q2-2022 N	2022-04-06	-	< 0.010	< 0.000050	0.0198	28.4	0.00108	0.00705	1.91	33.3	< 0.000010	3.82	0.11	0.000012	< 0.00010	< 0.00030	0.00152	0.0067	
	LC DCDS WS 2022-04-11 N	2022-04-12	-	< 0.010	< 0.000050	0.0179	25.6	0.00066	0.00663	1.74	30	< 0.000010	3.18	0.0966	< 0.000010	< 0.00010	< 0.00030	0.0013	0.0052	
	LC DCDS WS 2022-04-18 N	2022-04-17	-	< 0.010	< 0.000050	0.0215	32	0.00066	0.00778	2.08	41	< 0.000010	4.1	0.123	0.000011	< 0.00010	< 0.00030	0.00172	0.0058	
	LC DCDS WS 2022-04-25 N	2022-04-24	-	< 0.010	< 0.000050	0.0202	28.6	0.00087	0.00827	1.97	39.7	< 0.000010	3.65	0.108	0.000015	< 0.00010	< 0.00030	0.00166	0.0069	
	LC DCDS WS 2022-05-03 N	2022-05-03	-	< 0.010	< 0.000050	0.0156	25	0.00121	0.00807	1.92	35.1	< 0.000010	2.72	0.099	0.000014	< 0.00010	< 0.00030	0.00133	0.0073	
	LC DCDS WS 2022-05-09 N	2022-05-11	-	< 0.010	< 0.000050	0.0166	27.7	0.00115	0.00892	1.81	36.6	< 0.000010	3.24	0.106	0.000014	< 0.00010	< 0.00030	0.00139	0.0067	
	LC CC3 WS 2022-05-16 N	2022-05-17	-	0.023	0.0000515	0.01845	19.30166667	0.00257	0.009295	1.456666667	39.7	< 0.000010	2.346666667	0.1175	0.000014	0.0002	< 0.00030	0.000435	0.00165	0.00705
	LC DCDS WS 2022-05-23 N	2022-05-24	-	< 0.010	< 0.000050	0.0198	27.9	0.0011	0.0091	1.98	43.8	< 0.000010	3.42	0.119	0.000014	< 0.00010	< 0.00030	0.00144	0.0076	
	LC CC3 WS 2022-05-30 N	2022-05-31	-	< 0.010	< 0.000050	0.0167	25.8	0.00162	0.00939	2.025	38.7	< 0.000010	2.765	0.102	0.0000115	< 0.00010	< 0.00030	0.001435	0.0066	
	LC DCDS WS 2022-06-07 N	2022-06-07	-	< 0.010	< 0.000050	0.0174	28.3	0.00179	0.0103	1.9	41	< 0.000010	3.15	0.111	0.000016	< 0.00010	< 0.00030	0.00144	0.0079	
	LC DCDS WS 2022-06-13 N	2022-06-14	-	< 0.010	< 0.000050	0.0203	28.7	0.00137	0.0116	2.12	45.3	< 0.000010	3.49	0.13	0.000013	< 0.00010	< 0.00030	0.00148	0.0087	
	LC DCDS WS 2022-06-17 N	2022-06-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	LC DCDS WS 2022-06-18 N	2022-06-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	LC CC3 WS 2022-06-20 N	2022-06-21	-	< 0.010	< 0.000050	0.01235	21.85	0.0026	0.00773	1.94	32.4	< 0.000010	2.195	0.08615	0.0000125	< 0.00010	< 0.00030	0.00115	0.00545	
	LC DCDS WS 2022-06-27 N	2022-06-28	-	< 0.010	< 0.000050	0.0167	26.5	0.00156	0.0105	2.09	42	< 0.000010	2.97	0.105	0.000016	< 0.00010	< 0.00030	0.00151	0.0072	
	LC DCDS WS Q3-2022 N	2022-07-07	-	< 0.010	< 0.000050	0.0214	32	0.00131	0.0113	2.07	50.4	< 0.000010	3.7	0.125	0.000016	< 0.00010	< 0.00030	0.0015	0.0082	
	LC CC3 WS 2022-07-11 N	2022-07-12	-	< 0.010	< 0.000050	0.023	34.3	0.0013	0.01205	2.315	55.2	< 0.000010	4.36	0.139	0.0000165	< 0.00010	< 0.00030	0.001685	0.0082	
	LC DCDS WS 2022-07-18 N	2022-07-18	-	< 0.010	< 0.000050	0.0262	37.4	0.00134	0.0142	2.6	68.2	< 0.000010	5.07	0.16	0.00002	< 0.00010	< 0.00030	0.00208	0.0097	
	LC DCDS WS 2022-07-25 N	2022-07-25	-	< 0.010	< 0.000050	0.0285	39.3	0.00128	0.0135	2.61	71.6	< 0.000010	5.31	0.165	0.000023	< 0.00010	< 0.00030	0.00213	0.0097	
	LC CC3 MNT 2022-08-02 N	2022-08-02	-	< 0.010	< 0.000050	0.02925	39	0.001495	0.01435	2.66	78.3	< 0.000010	6.03	0.1725	0.00002	< 0.00010	< 0.00030	0.00213	0.0104	
	LC DCDS WS 2022-08-08 N	2022-08-09	-	< 0.010	< 0.000050	0.0334	45.3	0.00168	0.0147	2.63	76.2	< 0.000010	6.71	0.181	0.00002	< 0.00010	< 0.00030	0.0023	0.0111	
	LC DCDS WS SESMP 2022-08 N	2022-08-18	-	< 0.010	< 0.000050	0.0352	47.3	0.00201	0.0156	2.77	94.4	< 0.000010	7.28	0.191	0.000019	< 0.00010	< 0.00030	0.00258	0.0108	
	LC DCDS WS 2022-08-22 N	2022-08-23	-	< 0.010	< 0.000050	0.0355	24.9525	0.00246	0.016	1.425	86.3	< 0.000010	3.925	0.193	0.00002	< 0.00010	< 0.00030	0.00249	0.011	
	LC DCDS WS 2022-08-29 N	2022-08-30	-	< 0.010	< 0.000050	0.0433	27.0525	0.00178	0.0154	1.39	90.6	< 0.000010	3.73	0.198	0.000021	< 0.00010	< 0.00030	0.00273	0.0111	
	LC DCDS WS 2022-09-06 N	2022-09-06	-	< 0.010	< 0.000050	0.0369	53.8	0.00182	0.0138	2.81	109	< 0.000010	7.65	0.205	0.00002	< 0.00010	< 0.00030	0.00263	0.0061	
	LC DCDS WS 2022-09-12 N	2022-09-13	-	< 0.010	< 0.000050	0.036	52.9	0.00158	0.0161	2.93	97.7	< 0.000010	8.56	0.208	0.00002	< 0.00010	< 0.00030	0.00266	0.0116	
	LC DCDS WS 2022-09-19 N	2022-09-20	-	< 0.010	< 0.000050	0.037	54.6	0.00177	0.0158	3.11	103	< 0.000010	8.85	0.222	0.00002	< 0.00010	< 0.00030	0.00279	0.0115	
	LC DCDS WS 2022-09-26 N	2022-09-27	-	< 0.010	< 0.000050	0.0435	27.9025	0.00168	0.0167	1.495	112	< 0.000010	4.65	0.22	0.00002	< 0.00010	< 0.00030	0.00311	0.0129	
	MORTALITY PKG 8	2022-10-04	-	< 0.010	< 0.000050	0.047	51.8	0.00174	0.0173	3.12	112	< 0.000010	9.29	0.232	0.00002	< 0.00010	< 0.00030	0.00309	0.0114	
	LC DCDS WS 2022-10-05 N	2022-10-05	-	< 0.010	< 0.000050	0.0422	55.9	0.00176	0.0168	2.96	110	< 0.000010	9.42	0.234	0.000017	< 0.00010	< 0.00030	0.003	0.0127	
	LC DCDS WS 2022-10-06 N	2022-10-06	-	< 0.010	< 0.000050	0.0405	52.6	0.00175	0.0161	2.95	107	< 0.000010	9.6	0.222	0.000019	< 0.00010	< 0.00030	0.00325	0.0128	
	LC DCDS WS 2022-10-07 N	2022-10-07	-	< 0.010	< 0.000050	0.0413	51	0.0018	0.0151	3.16	127	< 0.000010	10	0.222	0.000018	< 0.00010	< 0.00030	0.00275	0.011	
	LC DCDS WS 2022-10-10 N	2022-10-11	-	< 0.010	< 0.000050	0.0447	56.3	0.0017	0.0168	3.18	118	< 0.000010	10.1	0.235	0.000019	< 0.00010	< 0.00030	0.00311	0.0128	
	LC CC3 WS 2022-10-17 N	2022-10-18																		

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper			
				Acute mg/L	Chronic mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Acute mg/L	Chronic mg/L	mg/L	mg/L	mg/L	mg/L	Acute mg/L	Chronic mg/L
BC WQG FWAL			n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>b</sup>	0.00002-0.00173 <sup>b</sup>	n/a	n/a	n/a	n/a	BLM <sup>c</sup>	
Line Creek Operation																				
LC DCDS	LC CC3 WS 2022-10-31 N	2022-11-01	-	0.0017		0.00063	0.00027	0.216	< 0.020	< 0.000050	0.011		0.000316		147	< 0.00010	< 0.10		0.00028	
LC DCDS	LC DCDS MNT 2022-11-08 N	2022-11-08	-	0.0017		0.00059	0.00031	0.224	< 0.020	< 0.000050	0.01		0.000315		150	< 0.00010	< 0.10		0.0002	
LC DCDS	LC DCDS WS 2022-11-14 N	2022-11-15	-	0.0015		0.00063	0.00034	0.218	< 0.020	< 0.000050	0.01		0.000371		164	< 0.00010	< 0.10		0.00022	
LC DCDS	LC DCDS WS 2022-11-21 N	2022-11-22	-	0.0023		0.0006	0.00032	0.225	< 0.020	< 0.000050	0.01		0.000325		153	< 0.00010	< 0.10		0.0003	
LC LC12	LC LC12 MNT 2022-05-03 N	2022-05-02	-	0.0013		0.00018	0.00017	0.0534	< 0.020	< 0.000050	< 0.010		0.000118		111	0.00021	< 0.10		0.00032	
LC LC12	LC LC12 WS 2022-05-09 N	2022-05-09	-	-		-	-	-	-	-	-		-		-	-	-	-	-	
LC LC12	LC LC12 WS 2022-05-16 N	2022-05-18	-	-		-	-	-	-	-	-		-		-	-	-	-	-	
LC LC12	LC LC12 WS 2022-05-23 N	2022-05-24	-	-		-	-	-	-	-	-		-		-	-	-	-	-	
LC LC12	LC LC12 WS 2022-05-30 N	2022-05-30	-	-		-	-	-	-	-	-		-		-	-	-	-	-	
LC LC12	LC LC12 MNT 2022-06-07 N	2022-06-06	-	0.0017		0.00015	0.00012	0.028	< 0.020	< 0.000050	< 0.010		0.000109		67.1	0.00013	0.00012		0.00031	
LC LC12	LC LC12 WS 2022-06-13 N	2022-06-13	-	-		-	-	-	-	-	-		-		-	-	-	-	-	
LC LC12	LC LC12 WS 2022-06-20 N	2022-06-20	-	-		-	-	-	-	-	-		-		-	-	-	-	-	
LC LC12	LC LC12 WS 2022-06-27 N	2022-06-27	-	-		-	-	-	-	-	-		-		-	-	-	-	-	
LC LC12	LC LC12 WS Q3-2022 N	2022-07-05	-	0.001		0.00013	0.00012	0.0281	< 0.020	< 0.000050	< 0.010		0.000108		61.5	0.00014	< 0.10		0.00025	
LC LC12	LC LC12 WS 2022-07-11 N	2022-07-13	-	-		-	-	-	-	-	-		-		-	-	-	-	-	
LC LCDSSLCC	LC LCDSSLCC WS Q1-2022 N	2022-01-04	-	< 0.0010		0.0002	< 0.00010	0.0656	< 0.020	-	-		0.000111		120	0.00012	-		< 0.00020	
LC LCDSSLCC	LC LCDSSLCC WS 2022-01-10 N	2022-01-10	-	< 0.0010		0.00018	< 0.00010	0.0682	< 0.020	-	-		0.000109		120	< 0.00010	-		< 0.00020	
LC LCDSSLCC	LC LCDSSLCC WS 2022-01-17 N	2022-01-17	-	< 0.0010		0.0002	< 0.00010	0.0675	< 0.020	< 0.000050	0.014		0.000114		124	0.00011	< 0.00010		< 0.00020	
LC LCDSSLCC	LC LCDSSLCC WS 2022-01-24 N	2022-01-25	-	0.0015		0.0002	< 0.00010	0.0726	< 0.020	< 0.000050	0.013		0.000111		124	0.00015	< 0.00010		< 0.00020	
LC LCDSSLCC	LC LCDSSLCC WS 2021-01-31 N	2022-02-01	-	0.0011		0.0002	< 0.00010	0.0736	< 0.020	< 0.000050	0.014		0.000104		120	0.00019	< 0.00010		0.0002	
LC LCDSSLCC	LC LCDSSLCC MNT 2021-02-08 N	2022-02-08	-	0.0012		0.00019	< 0.00010	0.0739	< 0.020	< 0.000050	0.014		0.0000961		126	0.0002	< 0.00010		0.00022	
LC LCDSSLCC	LC LCDSSLCC WS 2021-02-14 N	2022-02-15	-	0.0014		0.00021	< 0.00010	0.0705	< 0.020	< 0.000050	0.015		0.000107		127	< 0.00010	< 0.00010		0.00020	
LC LCDSSLCC	LC LCDSSLCC WC 2022-02-18 N	2022-02-18	-	-		-	-	-	-	-	-		-		136	-	-	-	-	
LC LCDSSLCC	LC LCDSSLCC WS 2022-02-21 N	2022-02-22	-	0.0018		0.00021	< 0.00010	0.079	< 0.020	< 0.000050	0.015		0.000128		142	0.0001	< 0.00010		0.00034	
LC LCDSSLCC	LC LC1 WS 2022-02-28 N	2022-03-01	-	0.0084		0.000215	-	0.074	< 0.020	< 0.000050	0.013		0.00013015		147	0.000945	< 0.00010		-	
LC LCDSSLCC	LC LCDSSLCC WS 2022-02-28 N	2022-03-01	-	-		< 0.00010	-	-	-	-	-		-		-	-	-	-	< 0.00020	
LC LCDSSLCC	LC LCDSSLCC MNT 2021-03-07 N	2022-03-08	-	< 0.0010		0.00021	< 0.00010	0.0771	< 0.020	< 0.000050	0.013		0.000099		132	0.00016	< 0.00010		< 0.00020	
LC LCDSSLCC	LC LCDSSLCC WS 2022-03-14 N	2022-03-15	-	< 0.0010		0.0002	< 0.00010	0.077	< 0.020	< 0.000050	0.014		0.000089		129	0.00014	< 0.00010		< 0.00020	
LC LCDSSLCC	LC LCDSSLCC WS 2022-03-21 N	2022-03-22	-	0.0022		0.00022	< 0.00010	0.074	< 0.020	< 0.000050	0.015		0.000105		131	0.00053	< 0.00010		< 0.00020	
LC LCDSSLCC	LC LCDSSLCC WS 2022-03-28 N	2022-03-28	-	0.0013		0.00026	0.0001	0.0772	< 0.020	< 0.000050	0.016		0.000132		150	0.00014	< 0.10		0.00023	
LC LCDSSLCC	LC LCDSSLCC WS Q2-2022 N	2022-04-07	-	0.0243		0.00026	0.00011	0.0814	< 0.020	< 0.000050	0.015		0.000161		135	0.00028	0.0001		0.0007	
LC LCDSSLCC	LC LCDSSLCC WS 2022-04-11 N	2022-04-11	-	0.001		0.00026	< 0.00010	0.0672	< 0.020	< 0.000050	0.015		0.000115		138	0.00013	< 0.10		0.00024	
LC LCDSSLCC	LC LCDSSLCC WS 2022-04-18 N	2022-04-19	-	0.0015		0.00024	< 0.00010	0.0648	< 0.020	< 0.000050	0.014		0.000108		118	0.00021	< 0.10		0.00023	
LC LCDSSLCC	LC LCDSSLCC WS 2022-04-25 N	2022-04-25	-	0.0013		0.00023	< 0.00010	0.0681	< 0.020	< 0.000050	0.015		0.00011		121	0.00016	< 0.10		< 0.00020	
LC LCDSSLCC	LC LCDSSLCC MNT 2022-05-03 N	2022-05-04	-	< 0.0010		0.0002	< 0.00010	0.0538	< 0.020	< 0.000050	0.013		0.000119		107	0.0002	< 0.10		0.00028	
LC LCDSSLCC	LC LCDSSLCC WS 2022-05-09 N	2022-05-09	-	< 0.0010		0.00031	0.00012	0.0392	< 0.020	< 0.000050	0.011		0.000134		78.5	0.00012	< 0.10		0.00023	
LC LCDSSLCC	LC LCDSSLCC WS 2022-05-16 N	2022-05-17	-	0.0023		0.00019	0.00012	0.0439	< 0.020	< 0.000050	0.011		0.000141		86	0.00014	< 0.10		0.00055	
LC LCDSSLCC	LC LCDSSLCC WS 2022-05-23 N	2022-05-24	-	< 0.0010		0.0002	< 0.00010	0.0434	< 0.020	< 0.000050	0.011		0.000141		90.5	0.00015	< 0.10		0.0002	
LC LCDSSLCC	LC LCDSSLCC WS 2022-05-30 N	2022-05-31	-	0.002		0.00018	0.00011	0.0334	< 0.020	< 0.000050	< 0.010		0.000149		63.8	0.00013	< 0.10		0.00029	
LC LCDSSLCC	LC LCDSSLCC MNT 2022-06-07 N	2022-06-06	-	0.0024		0.00015	0.00011	0.0271	< 0.020	< 0.000050	< 0.010		0.000133		55	0.00011	< 0.10		0.00028	
LC LCDSSLCC	LC LCDSSLCC WS 2022-06-13 N	2022-06-14	-	0.0026		0.00016	0.00011	0.0276	< 0.020	< 0.000050	< 0.010		0.000164		51.9	0.00014	< 0.10		0.00031	
LC LCDSSLCC	LC LCDSSLCC WS 2022-06-20 N	2022-06-22	-	< 0.0010		0.00036	0.00013	0.0222	< 0.020	< 0.000050	0.012		0.000378		58.9	0.00014	0.00019		0.0006	
LC LCDSSLCC	LC LCDSSLCC WS 2022-06-27 N	2022-06-27	-	0.0021		0.00021	0.00011	0.0316	< 0.020	< 0.000050	< 0.010		0.000234		59.7	0.00012	< 0.10		0.00043	
LC LCDSSLCC	LC LCDSSLCC WS Q3-2022 N	2022-07-05	-	0.0017		0.00016	0.00012	0.0298	< 0.020	< 0.000050	< 0.010		0.00024		57.7	0.00018	< 0.10		0.00037	
LC LCDSSLCC	LC LCDSSLCC WS 2022-07-11 N	2022-07-11	-	< 0.0010		0.00019	< 0.00010	0.0335	< 0.020	< 0.000050	< 0.010		0.000273		66.8	0.00015	< 0.10		0.00122	
LC LCDSSLCC	LC LCDSSLCC WS 2022-07-18 N	2022-07-19	-	0.0014		0.00021	0.00012	0.0426	< 0.020	< 0.000050	0.012		0.000311		77	0.00017	< 0.10		0.00029	
LC LCDSSLCC	LC LCDSSLCC WS 2022-07-25 N	2022-07-28	-	< 0.0010		0.00022	0.00011	0.0491	< 0.020	< 0.000050	0.013		0.000311		85	0.00014	< 0.10		0.00026	
LC LCDSSLCC	LC LCDSSLCC MNT 2022-08-02 N	2022-08-03	-	< 0.0010		0.00021	0.0001	0.0566	< 0.020	< 0.000050	0.014		0.000285		91	0.0001	< 0.10		0.00028	
LC LCDSSLCC	LC LCDSSLCC WS 2022-08-08 N	2022-08-09	-	0.0036		0.00024	0.00011	0.0804	< 0.020	< 0.000050	0.015		0.000228		95.6	0.00015	< 0.10		0.00022	
LC LCDSSLCC	LC LCDSSLCC WS 2022-08-15 N	2022-08-16	-	0.0047		0.00022	0.00012	0.0631	< 0.020	< 0.000050	0.016		0.000199		98.9	0.00014	< 0.10		0.0002	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
			Acute																	
<b>BC WQG FWAL</b>			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Line Creek Operation</b>																				
LC DCDS	LC CC3 WS 2022-10-31 N	2022-11-01	-	< 0.010	< 0.000050	0.0464	53.9	0.00142	0.016	2.97	116	< 0.000010	9.95	0.236	0.000021	< 0.00010	< 0.00030	0.00327	0.0116	
LC DCDS	LC DCDS MNT 2022-11-08 N	2022-11-08	-	< 0.010	< 0.000050	0.0469	57.3	0.0021	0.0155	3.01	108	< 0.000010	10.3	0.25	0.000018	< 0.00010	< 0.00030	0.00341	0.0124	
LC DCDS	LC DCDS WS 2022-11-14 N	2022-11-15	-	< 0.010	< 0.000050	0.0476	64.3	0.00211	0.0179	3.33	128	< 0.000010	11.8	0.237	0.000021	< 0.00010	< 0.00030	0.00371	0.0136	
LC DCDS	LC DCDS WS 2022-11-21 N	2022-11-22	-	< 0.010	< 0.000050	0.0486	66.9	0.00234	0.0175	3.29	149	< 0.000010	11.5	0.25	0.000019	< 0.00010	< 0.00030	0.00388	0.0151	
LC LC12	LC LC12 MNT 2022-05-03 N	2022-05-02	-	< 0.010	< 0.000050	0.012	55	< 0.00010	0.00742	1.34	51.7	< 0.000010	1.42	0.179	< 0.00010	< 0.00010	< 0.00030	0.00572	0.0076	
LC LC12	LC LC12 WS 2022-05-09 N	2022-05-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LC12	LC LC12 WS 2022-05-16 N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LC12	LC LC12 WS 2022-05-23 N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LC12	LC LC12 WS 2022-05-30 N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LC12	LC LC12 MNT 2022-06-07 N	2022-06-06	-	< 0.010	< 0.000050	0.008	28.2	< 0.00010	0.00576	0.908	31.6	< 0.000010	0.773	0.121	< 0.000010	< 0.00010	< 0.00030	0.00301	0.0075	
LC LC12	LC LC12 WS 2022-06-13 N	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LC12	LC LC12 WS 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LC12	LC LC12 WS 2022-06-27 N	2022-06-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LC12	LC LC12 WS Q3-2022 N	2022-07-05	-	< 0.010	< 0.000050	0.0076	27.3	< 0.00010	0.00512	0.911	28.4	< 0.000010	0.75	0.107	< 0.000010	< 0.00010	< 0.00030	0.00286	0.0065	
LC LC12	LC LC12 WS 2022-07-11 N	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LC LCDSSLCC	LC LCDSSLCC WS Q1-2022 N	2022-01-04	-	< 0.010	-	0.0487	57.4	0.00366	0.00419	1.52	46.6	< 0.000010	9.74	0.231	< 0.000010	-	< 0.00030	0.00385	0.0038	
LC LCDSSLCC	LC LCDSSLCC WS 2022-01-10 N	2022-01-10	-	< 0.010	-	0.0469	55.3	0.0046	0.00423	1.52	40.3	< 0.000010	9.93	0.232	< 0.000010	-	< 0.00030	0.00396	0.0039	
LC LCDSSLCC	LC LCDSSLCC WS 2022-01-17 N	2022-01-17	-	< 0.010	< 0.000050	0.0492	55	0.00418	0.00433	1.52	42.3	< 0.000010	10	0.228	< 0.000010	< 0.00010	< 0.00030	0.00395	0.0039	
LC LCDSSLCC	LC LCDSSLCC WS 2022-01-24 N	2022-01-25	-	< 0.010	< 0.000050	0.0443	59	0.00368	0.00441	1.59	43.3	< 0.000010	10.8	0.245	< 0.000010	0.00015	< 0.00030	0.00397	0.0041	
LC LCDSSLCC	LC LCDSSLCC WS 2022-01-31 N	2022-02-01	-	< 0.010	< 0.000050	0.0473	60.2	0.00397	0.00441	1.54	43.3	< 0.000010	11.3	0.241	< 0.000010	< 0.00010	< 0.00030	0.00388	0.0054	
LC LCDSSLCC	LC LCDSSLCC MNT 2021-02-08 N	2022-02-08	-	< 0.010	< 0.000050	0.0495	58.1	0.00423	0.00417	1.66	43.8	< 0.000010	11.1	0.236	< 0.000010	< 0.00010	< 0.00030	0.00398	0.0043	
LC LCDSSLCC	LC LCDSSLCC WS 2021-02-14 N	2022-02-15	-	< 0.010	< 0.000050	0.0497	59.4	0.00504	0.00457	1.72	47.4	< 0.000010	11.7	0.246	< 0.000010	< 0.00010	< 0.00030	0.00404	0.0043	
LC LCDSSLCC	LC LCDSSLCC WC 2022-02-18 N	2022-02-18	-	-	-	66.4	-	-	-	1.56	-	-	11.8	-	-	-	-	-	-	
LC LCDSSLCC	LC LCDSSLCC WS 2022-02-21 N	2022-02-22	-	< 0.010	< 0.000050	0.0529	67.4	0.00584	0.00459	1.82	59.5	< 0.000010	12.7	0.268	< 0.000010	< 0.00010	< 0.00030	0.00438	0.006	
LC LCDSSLCC	LC CC1 WS 2022-02-28 N	2022-03-01	-	-	< 0.000050	0.05075	63	0.00598	0.0041	1.6	44.4	< 0.000010	11.75	0.2435	< 0.000010	-	< 0.00030	0.00366	0.00485	
LC LCDSSLCC	LC LCDSSLCC WS 2022-02-28 N	2022-03-01	-	< 0.010	< 0.000050	-	-	-	-	-	-	-	-	-	-	< 0.00010	-	-	-	
LC LCDSSLCC	LC LCDSSLCC MNT 2021-03-07 N	2022-03-08	-	< 0.010	< 0.000050	0.0482	60.1	0.00399	0.00389	1.7	49.2	< 0.000010	12	0.248	< 0.000010	< 0.00010	< 0.00030	0.00413	0.0039	
LC LCDSSLCC	LC LCDSSLCC WS 2022-03-14 N	2022-03-15	-	< 0.010	< 0.000050	0.0487	60	0.0038	0.00422	1.74	46.1	< 0.000010	12.3	0.259	< 0.000010	< 0.00010	< 0.00030	0.00413	0.0037	
LC LCDSSLCC	LC LCDSSLCC WS 2022-03-21 N	2022-03-22	-	< 0.010	< 0.000050	0.0526	63.4	0.00567	0.00461	1.8	52.5	< 0.000010	12.7	0.252	< 0.000010	< 0.00010	< 0.00030	0.00428	0.006	
LC LCDSSLCC	LC LCDSSLCC WS 2022-03-28 N	2022-03-28	-	< 0.010	< 0.000050	0.0544	70.7	0.0068	0.00539	1.97	57.4	< 0.000010	13.5	0.276	< 0.000010	< 0.00010	< 0.00030	0.00453	0.0067	
LC LCDSSLCC	LC LCDSSLCC WS Q2-2022 N	2022-04-07	-	0.035	0.000122	0.0526	55.7	0.011	0.00495	1.67	51.7	< 0.000010	10.4	0.232	< 0.000010	0.00016	0.0003	0.00382	0.0014	
LC LCDSSLCC	LC LCDSSLCC WS 2022-04-11 N	2022-04-11	-	< 0.010	< 0.000050	0.0555	59.3	0.00621	0.00507	1.67	50.6	< 0.000010	10.4	0.245	< 0.000010	< 0.00010	< 0.00030	0.00388	0.0047	
LC LCDSSLCC	LC LCDSSLCC WS 2022-04-18 N	2022-04-19	-	< 0.010	< 0.000050	0.0492	56.4	0.00476	0.00432	1.57	51.1	< 0.000010	9.63	0.233	< 0.000010	< 0.00010	< 0.00030	0.00382	0.0041	
LC LCDSSLCC	LC LCDSSLCC WS 2022-04-25 N	2022-04-25	-	< 0.010	< 0.000050	0.0529	54.8	0.00521	0.00442	1.55	48.4	< 0.000010	9.62	0.219	< 0.000010	< 0.00010	< 0.00030	0.0036	0.0041	
LC LCDSSLCC	LC LCDSSLCC MNT 2022-05-03 N	2022-05-04	-	< 0.010	< 0.000050	0.0412	48	0.00293	0.00425	1.34	44.5	< 0.000010	7.18	0.205	< 0.000010	< 0.00010	< 0.00030	0.00338	0.0043	
LC LCDSSLCC	LC LCDSSLCC WS 2022-05-09 N	2022-05-09	-	< 0.010	< 0.000050	0.0321	35.2	0.00243	0.00406	1.1	31.6	< 0.000010	5.26	0.17	< 0.000010	< 0.00010	< 0.00030	0.0027	0.0071	
LC LCDSSLCC	LC LCDSSLCC WS 2022-05-16 N	2022-05-17	-	< 0.010	< 0.000050	0.0333	37.2	0.00261	0.00364	1.07	31.3	< 0.000010	5.46	0.184	< 0.000010	0.00013	< 0.00030	0.0027	0.0049	
LC LCDSSLCC	LC LCDSSLCC WS 2022-05-23 N	2022-05-24	-	< 0.010	< 0.000050	0.0351	39.2	0.00286	0.00424	1.13	30.3	< 0.000010	5.72	0.177	< 0.000010	< 0.00010	< 0.00030	0.00284	0.0052	
LC LCDSSLCC	LC LCDSSLCC WS 2022-05-30 N	2022-05-31	-	< 0.010	< 0.000050	0.0215	27.1	0.00181	0.00368	0.98	23.8	< 0.000010	3.55	0.126	< 0.000010	< 0.00010	< 0.00030	0.00218	0.0062	
LC LCDSSLCC	LC LCDSSLCC MNT 2022-06-07 N	2022-06-06	-	< 0.010	< 0.000050	0.0172	23.9	0.00084	0.00329	0.782	22.2	< 0.000010	2.7	0.108	< 0.000010	< 0.00010	< 0.00030	0.00167	0.007	
LC LCDSSLCC	LC LCDSSLCC WS 2022-06-13 N	2022-06-14	-	< 0.010	< 0.000050	0.0153	20.7	0.00081	0.00349	0.806	17.7	< 0.000010	2.61	0.1	< 0.000010	< 0.00010	< 0.00030	0.00161	0.0113	
LC LCDSSLCC	LC LCUSWLC WS 2022-06-20 N	2022-06-22	-	< 0.010	< 0.000050	0.0308	28.7	0.00017	0.00786	1.26	27.3	< 0.000010	4.22	0.134	< 0.000010	< 0.00010	< 0.00030	0.00214	0.017	
LC LCDSSLCC	LC LCDSSLCC WS 2022-06-27 N	2022-06-27	-	< 0.010	< 0.000050	0.023	25.1	0.00074	0.00493	1.07	20.1	< 0.000010	3.41	0.121	< 0.000010	0.00018	< 0.00030	0.00184	0.0114	
LC LCDSSLCC	LC LCDSSLCC WS Q3-2022 N	2022-07-05	-	< 0.010	< 0.000050	0.0205	23.1	0.00087	0.00422	0.93	20	< 0.000010	3.15	0.121	< 0.000010	< 0.00010	< 0.00030	0.00179	0.0108	
LC LCDSSLCC	LC LCDSSLCC WS 2022-07-11 N	2022-07-11	-	< 0.010	< 0.000050	0.024	27.5	0.00112	0.00516	1.01	25.3	< 0.000010	3.83	0.139	< 0.000010	< 0.00010	< 0.00030	0.002	0.012	
LC LCDSSLCC	LC LCDSSLCC WS 2022-07-18 N	2022-07-19	-	< 0.010	< 0.000050	0.0313	33.4	0.00115	0.00612	1.2	35	< 0.000010	4.81	0.169	< 0.000010	< 0.00010	< 0.00030	0.00267	0.0124	
LC LCDSSLCC	LC LCDSSLCC WS 2022-07-25 N	2022-07-28	-	< 0.010	< 0.000050	0.0371	39.2	0.00054	0.00358	1.3	46.2	< 0.000010	5.26	0.188	0.00011	< 0.00010	< 0.00030	0.00282	0.013	
LC LCDSSLCC	LC LCDSSLCC MNT 2022-08-02 N	2022-08-03	-	< 0.010	< 0.000050	0.0412	40.2	0.00268	0.00576	1.35	42.4	< 0.000010	6.58	0.198	< 0.000010	&				

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals													
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL		n/a	0.020-0.10 <sup>a</sup>	0.005-0.05 <sup>a</sup>	n/a	na	na	na	na	n/a	n/a	0.00004-0.0028 <sup>b</sup>	0.00002-0.00173 <sup>c</sup>	n/a	n/a	n/a	BLM <sup>d</sup>
<b>Line Creek Operation</b>																	
LC LCDSSLCC	LC LCDSSLCC WS 2022-08-22 N	2022-08-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LC LCDSSLCC	LC CC1 WS 2022-08-22 N	2022-08-23	-	0.00345	0.000225	0.000125	0.06165	< 0.020	< 0.000050	0.015	0.00019	102	0.00042	< 0.10	0.00022		
LC LCDSSLCC	LC LCDSSLCC WS 2022-08-29 N	2022-08-30	-	0.003	0.00022	0.00012	0.0563	< 0.020	< 0.000050	0.014	0.000268	97.4	0.00015	< 0.10	0.0002		
LC LCDSSLCC	LC LCDSSLCC MNT 2022-09-06 N	2022-09-06	-	< 0.0010	0.00022	0.00011	0.062	< 0.020	< 0.000050	0.015	0.000128	107	0.00011	< 0.10	< 0.00020		
LC LCDSSLCC	LC LCDSSLCC WS 2022-09-12 N	2022-09-13	-	0.0011	0.00023	0.00012	0.0636	< 0.020	< 0.000050	0.014	0.000208	105	0.00013	< 0.10	0.00023		
LC LCDSSLCC	LC LCDSSLCC WS 2022-09-19 N	2022-09-19	-	< 0.0010	-	-	-	-	-	-	-	-	-	-	-	-	
LC LCDSSLCC	LC CC1 WS 2022-09-19 N	2022-09-19	-	-	0.000205	< 0.00010	0.06715	< 0.020	< 0.000050	0.014	0.000178	102.5	0.00012	< 0.10	< 0.00020		
LC LCDSSLCC	LC LCDSSLCC WS 2022-09-26 N	2022-09-29	-	< 0.0010	0.00022	0.0001	0.0627	< 0.020	< 0.000050	0.015	0.000146	110	0.00014	< 0.10	< 0.00020		
LC LCDSSLCC	LC CC2 WS Q4-2022 N	2022-10-03	-	< 0.0010	0.00023	< 0.00010	0.0603	< 0.020	< 0.000050	0.014	0.000157	106.5	0.00011	< 0.10	< 0.00020		
LC LCDSSLCC	LC LCDSSLCC WS 2022-10-10 N	2022-10-11	-	< 0.0010	-	-	-	-	-	-	-	-	-	-	-	-	
LC LCDSSLCC	LC CC1 WS 2022-10-10 N	2022-10-11	-	-	0.00025	< 0.00010	0.06155	< 0.020	< 0.000050	0.016	0.0001725	112	< 0.00010	< 0.10	< 0.00020		
LC LCDSSLCC	LC LCDSSLCC WS 2022-10-17 N	2022-10-18	-	< 0.0010	0.00011	< 0.00010	0.0674	< 0.020	< 0.000050	0.011	0.0000187	104	0.00014	< 0.10	< 0.00020		
LC LCDSSLCC	LC LCDSSLCC WS 2022-10-24 N	2022-10-25	-	< 0.0010	0.00024	< 0.00010	0.064	< 0.020	< 0.000050	0.016	0.000161	120	0.00011	< 0.10	< 0.00020		
LC LCDSSLCC	LC LCDSSLCC WS 2022-10-31 N	2022-11-01	-	< 0.0010	0.00024	0.0001	0.0686	< 0.020	< 0.000050	0.014	0.000156	121	0.00014	< 0.10	< 0.00020		
LC LCDSSLCC	LC LCDSSLCC MNT 2022-11-08 N	2022-11-08	-	0.0014	0.00024	0.00013	0.065	< 0.020	< 0.000050	0.014	0.000153	117	0.00011	< 0.10	< 0.00020		
LC LCDSSLCC	LC LCDSSLCC WS 2022-11-14 N	2022-11-14	-	< 0.0010	0.00028	0.00012	0.0635	< 0.020	< 0.000050	0.015	0.000164	120	0.00018	< 0.10	< 0.00020		
LC LCDSSLCC	LC LCDSSLCC WS 2022-11-21 N	2022-11-21	-	< 0.0010	-	-	-	-	-	-	-	-	-	-	-	-	
LC LCDSSLCC	LC CC1 WS 2022-11-21 N	2022-11-21	-	-	0.00023	< 0.00010	0.06545	< 0.020	< 0.000050	0.014	0.000158	115.5	0.00014	< 0.10	< 0.00020		
LC LCDSSLCC	LC LCDSSLCC WS 2022-11-28 N	2022-11-28	-	< 0.0010	0.00022	< 0.00010	0.0664	< 0.020	< 0.000050	0.014	0.00015	122	0.00012	< 0.10	< 0.00020		
LC LCDSSLCC	LC LCDSSLCC MNT 2022-12-05 N	2022-12-05	-	0.0012	0.00024	< 0.00010	0.0635	< 0.020	< 0.000050	0.012	0.000121	114	0.0001	< 0.10	< 0.00020		
LC LCDSSLCC	LC LCDSSLCC WS 2022-12-12 N	2022-12-12	-	< 0.0010	0.00028	0.00012	0.0735	< 0.020	< 0.000050	0.014	0.000133	128	0.00014	< 0.10	< 0.00020		
LC LCDSSLCC	LC CC1 WS 2022-12-19 N	2022-12-19	-	< 0.0010	0.00025	-	0.06435	< 0.020	< 0.000050	0.016	0.0001245	122	0.000115	< 0.10	< 0.00020		
LC LCDSSLCC	LC LCDSSLCC WS 2022-12-19 N	2022-12-19	-	< 0.0010	-	< 0.00010	-	-	-	-	-	-	-	-	-	-	
LC LCDSSLCC	LC LCDSSLCC WS 2022-12-26 N	2022-12-28	-	< 0.0010	0.00022	< 0.00010	0.0647	< 0.020	< 0.000050	0.016	0.0000638	129	0.00016	< 0.10	< 0.00020		
LC WLC	LC WLC WS Q1-2022 N	2022-01-04	-	< 0.0020	0.00044	0.00021	0.021	< 0.040	-	-	0.000281	272	< 0.00020	-	0.0007		
LC WLC	LC WLC WS 2022-01-10 N	2022-01-10	-	0.0029	0.00043	0.00023	0.02	< 0.040	-	-	0.000229	254	< 0.00020	-	0.00067		
LC WLC	LC MT1 WS 2022-01-17 N	2022-01-17	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.00029	< 0.050	< 0.00010	< 0.00010	< 0.00020		
LC WLC	LC CC1 WS 2022-01-17 N	2022-01-17	-	< 0.0010	0.000475	0.00024	0.02105	< 0.040	< 0.000100	< 0.020	< 0.00029	266.5	< 0.00020	< 0.00020	0.00067		
LC WLC	LC WLC WS 2022-01-24 N	2022-01-25	-	< 0.0020	0.00047	0.00026	0.021	< 0.040	< 0.000100	< 0.020	0.000122	255	< 0.00020	< 0.00020	0.00068		
LC WLC	LC WLC WS 2022-01-31 N	2022-01-31	-	< 0.0020	0.00047	0.00026	0.021	< 0.040	< 0.000100	< 0.020	0.000108	278	< 0.00020	< 0.00020	0.00129		
LC WLC	LC MT2 MNT 2021-02-08 N	2022-02-08	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.00029	< 0.050	< 0.00010	< 0.00010	< 0.00020		
LC WLC	LC CC1 WS 2022-02-14 N	2022-02-14	-	0.0024	0.000485	0.000245	0.02135	< 0.040	< 0.000100	< 0.020	0.0000865	266	0.00022	< 0.00020	0.000825		
LC WLC	LC MT1 WS 2022-02-21 N	2022-02-23	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.00029	< 0.050	< 0.00010	< 0.00010	< 0.00020		
LC WLC	LC WLC WS 2022-02-28 N	2022-03-01	-	0.0135	0.00049	0.00024	0.022	< 0.040	< 0.000100	< 0.020	0.0000717	298	0.00029	< 0.00020	0.0007		
LC WLC	LC MT1 MNT 2021-03-07 N	2022-03-08	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.00029	< 0.050	< 0.00010	< 0.10	< 0.00020		
LC WLC	LC WLC WS 2022-03-14 N	2022-03-14	-	0.003	0.00047	0.00024	0.0212	< 0.040	< 0.000100	< 0.020	< 0.00029	247	< 0.00020	< 0.20	0.00064		
LC WLC	LC WLC WS 2022-03-21 N	2022-03-22	-	0.0022	0.00044	0.00026	0.0212	< 0.040	< 0.000100	< 0.020	0.0000538	287	< 0.00020	< 0.20	0.00069		
LC WLC	LC WLC WS 2022-03-28 N	2022-03-28	-	< 0.0020	0.00046	0.00025	0.0212	< 0.040	< 0.000100	< 0.020	0.0000529	270	< 0.00020	< 0.20	0.00062		
LC WLC	LC WLC WS Q2-2022 N	2022-04-05	-	0.0031	0.00047	0.00028	0.0216	< 0.040	< 0.000100	< 0.020	0.0000604	271	< 0.00020	< 0.20	0.00064		
LC WLC	LC WLC WS 2022-04-11 N	2022-04-11	-	< 0.0020	0.00046	0.00025	0.0204	< 0.040	< 0.000100	< 0.020	0.0000497	267	0.00029	< 0.20	0.0006		
LC WLC	LC CC1 WS 2022-04-18 N	2022-04-18	-	0.00235	0.000445	0.000245	0.0203	< 0.040	< 0.000100	< 0.020	0.00004785	265	< 0.00020	< 0.20	0.000695		
LC WLC	LC CC1 WS 2022-04-25 N	2022-04-25	-	0.00205	0.000495	0.000235	0.0218	< 0.040	< 0.000100	< 0.020	0.00006065	271	< 0.00020	< 0.20	0.000645		
LC WLC	LC WLC MNT 2022-05-03 N	2022-05-03	-	0.0031	0.0005	0.00026	0.0208	< 0.040	< 0.000100	< 0.020	0.0000909	259	< 0.00020	< 0.20	0.00074		
LC WLC	LC WLC WS 2022-05-09 N	2022-05-09	-	0.0016	0.00045	0.00026	0.0196	< 0.020	< 0.000050	0.015	0.000176	239	0.00011	< 0.10	0.00073		
LC WLC	LC WLC WS 2022-05-16 N	2022-05-16	-	0.0046	0.00052	0.00024	0.0181	< 0.020	< 0.000050	0.016	0.000245	253	0.0002	< 0.10	0.0125		
LC WLC	LC WLC WS 2022-05-23 N	2022-05-24	-	0.0014	0.00042	0.00028	0.0191	< 0.020	< 0.000050	0.016	0.000339	243	0.00014	< 0.10	0.00073		
LC WLC	LC MT1 WS 2022-05-30 N	2022-05-30	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.00029	< 0.050	< 0.00010	< 0.10	< 0.00020		
LC WLC	LC MT2 MNT 2022-06-07 N	2022-06-08	-	< 0.0010	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.00029	< 0.050	< 0.00010	< 0.10	< 0.00020		
LC WLC	LC CC1 WS 2022-06-13 N	2022-06-13	-	< 0.0010	0.000445	0.000115	0.01365	< 0.020	< 0.000050	0.0195	0.000117	130	< 0.00010	0.00014	0.000785		
LC WLC	LC WLC WS 2022-06-20 N	2022-06-22	-	< 0.0010	0.00043	0.00012	0.0142	< 0.020	< 0.000050	0.018	0.00147	134	< 0.00010	0.00014	0.0008		

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Line Creek Operation																			
LC LCDSSLCC	LC LCDSSLCC WS 2022-08-22 N	2022-08-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LC LCDSSLCC	LC CC1 WS 2022-08-22 N	2022-08-23	-	< 0.010	< 0.000050	0.0417	48.9	0.004195	0.0055	1.39	41.15	< 0.000010	7.245	0.208	< 0.000010	< 0.000010	< 0.000030	0.003275	0.0089
LC LCDSSLCC	LC LCDSSLCC WS 2022-08-29 N	2022-08-30	-	< 0.010	< 0.000050	0.0413	44.2	0.0008	0.00658	1.26	47.7	< 0.000010	6.51	0.191	< 0.000010	< 0.000010	< 0.000030	0.00324	0.0112
LC LCDSSLCC	LC LCDSSLCC MNT 2022-09-06 N	2022-09-06	-	< 0.010	< 0.000050	0.0398	51.4	0.0038	0.00469	1.35	51.1	< 0.000010	6.75	0.2	< 0.000010	< 0.000010	< 0.000030	0.00298	0.0041
LC LCDSSLCC	LC LCDSSLCC WS 2022-09-12 N	2022-09-13	-	< 0.010	< 0.000050	0.0428	50.2	0.00456	0.00579	1.42	41.7	< 0.000010	7.52	0.212	< 0.000010	< 0.000010	< 0.000030	0.00318	0.0079
LC LCDSSLCC	LC LCDSSLCC WS 2022-09-19 N	2022-09-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LC LCDSSLCC	LC CC1 WS 2022-09-19 N	2022-09-19	-	< 0.010	< 0.000050	0.0443	51.9	0.003745	0.0052	1.385	43.45	< 0.000010	7.53	0.2175	< 0.000010	< 0.000010	< 0.000030	0.00305	0.0071
LC LCDSSLCC	LC LCDSSLCC WS 2022-09-26 N	2022-09-29	-	< 0.010	< 0.000050	0.0411	48.5	0.00378	0.00548	1.39	45	< 0.000010	7.37	0.217	< 0.000010	< 0.000010	< 0.000030	0.00377	0.0071
LC LCDSSLCC	LC CC2 WS Q4-2022 N	2022-10-03	-	< 0.010	< 0.000050	0.0431	49.9	0.003665	0.005105	1.38	56.05	< 0.000010	7.335	0.199	< 0.000010	< 0.000010	< 0.000030	0.003115	0.00605
LC LCDSSLCC	LC LCDSSLCC WS 2022-10-10 N	2022-10-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LC LCDSSLCC	LC CC1 WS 2022-10-10 N	2022-10-11	-	< 0.010	< 0.000050	0.04415	49.9	0.003935	0.00584	1.51	48.25	< 0.000010	7.53	0.214	< 0.000010	< 0.000010	< 0.000030	0.00325	0.00685
LC LCDSSLCC	LC LCDSSLCC WS 2022-10-17 N	2022-10-18	-	< 0.010	< 0.000050	0.0297	49.8	0.00332	0.0012	1.37	47.7	< 0.000010	4.37	0.181	< 0.000010	< 0.000010	< 0.000030	0.00245	0.0018
LC LCDSSLCC	LC LCDSSLCC WS 2022-10-24 N	2022-10-25	-	< 0.010	< 0.000050	0.046	51.1	0.00335	0.00515	1.44	43	< 0.000010	7.77	0.226	< 0.000010	< 0.000010	< 0.000030	0.0037	0.005
LC LCDSSLCC	LC LCDSSLCC WS 2022-10-31 N	2022-11-01	-	< 0.010	< 0.000050	0.044	61.7	0.00374	0.0059	1.56	52.2	< 0.000010	9.23	0.221	< 0.000010	< 0.000010	< 0.000030	0.0041	0.0062
LC LCDSSLCC	LC LCDSSLCC MNT 2022-11-08 N	2022-11-08	-	< 0.010	< 0.000050	0.0496	55.9	0.00369	0.00512	1.51	51.2	< 0.000010	8.23	0.232	< 0.000010	< 0.000010	< 0.000030	0.0037	0.0056
LC LCDSSLCC	LC LCDSSLCC WS 2022-11-14 N	2022-11-14	-	< 0.010	< 0.000050	0.0516	56.8	0.00333	0.00506	1.49	45.9	< 0.000010	8.72	0.2	0.000021	< 0.000010	< 0.000030	0.00392	0.0059
LC LCDSSLCC	LC LCDSSLCC WS 2022-11-21 N	2022-11-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LC LCDSSLCC	LC CC1 WS 2022-11-21 N	2022-11-21	-	< 0.010	< 0.000050	0.04665	53.2	0.004015	0.004965	1.47	59.55	< 0.000010	7.91	0.221	< 0.000010	< 0.000010	< 0.000030	0.00381	0.0053
LC LCDSSLCC	LC LCDSSLCC WS 2022-11-28 N	2022-11-28	-	< 0.010	< 0.000050	0.0511	62.8	0.00348	0.00511	1.47	46.3	< 0.000010	8.27	0.223	< 0.000010	< 0.000010	< 0.000030	0.00443	0.0043
LC LCDSSLCC	LC LCDSSLCC MNT 2022-12-05 N	2022-12-05	-	< 0.010	< 0.000050	0.0479	56.7	0.00339	0.00453	1.51	57.6	< 0.000010	8.69	0.219	< 0.000010	< 0.000010	< 0.000030	0.00369	0.0044
LC LCDSSLCC	LC LCDSSLCC WS 2022-12-12 N	2022-12-12	-	< 0.010	< 0.000050	0.0506	58.6	0.00309	0.00454	1.55	49.6	< 0.000010	8.86	0.22	0.000012	< 0.000010	< 0.000030	0.00431	0.0044
LC LCDSSLCC	LC CC1 WS 2022-12-19 N	2022-12-19	-	< 0.010	< 0.000050	0.0493	58	0.003415	0.00475	1.43	57.5	< 0.000010	8.43	0.2185	< 0.000010	< 0.000010	< 0.000030	0.004425	0.0041
LC LCDSSLCC	LC LCDSSLCC WS 2022-12-19 N	2022-12-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LC LCDSSLCC	LC LCDSSLCC WS 2022-12-26 N	2022-12-28	-	< 0.010	< 0.000050	0.0502	59.9	0.00266	0.0039	1.5	48.7	< 0.000010	9.82	0.216	< 0.000010	< 0.000010	< 0.000030	0.0038	0.002
LC WLC	LC WLC WS Q1-2022 N	2022-01-04	-	< 0.020	-	0.0373	202	< 0.00020	0.0163	2.53	407	< 0.000020	2.43	0.195	0.000024	-	< 0.00060	0.0205	0.0095
LC WLC	LC WLC WS 2022-01-10 N	2022-01-10	-	< 0.020	-	0.0333	190	< 0.00020	0.016	2.36	410	< 0.000020	2.23	0.184	< 0.000020	-	< 0.00060	0.018	0.0084
LC WLC	LC MT1 WS 2022-01-17 N	2022-01-17	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00050	< 0.0050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.000010	< 0.000010	< 0.000010	0.0011
LC WLC	LC CC1 WS 2022-01-17 N	2022-01-17	-	< 0.020	< 0.000100	0.0365	189	< 0.00020	0.0168	2.48	410	< 0.000020	2.355	0.1865	0.0000245	< 0.00020	< 0.00060	0.0179	0.0079
LC WLC	LC WLC WS 2022-01-24 N	2022-01-25	-	< 0.020	< 0.000100	0.0325	195	< 0.00020	0.0159	2.44	424	< 0.000020	2.37	0.192	0.000021	< 0.00020	< 0.00060	0.0175	0.0065
LC WLC	LC WLC WS 2022-01-31 N	2022-01-31	-	< 0.020	< 0.000100	0.0358	218	< 0.00020	0.016	2.5	418	< 0.000020	2.35	0.201	0.000021	< 0.00020	< 0.00060	0.0169	0.0052
LC WLC	LC MT2 MNT 2021-02-08 N	2022-02-08	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00050	< 0.0050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.000010	< 0.000030	< 0.000010	< 0.0010
LC WLC	LC CC1 WS 2022-02-14 N	2022-02-14	-	< 0.020	< 0.000100	0.03705	195.5	< 0.00020	0.0164	2.425	470	< 0.000020	2.49	0.201	0.0000275	< 0.00020	< 0.00060	0.019	0.00495
LC WLC	LC MT1 WS 2022-02-21 N	2022-02-23	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00050	< 0.0050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.000010	< 0.000030	< 0.000010	< 0.0010
LC WLC	LC WLC WS 2022-02-28 N	2022-03-01	-	< 0.020	< 0.000100	0.0394	214	0.0006	0.016	2.48	447	< 0.000020	2.42	0.197	0.000024	< 0.00020	< 0.00060	0.0187	0.0113
LC WLC	LC MT1 MNT 2021-03-07 N	2022-03-08	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00050	< 0.0050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.000010	< 0.000030	< 0.000010	< 0.0010
LC WLC	LC WLC WS 2022-03-14 N	2022-03-14	-	< 0.020	< 0.000100	0.0333	193	< 0.00020	0.0168	2.51	459	< 0.000020	2.44	0.184	0.000027	< 0.00020	< 0.00060	0.0178	0.0053
LC WLC	LC WLC WS 2022-03-21 N	2022-03-22	-	< 0.020	< 0.000100	0.0384	205	< 0.00020	0.0154	2.52	445	< 0.000020	2.46	0.194	0.00002	< 0.00020	< 0.00060	0.0168	0.0048
LC WLC	LC WLC WS 2022-03-28 N	2022-03-28	-	< 0.020	< 0.000100	0.0359	206	< 0.00020	0.0156	2.48	436	< 0.000020	2.3	0.2	0.000021	< 0.00020	< 0.00060	0.017	0.0048
LC WLC	LC WLC WS Q2-2022 N	2022-04-05	-	< 0.020	< 0.000100	0.0352	215	< 0.00020	0.0165	2.52	433	< 0.000020	2.46	0.204	0.000027	0.0002	< 0.00060	0.018	0.0062
LC WLC	LC WLC WS 2022-04-11 N	2022-04-11	-	< 0.020	< 0.000100	0.0372	199	< 0.00020	0.0155	2.47	445	< 0.000020	2.46	0.189	< 0.000020	< 0.00020	< 0.00060	0.0164	0.0035
LC WLC	LC CC1 WS 2022-04-18 N	2022-04-18	-	< 0.020	< 0.000100	0.03925	199	< 0.00020	0.01495	2.645	430	< 0.000020	2.49	0.2015	0.0000235	< 0.00020	< 0.00060	0.01795	0.0036
LC WLC	LC CC1 WS 2022-04-25 N	2022-04-25	-	< 0.020	< 0.000100	0.0384	193.5	< 0.00020	0.01595	2.68	454	< 0.000020	2.5	0.201	0.0000255	< 0.00020	< 0.00060	0.0174	0.0044
LC WLC	LC WLC MNT 2022-05-03 N	2022-05-03	-	< 0.020	< 0.000100	0.0396	190	< 0.00020	0.0157	2.66	423	< 0.000020	2.46	0.19	0.000024	< 0.00020	< 0.00060	0.0154	0.0056
LC WLC	LC WLC WS 2022-05-09 N	2022-05-09	-	< 0.010	< 0.000050	0.0344	191	< 0.00010	0.016	2.42	430	< 0.000010	2.35	0.176	0.000024	< 0.00010	< 0.00030	0.0145	0.0074
LC WLC	LC WLC WS 2022-05-16 N	2022-05-16	-	0.011	0.00055	0.0351	177	< 0.00010	0.0152	2.46	452	< 0.000010	2.41	0.196	0.000025	0.000407	< 0.00030	0.0168	0.0254
LC WLC	LC WLC WS 2022-05-23 N	2022-05-24	-	< 0.010	< 0.000050	0.0356	179	< 0.00010	0.0154	2.54	379	&lt							

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals															
				Aluminum		Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium		Calcium	Chromium	Cobalt	Copper		
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
				Acute	Chronic							Acute	Chronic			Acute	Chronic		
<b>BC WQG FWAL</b>			n/a	<b>0.020-0.10<sup>a</sup></b>	<b>0.005-0.05<sup>a</sup></b>	n/a	na	na	na	n/a	n/a	<b>0.00004-0.0028<sup>a</sup></b>	<b>0.00002-0.00173<sup>a</sup></b>	n/a	n/a	n/a	n/a	<b>BLM<sup>e</sup></b>	
<b>Line Creek Operation</b>																			
LC_WLC	LC_WLC_WS_2022-06-27_N	2022-06-27	-	< 0.0010		0.00041	0.00014	0.0162	< 0.020	< 0.000050	0.019		0.0016	150	0.0001	< 0.10	0.00092		
LC_WLC	LC_WLC_WS_Q3-2022_N	2022-07-05	-	< 0.0010		0.00037	0.00012	0.0161	< 0.020	< 0.000050	0.018		0.00174	165	< 0.00010	< 0.10	0.00088		
LC_WLC	LC_CC1_WS_2022-07-11_N	2022-07-11	-	0.00185		0.0004	0.000125	0.0186	< 0.020	< 0.000050	0.018		0.00194	185.7	< 0.00010	< 0.10	0.00132		
LC_WLC	LC_WLC_WS_2022-07-18_N	2022-07-19	-	< 0.0010		0.00037	0.00012	0.0183	< 0.020	< 0.000050	0.02		0.00234	203	< 0.00010	< 0.10	0.00088		
LC_WLC	LC_MT1_WS_2022-07-25_N	2022-07-26	-	< 0.0010		< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010		< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00020		
LC_WLC	LC_WLC_MNT_2022-08-02_N	2022-08-03	-	< 0.0010		0.00038	0.00018	0.0205	< 0.020	< 0.000050	0.022		0.00253	220	0.00011	< 0.10	0.00102		
LC_WLC	LC_WLC_WS_2022-08-08_N	2022-08-08	-	0.0046		0.00039	0.00013	0.0228	< 0.020	< 0.000050	0.019		0.00284	243	0.00015	< 0.10	0.00104		
LC_WLC	LC_MT1_WS_2022-08-15_N	2022-08-15	-	< 0.0010		< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010		< 0.0050	< 0.050	< 0.00010	< 0.10	0.00065		
LC_WLC	LC_WLC_WS_2022-08-22_N	2022-08-22	-	0.0023		0.0004	0.00013	0.0244	< 0.020	< 0.000050	0.019		0.00273	237	0.00022	< 0.10	0.00101		
LC_WLC	LC_WLC_WS_2022-08-29_N	2022-08-29	-	0.0024		0.0004	0.00023	0.0248	< 0.040	< 0.000100	0.029		0.00293	243	< 0.00020	< 0.20	0.00111		
LC_WLC	LC_WLC_MNT_2022-09-06_N	2022-09-06	-	< 0.0020		0.00038	< 0.00020	0.0219	< 0.040	< 0.000100	0.025		0.00258	238	< 0.00020	< 0.20	0.00042		
LC_WLC	LC_WLC_WS_2022-09-12_N	2022-09-13	-	0.0016		0.00039	0.00014	0.027	< 0.020	< 0.000050	0.021		0.00357	281	< 0.00010	< 0.10	0.00124		
LC_WLC	LC_WLC_WS_2022-09-19_N	2022-09-19	-	< 0.0020		0.00044	< 0.00020	0.0254	< 0.040	< 0.000100	0.021		0.00287	271	< 0.00020	< 0.20	0.00109		
LC_WLC	LC_WLC_WS_2022-09-29_N	2022-09-29	-	0.0013		0.00043	0.00017	0.0282	< 0.020	< 0.000050	0.021		0.00264	282	0.0001	< 0.10	0.00113		
LC_WLC	LC_WLC_WS_Q4-2022_N	2022-10-03	-	< 0.0020		0.00044	< 0.00020	0.0259	< 0.040	< 0.000100	0.024		0.00289	293	< 0.00020	< 0.20	0.00113		
LC_WLC	LC_WLC_WS_2022-10-10_N	2022-10-12	-	< 0.0020		0.00046	0.00024	0.0279	< 0.040	< 0.000100	0.021		0.00296	289	< 0.00020	< 0.20	0.00129		
LC_WLC	LC_WLC_WS_2022-10-17_N	2022-10-17	-	< 0.0010		0.00042	0.00016	0.0275	< 0.020	< 0.000050	0.023		0.00287	304	< 0.00010	< 0.10	0.00118		
LC_WLC	LC_CC1_WS_2022-10-24_N	2022-10-24	-	< 0.0020		0.00032667	< 0.00020	0.0192	< 0.040	< 0.000100	< 0.020		0.001365	219	< 0.00020	< 0.20	0.00093		
LC_WLC	LC_WLC_WS_2022-10-31_N	2022-10-31	-	< 0.0020		0.00041	< 0.00020	0.0232	< 0.040	< 0.000100	< 0.020		0.00138	287	< 0.00020	< 0.20	0.00103		
LC_WLC	LC_WLC_MNT_2022-11-08_N	2022-11-07	-	0.003		0.00056	< 0.00020	0.023	< 0.040	< 0.000100	< 0.020		0.000807	277	< 0.00020	< 0.20	0.00087		
LC_WLC	LC_MT1_WS_2022-11-14_N	2022-11-14	-	0.00215		< 0.00010	< 0.00010	0.01171	< 0.020	< 0.000050	< 0.010		< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00020		
LC_WLC	LC_WLC_WS_2022-11-21_N	2022-11-21	-	< 0.0010		0.00044	0.00018	0.0241	< 0.020	< 0.000050	0.013		0.000577	282	0.00011	< 0.10	0.00091		

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<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH  
<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

***BOLD ITALIC*** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
***BOLD ITALIC SHADED*** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 2: Summary of Analytical Results for Dissolved Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Dissolved Metals																
				Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Nickel mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L	Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Zinc mg/L	
BC WQG FWAL			n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Line Creek Operation																				
LC_WLC	LC_WLC_WS_2022-06-27_N	2022-06-27	-	< 0.010	< 0.000050	0.0231	89.8	0.00052	0.0227	2.16	180	< 0.000010	1.54	0.104	0.000022	< 0.00010	< 0.00030	0.00675	0.0668	
LC_WLC	LC_WLC_WS_Q3-2022_N	2022-07-05	-	< 0.010	< 0.000050	0.023	100	0.00063	0.0253	2.16	215	< 0.000010	1.63	0.115	0.000026	< 0.00010	< 0.00030	0.00822	0.0692	
LC_WLC	LC_CCT_WS_2022-07-11_N	2022-07-11	-	< 0.010	< 0.000050	0.02485	115	0.00084	0.03	2.353333333	284	< 0.000010	1.78	0.134	0.0000255	< 0.00010	< 0.00030	0.008865	0.08135	
LC_WLC	LC_WLC_WS_2022-07-18_N	2022-07-19	-	< 0.010	< 0.000050	0.0256	124	0.00109	0.0352	2.15	273	< 0.000010	1.84	0.136	0.000014	< 0.00010	< 0.00030	0.0091	0.093	
LC_WLC	LC_MT1_WS_2022-07-25_N	2022-07-26	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.00010	< 0.00030	< 0.00010	< 0.0010	
LC_WLC	LC_WLC_MNT_2022-08-02_N	2022-08-03	-	< 0.010	< 0.000050	0.0331	137	0.00144	0.0372	2.48	334	< 0.000010	2.06	0.159	0.000027	< 0.00010	< 0.00030	0.0104	0.0996	
LC_WLC	LC_WLC_WS_2022-08-08_N	2022-08-08	-	< 0.010	< 0.000050	0.0307	156	0.00171	0.0392	2.43	335	< 0.000010	2.08	0.166	0.00003	< 0.00010	< 0.00030	0.0122	0.103	
LC_WLC	LC_MT1_WS_2022-08-15_N	2022-08-15	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.00010	< 0.00030	< 0.00010	< 0.0010	
LC_WLC	LC_WLC_WS_2022-08-22_N	2022-08-22	-	< 0.010	< 0.000050	0.0296	162	0.00151	0.04	2.38	407	< 0.000010	2.13	0.166	0.00003	< 0.00010	< 0.00030	0.014	0.105	
LC_WLC	LC_WLC_WS_2022-08-29_N	2022-08-29	-	< 0.020	< 0.000100	0.0345	208	0.00218	0.0424	2.38	366	< 0.000020	2.54	0.174	0.000031	< 0.00020	< 0.00060	0.015	0.128	
LC_WLC	LC_WLC_MNT_2022-09-06_N	2022-09-06	-	< 0.020	< 0.000100	0.0363	176	0.00098	0.0392	2.24	391	< 0.000020	2.06	0.174	0.00003	< 0.00020	< 0.00060	0.015	0.0993	
LC_WLC	LC_WLC_WS_2022-09-12_N	2022-09-13	-	< 0.010	< 0.000050	0.0348	187	0.00182	0.0411	2.58	414	< 0.000010	2.25	0.193	0.00003	< 0.00010	< 0.00030	0.0174	0.134	
LC_WLC	LC_WLC_WS_2022-09-19_N	2022-09-19	-	< 0.020	< 0.000100	0.0335	192	0.00182	0.043	2.48	372	< 0.000020	2.22	0.196	0.000032	< 0.00020	< 0.00060	0.0171	0.107	
LC_WLC	LC_WLC_WS_2022-09-29_N	2022-09-29	-	< 0.010	< 0.000050	0.0366	201	0.00129	0.0432	2.75	480	< 0.000010	2.42	0.194	0.000029	< 0.00010	< 0.00030	0.0195	0.0937	
LC_WLC	LC_WLC_WS_Q4-2022_N	2022-10-03	-	< 0.020	< 0.000100	0.0396	201	0.0016	0.0441	2.54	438	< 0.000020	2.21	0.196	0.000034	< 0.00020	< 0.00060	0.0174	0.102	
LC_WLC	LC_WLC_WS_2022-10-10_N	2022-10-12	-	< 0.020	< 0.000100	0.0381	218	0.00175	0.0488	2.69	400	< 0.000020	2.32	0.189	0.000046	< 0.00020	< 0.00060	0.0178	0.122	
LC_WLC	LC_WLC_WS_2022-10-17_N	2022-10-17	-	< 0.010	< 0.000050	0.0409	224	0.00176	0.0479	2.94	471	< 0.000010	2.54	0.198	0.000031	< 0.00010	< 0.00030	0.0189	0.114	
LC_WLC	LC_CCT_WS_2022-10-24_N	2022-10-24	-	< 0.020	< 0.000100	0.025766667	149.6683333	0.00053	0.026966667	1.873333333	296.35	< 0.000020	1.666666667	0.138066667	2.36667E-05	< 0.00020	< 0.00060	0.01467	0.0462	
LC_WLC	LC_WLC_WS_2022-10-31_N	2022-10-31	-	< 0.020	< 0.000100	0.0358	203	0.00023	0.0301	2.5	452	< 0.000020	2.27	0.178	0.00003	< 0.00020	< 0.00060	0.0216	0.0469	
LC_WLC	LC_WLC_MNT_2022-11-08_N	2022-11-07	-	< 0.020	< 0.000100	0.036	205	< 0.00020	0.0227	2.46	414	< 0.000020	2.14	0.178	0.000028	< 0.00020	< 0.00060	0.0193	0.0238	
LC_WLC	LC_MT1_WS_2022-11-14_N	2022-11-14	-	< 0.010	< 0.000050	< 0.0010	< 0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	< 0.050	< 0.00020	< 0.000010	< 0.00010	< 0.00030	< 0.00010	< 0.0010	
LC_WLC	LC_WLC_WS_2022-11-21_N	2022-11-21	-	< 0.010	< 0.000050	0.0396	211	0.00011	0.0189	2.54	520	< 0.000010	2.19	0.19	0.000029	< 0.00010	< 0.00030	0.0224	0.0147	

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness

<sup>b</sup> Guideline varies with pH and water temperature

<sup>c</sup> Guideline varies with chloride

<sup>d</sup> Guideline varies with pH

<sup>e</sup> Guideline calculated using the BC Biotic Ligand Model (BLM)

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness	Aluminum	Antimony	Arsenic	Barium <sup>a</sup>	Beryllium <sup>b</sup>	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt		Copper	Iron	Lead	
														mg/L	mg/L			mg/L	mg/L
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>c</sup>	3.3-3.5 <sup>d</sup>
Coal Mountain Mine																			
CM CC1	CM CC1 WS 2022-01-04 N	2022-01-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM CC1	CM CC1 WS 2022-01-11 N	2022-01-11	922	0.011	0.00039	0.00022	0.0384	< 0.020	< 0.000050	0.116	0.000144	235	0.00012	<b>0.0111</b>	< 0.00050	0.071	< 0.000050		
CM CC1	CM CC1 WS 2022-02-01 N	2022-02-01	913	0.0079	0.00036	0.00018	0.0346	< 0.020	< 0.000050	0.085	0.000111	198	0.0001	<b>0.00983</b>	< 0.00050	0.044	< 0.000050		
CM CC1	CM CC1 WS 2022-03-01 N	2022-03-01	1050	0.0073	0.00055	0.00025	0.0378	< 0.020	< 0.000050	0.087	0.000182	236	0.00018	<b>0.0132</b>	< 0.00050	0.154	< 0.000050		
CM CC1	CM CC1 WS 2022-03-15 N	2022-03-15	978	0.0062	0.00031	0.00023	0.046	< 0.020	< 0.000050	0.053	0.0000775	206	0.00014	<b>0.00393</b>	< 0.00050	0.016	< 0.000050		
CM CC1	CM CC1 WS 2022-03-22 N	2022-03-22	988	0.0052	0.00028	0.00019	0.0489	< 0.020	< 0.000050	0.052	0.0000857	210	0.00015	<b>0.00317</b>	< 0.00050	0.012	< 0.000050		
CM CC1	CM CC1 WS 2022-03-29 N	2022-03-29	1030	0.0043	0.00028	0.00022	0.0546	< 0.020	< 0.000050	0.064	0.0000591	225	0.00022	<b>0.00312</b>	< 0.00050	0.012	< 0.000050		
CM CC1	CM CC1 WS 2022-04-05 N	2022-04-05	970	0.0253	0.00028	0.00023	0.0484	< 0.020	< 0.000050	0.061	0.0000612	198	0.00012	<b>0.00416</b>	< 0.00050	0.031	< 0.000050		
CM CC1	CM CC1 WS 2022-04-12 N	2022-04-12	899	0.01	0.00028	0.0002	0.0469	< 0.020	< 0.000050	0.078	0.0000588	192	0.00012	<b>0.00378</b>	< 0.00050	0.036	< 0.000050		
CM CC1	CM CC1 WS 2022-04-19 N	2022-04-19	889	0.0091	0.00028	0.00021	0.0454	< 0.020	< 0.000050	0.072	0.0000492	213	0.00049	<b>0.00361</b>	< 0.00050	0.032	< 0.000050		
CM CC1	CM CC1 WS 2022-04-26 N	2022-04-26	872	0.0089	0.00028	0.00018	0.0467	< 0.020	< 0.000050	0.083	0.0000452	202	0.00016	<b>0.00377</b>	< 0.00050	0.036	< 0.000050		
CM CC1	CM CC1 WS 2022-05-03 N	2022-05-03	819	0.0203	0.000315	0.00025	0.04575	< 0.020	< 0.000050	0.0735	0.00004875	193.5	0.00019	<b>0.004555</b>	< 0.00050	0.039	< 0.000050		
CM CC1	CM CC1 2022-05-06 N2	2022-05-06	772	0.0266	0.00039	0.00021	0.0413	< 0.020	< 0.000050	0.087	0.0000793	182	0.00021	<b>0.0102</b>	< 0.00050	0.061	< 0.000050		
CM CC1	CM CC1 2022-05-06 N1	2022-05-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CC1	CM CC1 2022-05-07 N1	2022-05-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CC1	CM CC1 WS 2022-05-10 N	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CC1	CM CC1 WS 2022-05-17 N	2022-05-17	694	0.0456	0.00038	0.00021	0.0376	< 0.020	< 0.000050	0.091	0.000161	158	0.00029	<b>0.00648</b>	0.00073	0.106	0.000071		
CM CC1	CM NNP WS 2022-05-17 N	2022-05-17	731	0.03135	0.00038	0.00024	0.0316	< 0.020	< 0.000050	0.0805	0.000191	165.5	0.000205	<b>0.009815</b>	0.00055	0.0595	< 0.000050		
CM CC1	CM CC1 WS 2022-05-24 N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CC1	CM CC1 WS 2022-05-31 N	2022-05-31	721	0.0246	0.00036	0.00018	0.028	< 0.020	< 0.000050	0.059	0.000199	162	0.00017	<b>0.00778</b>	< 0.00050	0.037	< 0.000050		
CM CC1	CM CC1 WS 2022-06-07 N	2022-06-07	637	0.049	0.00036	0.00022	0.0253	< 0.020	< 0.000050	0.048	0.000297	142	0.00018	<b>0.00519</b>	0.00051	0.075	0.00007		
CM CC1	CM CC1 WS 2022-06-14 N	2022-06-14	654	0.0352	0.00032	0.00022	0.0229	< 0.020	< 0.000050	0.052	0.00038	139	0.00021	<b>0.00632</b>	< 0.00050	0.076	0.00006		
CM CC1	CM CC1 WS 2022-06-21 N	2022-06-21	538	0.104	0.0003	0.00027	0.0256	0.000022	< 0.000050	0.031	0.000418	133	0.00031	<b>0.00535</b>	0.00059	0.138	0.000181		
CM CC1	CM CC1 WS 2022-06-28 N	2022-06-28	602	0.0214	0.00032	0.000235	0.02375	< 0.020	< 0.000050	0.0465	0.0004555	126	0.00017	<b>0.00603</b>	< 0.00050	0.051	< 0.000050		
CM CC1	CM CC1 WS 2022-07-05 N	2022-07-05	798	0.0121	0.0004	0.00027	0.0263	< 0.020	< 0.000050	0.052	0.000441	186	0.00013	<b>0.00951</b>	< 0.00050	0.045	< 0.000050		
CM CC1	CM NNP WS 2022-07-12 N	2022-07-12	834	0.0306	0.00044	0.00027	0.0267	< 0.020	< 0.000050	0.071	0.000282	176	0.00019	<b>0.00972</b>	< 0.00050	0.063	< 0.000050		
CM CC1	CM CC1 WS 2022-07-12 N	2022-07-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CC1	CM CC1 WS 2022-08-02 N	2022-08-02	971	0.0098	0.000485	0.00028	0.02845	< 0.020	< 0.000050	0.076	0.0001535	192.5	0.00013	<b>0.01135</b>	-	0.0305	< 0.000050		
CM CC1	CM NNP WS 2022-08-02 N	2022-08-02	971	0.01	0.0006	0.00022	0.03085	< 0.020	< 0.000050	0.094	0.000131	223.5	0.00011	<b>0.01165</b>	< 0.00050	0.0275	< 0.000050		
CM CC1	CM CC1 2022-08-25 N1	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CC1	CM CC1 WS 2022-09-06 N	2022-09-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CC1	CM CC1 WS SEPT-2022 N	2022-09-08	1027	< 0.0150	0.000555	0.000295	0.0391	< 0.020	< 0.000050	0.1055	0.0000911	221	0.00014	<b>0.006185</b>	< 0.00050	0.016	< 0.000050		
CM CC1	CM CC1 WS 2022-10-04 N	2022-10-04	1040	0.0074	0.00049	0.00027	0.0359	< 0.020	< 0.000050	0.093	0.0000984	204	0.00011	<b>0.00611</b>	< 0.00050	0.015	< 0.000050		
CM CC1	CM CC1 WS 2022-11-01 N	2022-11-01	1020	0.0082	0.00034	0.00023	0.048	< 0.020	< 0.000050	0.067	0.0000562	220	0.00016	<b>0.00291</b>	< 0.00050	< 0.010	< 0.000050		
CM CC1	CM CC1 WS 2022-12-06 N	2022-12-06	1030	0.0616	0.00033	0.00024	0.0454	< 0.020	< 0.000050	0.079	0.0000518	227	0.00017	<b>0.00389</b>	< 0.00050	0.044	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-01-04 NP	2022-01-06	1165	0.0076	0.000265	0.000245	0.06165	< 0.020	< 0.000050	0.0685	0.00003975	264.5	0.00014	<b>0.003235</b>	< 0.00050	0.012	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-01-11 NP	2022-01-11	995	0.0094	0.00031	0.00022	0.0276	0.000025	< 0.000050	0.137	0.000402	242	0.00012	<b>0.00537</b>	< 0.00050	0.162	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-01-18 NP	2022-01-18	970	0.0102	0.00028	0.0002	0.0257	< 0.020	< 0.000050	0.092	0.000363	205	0.00012	<b>0.00312</b>	< 0.00050	0.115	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-01-19 NP	2022-01-19	1080	0.0072	0.00026	0.00016	0.0233	< 0.020	< 0.000050	0.07	0.000379	244	0.00012	<b>0.00127</b>	< 0.00050	0.038	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-01-25 NP	2022-01-25	1110	0.0102	0.00028	0.00019	0.026	< 0.020	< 0.000050	0.066	0.000444	229	0.00013	<b>0.00115</b>	< 0.00050	0.036	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-02-01 NP	2022-02-02	1160	0.0065	0.00032	0.0002	0.0252	< 0.020	< 0.000050	0.067	0.000433	244	0.00015	<b>0.00074</b>	< 0.00050	0.026	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-02-08 N	2022-02-08	1110	< 0.0060	0.0003	< 0.00020	0.0258	< 0.040	< 0.000100	0.062	0.000392	242	< 0.00020	<b>0.00053</b>	< 0.00100	0.022	< 0.000100		
CM CCOFF	CM CCOFF WS 2022-02-15 NP	2022-02-15	1240	0.0058	0.00033	0.00023	0.0268	< 0.040	< 0.000050	0.074	0.000412	256	0.00016	<b>0.00044</b>	< 0.00050	0.023	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-02-22 NP	2022-02-22	1160	0.0058	0.00029	0.00023	0.0265	< 0.020	< 0.000050	0.061	0.00045	271	0.00013	<b>0.00052</b>	< 0.00050	0.028	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-03-01 NP	2022-03-01	1170	0.01	0.0003	0.00025	0.026	< 0.040	< 0.000100	0.064	0.00036	253	< 0.00020	<b>0.00036</b>	< 0.00100	0.022	< 0.000100		
CM CCOFF	CM CCOFF WS 2022-03-08 NP	2022-03-08	1220	0.0068	0.00031	0.0002	0.0263	< 0.040	< 0.000100	0.063	0.000366	259	< 0.00020	<b>0.00036</b>	< 0.00100	0.022	< 0.000100		
CM CCOFF	CM CCOFF WS 2022-03-15 NP	2022-03-15	1200	0.0075	0.00028	0.00019	0.0287	< 0.020	< 0.000050	0.072	0.000267	259	0.00023	<b>0.00037</b>	< 0.00050	0.031	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-03-22 NP	2022-03-22	1170	0.007	0.00028	< 0.00													



APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Coal Mountain Mine																				
CM CC1	CM CC1 WS 2022-01-04 N	2022-01-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM CC1	CM CC1 WS 2022-01-11 N	2022-01-11	922	0.065	109	<b>0.0801</b>	0.0634	3.71	<b>19.4</b>	< 0.000010	52.7	1.1	0.00005	< 0.00010	< 0.00030	0.00623			0.0155	
CM CC1	CM CC1 WS 2022-02-01 N	2022-02-01	913	0.05	101	<b>0.0697</b>	0.0578	3.34	<b>16.6</b>	< 0.000010	39.9	0.96	0.000042	< 0.00010	< 0.00030	0.00607			0.013	
CM CC1	CM CC1 WS 2022-03-01 N	2022-03-01	1050	0.049	106	<b>0.0768</b>	0.0835	3.99	<b>16.8</b>	< 0.000010	38.2	1.05	0.000051	< 0.00010	< 0.00030	0.00665			0.02	
CM CC1	CM CC1 WS 2022-03-15 N	2022-03-15	978	0.032	116	<b>0.0281</b>	0.0371	3.17	<b>20.2</b>	< 0.000010	26.8	0.74	0.000035	< 0.00010	< 0.00030	0.00644			0.0074	
CM CC1	CM CC1 WS 2022-03-22 N	2022-03-22	988	0.033	111	<b>0.0257</b>	0.0304	3.13	<b>21.2</b>	< 0.000010	27	0.74	0.000031	< 0.00010	< 0.00030	0.00646			0.0055	
CM CC1	CM CC1 WS 2022-03-29 N	2022-03-29	1030	0.037	115	<b>0.0264</b>	0.0305	3.28	<b>21.3</b>	< 0.000010	29	0.77	0.000033	< 0.00010	< 0.00030	0.00641			0.0057	
CM CC1	CM CC1 WS 2022-04-05 N	2022-04-05	970	0.036	104	<b>0.0369</b>	0.0306	3.24	<b>16</b>	< 0.000010	26.1	0.71	0.000029	< 0.00010	< 0.00060	0.00537			0.0065	
CM CC1	CM CC1 WS 2022-04-12 N	2022-04-12	899	0.043	101	<b>0.0294</b>	0.0299	2.8	<b>15.9</b>	< 0.000010	41.8	0.91	0.000033	< 0.00010	< 0.00030	0.00584			0.0072	
CM CC1	CM CC1 WS 2022-04-19 N	2022-04-19	889	0.044	108	<b>0.0278</b>	0.0289	2.91	<b>16.2</b>	< 0.000010	41.2	0.88	0.000032	< 0.00010	< 0.00030	0.00547			0.0066	
CM CC1	CM CC1 WS 2022-04-26 N	2022-04-26	872	0.049	103	<b>0.0284</b>	0.029	3.06	<b>15.9</b>	< 0.000010	45.5	0.86	0.00003	< 0.00010	< 0.00030	0.00567			0.0065	
CM CC1	CM CC1 WS 2022-05-03 N	2022-05-03	819	0.044	103	<b>0.03575</b>	0.0337	3.045	<b>13.55</b>	< 0.000010	42.4	0.81	0.000031	< 0.00010	< 0.00060	0.004915			0.00675	
CM CC1	CM CC1 2022-05-06 N2	2022-05-06	772	0.054	87.4	<b>0.0757</b>	0.0527	3.32	<b>11.7</b>	< 0.000010	45.7	0.9	0.000038	< 0.00010	0.00047	0.00482			0.0097	
CM CC1	CM CC1 2022-05-06 N1	2022-05-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	
CM CC1	CM CC1 2022-05-07 N1	2022-05-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	
CM CC1	CM CC1 WS 2022-05-10 N	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	
CM CC1	CM CC1 WS 2022-05-17 N	2022-05-17	694	0.058	77.3	<b>0.0479</b>	0.0394	2.9	<b>16</b>	< 0.000010	53	0.74	0.000039	< 0.00010	0.00079	0.00419			0.0177	
CM CC1	CM NNP WS 2022-05-17 N	2022-05-17	731	0.047	82.6	<b>0.06745</b>	0.05605	3.01	<b>13.55</b>	< 0.000010	37.1	0.76	0.0000415	< 0.00010	0.000635	0.00474			0.0204	
CM CC1	CM CC1 WS 2022-05-24 N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	
CM CC1	CM CC1 WS 2022-05-31 N	2022-05-31	721	0.04	85.9	<b>0.0519</b>	0.0479	2.92	<b>18.6</b>	< 0.000010	31.8	0.69	0.000037	< 0.00010	0.00051	0.00505			0.0171	
CM CC1	CM CC1 WS 2022-06-07 N	2022-06-07	637	0.028	76.1	<b>0.0328</b>	0.0365	2.62	<b>19</b>	< 0.000010	21.9	0.52	0.000034	< 0.00010	0.0012	0.00429			0.025	
CM CC1	CM CC1 WS 2022-06-14 N	2022-06-14	654	0.029	64.8	<b>0.0422</b>	0.0399	2.46	<b>17</b>	< 0.000010	18.3	0.49	0.000033	< 0.00010	0.00099	0.00407			0.0297	
CM CC1	CM CC1 WS 2022-06-21 N	2022-06-21	538	0.02	59.3	<b>0.0388</b>	0.034	2.16	<b>15</b>	< 0.000010	10.3	0.41	0.000037	< 0.00010	0.00095	0.00381			0.0313	
CM CC1	CM CC1 WS 2022-06-28 N	2022-06-28	602	0.026	62.65	<b>0.03825</b>	0.0397	2.365	<b>14.4</b>	0.0000475	17.8	0.45	0.000033	< 0.00010	0.00046	0.00348			0.0328	
CM CC1	CM CC1 WS 2022-07-05 N	2022-07-05	798	0.038	89.3	<b>0.0563</b>	0.0598	3.02	<b>16.8</b>	< 0.000010	26.2	0.69	0.000042	< 0.00010	0.00035	0.00526			0.0333	
CM CC1	CM NNP WS 2022-07-12 N	2022-07-12	834	0.038	95.8	<b>0.0568</b>	0.0622	3.05	<b>17</b>	< 0.000010	26.3	0.68	0.000042	< 0.00010	0.00094	0.00535			0.0229	
CM CC1	CM CC1 WS 2022-07-12 N	2022-07-12	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00030	-			-	
CM CC1	CM CC1 WS 2022-08-02 N	2022-08-02	971	0.041	101.5	<b>0.05855</b>	0.07515	3.5	<b>19.7</b>	< 0.000010	26.7	0.75	0.000051	< 0.00010	-	0.00647			0.0135	
CM CC1	CM NNP WS 2022-08-02 N	2022-08-02	971	0.054	118.5	<b>0.04865</b>	0.0861	4.015	<b>14.95</b>	< 0.000010	35.5	0.91	0.000056	< 0.00010	-	0.00687			0.00485	
CM CC1	CM CC1 2022-08-25 N1	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00030	-			-	
CM CC1	CM CC1 WS 2022-09-06 N	2022-09-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	
CM CC1	CM CC1 WS SEPT-2022 N	2022-09-08	1027	0.049	120	<b>0.0251</b>	0.06915	3.765	<b>16.15</b>	< 0.000010	35.5	0.91	0.0000495	< 0.00010	< 0.00030	0.00556			0.00335	
CM CC1	CM CC1 WS 2022-10-04 N	2022-10-04	1040	0.049	110	<b>0.0249</b>	0.0648	3.82	<b>14.7</b>	< 0.000010	32	0.85	0.000051	< 0.00010	< 0.00030	0.00593			0.0035	
CM CC1	CM CC1 WS 2022-11-01 N	2022-11-01	1020	0.039	122	<b>0.0142</b>	0.0466	3.5	<b>15.4</b>	< 0.000010	28	0.75	0.000037	< 0.00010	< 0.00030	0.00579			< 0.0030	
CM CC1	CM CC1 WS 2022-12-06 N	2022-12-06	1030	0.038	123	<b>0.0226</b>	0.0444	3.58	<b>16.4</b>	< 0.000010	27.9	0.8	0.000036	< 0.00010	0.00136	0.00597			0.0039	
CM CCOFF	CM CCOFF WS 2022-01-04 NP	2022-01-06	1165	0.044	134	<b>0.0289</b>	0.03215	3.25	<b>17.35</b>	< 0.000010	34.7	0.85	0.0000325	< 0.00010	< 0.00030	0.00617			0.00355	
CM CCOFF	CM CCOFF WS 2022-01-11 NP	2022-01-11	995	0.074	118	<b>0.0363</b>	0.0387	3.41	<b>28.4</b>	< 0.000010	63.8	1.19	0.000052	< 0.00010	< 0.00030	0.00622			0.0354	
CM CCOFF	CM CCOFF WS 2022-01-18 NP	2022-01-18	970	0.051	112	<b>0.0218</b>	0.0312	3.18	<b>29.6</b>	< 0.000010	44.7	0.98	0.000046	< 0.00010	< 0.00030	0.00679			0.0296	
CM CCOFF	CM CCOFF WS 2022-01-19 NP	2022-01-19	1080	0.042	132	<b>0.0118</b>	0.0262	3.37	<b>30.6</b>	< 0.000010	32	0.81	0.000041	< 0.00010	< 0.00030	0.00697			0.0229	
CM CCOFF	CM CCOFF WS 2022-01-25 NP	2022-01-25	1110	0.038	134	<b>0.0108</b>	0.028	3.43	<b>31.8</b>	< 0.000010	30.8	0.84	0.000047	< 0.00010	< 0.00030	0.00796			0.0248	
CM CCOFF	CM CCOFF WS 2022-02-01 NP	2022-02-02	1160	0.037	141	<b>0.0087</b>	0.0266	3.6	<b>33.7</b>	< 0.000010	27.3	0.77	0.000046	< 0.00010	< 0.00030	<b>0.00853</b>			0.0223	
CM CCOFF	CM CCOFF WS 2022-02-08 NP	2022-02-08	1110	0.033	140	<b>0.00805</b>	0.0256	3.54	<b>30.8</b>	< 0.000020	26.9	0.76	0.000042	< 0.00020	< 0.00060	0.00798			0.0203	
CM CCOFF	CM CCOFF WS 2022-02-15 NP	2022-02-15	1240	0.04	137	<b>0.00795</b>	0.0261	3.65	<b>32.4</b>	< 0.000010	28.1	0.78	0.000044	< 0.00010	< 0.00030	<b>0.00874</b>			0.019	
CM CCOFF	CM CCOFF WS 2022-02-22 NP	2022-02-22	1160	0.035	156	<b>0.00877</b>	0.0264	3.57	<b>33</b>	< 0.000010	28.8	0.78	0.000044	< 0.00010	< 0.00030	0.00828			0.0242	
CM CCOFF	CM CCOFF WS 2022-03-01 NP	2022-03-01	1170	0.034	146	<b>0.00684</b>	0.0266	3.5	<b>30.9</b>	< 0.000020	26.3	0.78	0.000041	< 0.00020	< 0.00060	<b>0.00873</b>			0.0201	
CM CCOFF	CM CCOFF WS 2022-03-08 NP	2022-03-08	1220	0.035	146	<b>0.00693</b>	0.0264	3.57	<b>31.8</b>	< 0.000020	26.1	0.81	0.000047	< 0.00020	< 0.00060	<b>0.00934</b>			0.0172	
CM CCOFF	CM CCOFF WS 2022-03-15 NP	2022-03-15	1200	0.04	142	<b>0.00887</b>	0.0243	4.03	<b>33.2</b>	< 0.000010	29.3	0.84	0.000042	< 0.00010	< 0.00030	<b>0.00886</b>			0.0159	
CM CCOFF	CM CCOFF WS 2022-03-22 NP	2022-03-22	1170	0.036	144	<b>0.00818</b>	0.026	3.74	<b>34.35</b>	< 0.000020	28.8	0.82	0.000041	< 0.00020	< 0.00060	<b>0.00936</b>			0.0144	
CM CCOFF	CM CCOFF WS 2022-03-29 NP	2022-03-29	1240	0.038	146	<b>0.00864</b>	0.0254	3.75	<b>35.3</b>	< 0.000010	28.9	0.84	0.000043	< 0.00010	< 0.00030	<b>0.00886</b>			0.0135	
CM CCOFF	CM CCOFF WS 2022-04-05 NP	2022-04-05	1140	0.039																

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

			Total Metals																
Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium <sup>a</sup> mg/L	Beryllium <sup>b</sup> mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt		Copper mg/L	Iron mg/L	Lead	
														Acute mg/L	Chronic mg/L			Acute mg/L	Chronic mg/L
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>c</sup>	3.3-3.5 <sup>d</sup>
Coal Mountain Mine																			
CM CCOFF	CM CCOFF WS 2022-04-12 NP	2022-04-12	1050	0.0176	0.00032	0.00021	0.0278	0.000058	< 0.000050	0.129	0.000303	226	0.00065	<b>0.00644</b>	0.0006	0.306	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-04-19 NP	2022-04-19	1070	0.014	0.00035	0.00021	0.0298	0.000034	< 0.000050	0.118	0.000257	263	0.00014	<b>0.00438</b>	< 0.00050	0.204	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-04-26 NP	2022-04-26	1060	0.0355	0.00032	< 0.00020	0.0281	< 0.040	< 0.000100	0.124	0.000199	227	< 0.00020	0.0031	< 0.00100	0.2	< 0.000100		
CM CCOFF	CM CCOFF WS 2022-05-03 NP	2022-05-03	912	0.0529	0.00033	0.00021	0.0293	0.000026	< 0.000050	0.122	0.00021	222	0.00018	0.00269	< 0.00050	0.202	0.000079		
CM CCOFF	CM CCOFF 2022-05-06 NP1	2022-05-06	878	0.0544	0.00036	0.00019	0.0295	0.000041	< 0.000050	0.123	0.000139	192	0.0002	0.00393	0.00056	0.287	0.000086		
CM CCOFF	CM CCOFF 2022-05-07 NP1	2022-05-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM CCOFF	CM CCOFF WS 2022-05-10 NP	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM CCOFF	CM CCOFF WS 2022-05-17 NP	2022-05-17	825	0.0846	0.00033	0.0003	0.0294	0.000051	< 0.000050	0.093	0.000359	168	0.00034	0.00396	0.00088	0.311	0.000050		
CM CCOFF	CM CCOFF WS 2022-05-24 NP	2022-05-24	776	0.0372	0.00031	0.00025	0.0221	0.000028	< 0.000050	0.085	0.00036	178	0.00032	0.00176	0.00068	0.143	0.000050		
CM CCOFF	CM CCOFF WS 2022-05-31 NP	2022-05-31	750	0.032	0.00028	0.00015	0.0189	< 0.020	< 0.000050	0.044	0.000415	154	0.0002	0.00086	< 0.00050	0.071	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-06-07 NP	2022-06-07	691	0.0527	0.0003	0.00022	0.0194	< 0.020	< 0.000050	0.038	0.000434	141	0.0002	0.00083	< 0.00050	0.107	0.000123		
CM CCOFF	CM CCOFF WS 2022-06-14 NP	2022-06-14	642	0.0267	0.0003	0.00022	0.0176	< 0.020	< 0.000050	0.034	0.00061	136	0.00019	0.00072	0.0005	0.092	0.000069		
CM CCOFF	CM CCOFF WS 2022-06-21 NP	2022-06-21	591	0.0963	0.00031	0.0003	0.0191	< 0.020	< 0.000050	0.032	0.000701	129	0.00035	0.00097	0.00066	0.16	0.000103		
CM CCOFF	CM CCOFF WS 2022-06-28 NP	2022-06-28	708	0.0207	0.0003	0.00019	0.0175	< 0.020	< 0.000050	0.04	0.000735	130	0.00016	0.00155	0.00054	0.071	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-07-05 NP	2022-07-05	806	0.0172	0.00032	0.00021	0.0218	< 0.020	< 0.000050	0.046	0.000848	193	0.00016	0.00142	< 0.00050	0.074	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-07-12 NP	2022-07-12	988	0.0516	0.00029	0.00024	0.0256	< 0.020	< 0.000050	0.048	0.000732	174	0.0002	0.00074	< 0.00050	0.151	0.000065		
CM CCOFF	CM CCOFF WS 2022-07-19 NP	2022-07-19	1170	0.015	0.00031	0.00025	0.024	< 0.020	< 0.000050	0.041	0.000974	218	0.00017	0.0005	< 0.00050	0.042	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-07-26 NP	2022-07-26	1100	0.0203	0.00032	0.00029	0.0259	< 0.020	< 0.000050	0.059	0.0009	229	0.00019	0.00055	< 0.00050	0.065	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-08-02 NP	2022-08-02	1180	0.0099	0.00032	0.00023	0.0268	< 0.020	< 0.000050	0.062	0.000788	234	0.00013	0.00048	< 0.00050	0.053	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-08-09 NP	2022-08-10	1180	0.0333	0.00031	0.00025	0.0253	< 0.020	< 0.000050	0.06	0.000651	259	0.00015	0.00058	< 0.00050	0.079	0.000052		
CM CCOFF	CM CCOFF WS 2022-08-16 NP	2022-08-16	1310	0.0155	0.00033	0.00018	0.025	< 0.020	< 0.000050	0.066	0.000606	256	0.00014	0.00041	< 0.00050	0.039	< 0.000050		
CM CCOFF	CM CCOFF WS SESMP 2022-08 N	2022-08-16	1210	0.0244	0.00029	0.00023	0.0256	< 0.020	< 0.000050	0.056	0.000521	271	0.00017	0.00048	< 0.00050	0.05	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-08-23 NP	2022-08-23	1220	0.0166	0.00031	0.00022	0.0266	< 0.020	< 0.000050	0.064	0.000651	272	0.00016	0.00046	0.00066	0.046	< 0.000050		
CM CCOFF	CM CCOFF 2022-08-25 NP1	2022-08-25	1340	0.0086	0.00028	0.0002	0.0243	< 0.020	< 0.000050	0.057	0.000573	253	0.00013	0.00032	< 0.00050	0.027	< 0.000050		
CM CCOFF	CM CCOFF 2022-08-25 NP2	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM CCOFF	CM CCOFF 2022-08-25 NP3	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM CCOFF	CM CCOFF WS 2022-08-30 NP	2022-08-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM CCOFF	CM CCOFF WS 2022-09-06 NP	2022-09-06	1250	0.0219	0.00028	0.00018	0.0259	< 0.020	< 0.000050	0.064	0.000517	258	0.00012	0.00035	< 0.00050	0.037	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-09-13 NP	2022-09-13	1350	0.02	0.00032	0.00026	0.0262	< 0.040	< 0.000100	0.07	0.000489	264	< 0.00020	0.00043	< 0.00100	0.041	< 0.000100		
CM CCOFF	CM CCOFF WS 2022-09-20 NP	2022-09-20	1280	0.0105	0.0003	< 0.00020	0.0246	< 0.040	< 0.000100	0.071	0.000481	268	< 0.00020	0.00033	< 0.00100	< 0.020	< 0.000100		
CM CCOFF	CM CCOFF WS 2022-09-27 NP	2022-09-27	1250	0.0094	0.00027	0.0002	0.0238	< 0.020	< 0.000050	0.067	0.000534	264	0.00012	0.00027	< 0.00050	0.016	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-10-04 NP	2022-10-04	1370	0.0152	0.00028	0.00022	0.0229	< 0.020	< 0.000050	0.058	0.000485	274	0.00013	0.00028	< 0.00050	0.02	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-10-11 NP	2022-10-11	1360	0.0209	0.00028	0.00028	0.0261	< 0.020	< 0.000050	0.051	0.000459	282	0.00018	0.00031	< 0.00050	0.023	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-10-18 NP	2022-10-18	1370	0.0181	0.00029	0.0002	0.025	< 0.020	< 0.000050	0.042	0.000571	291	0.00018	0.00029	< 0.00050	0.02	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-10-25 NP	2022-10-25	1410	0.0115	0.0003	< 0.00020	0.0286	< 0.040	< 0.000100	0.071	0.000559	305	< 0.00020	0.00033	< 0.00100	0.044	< 0.000100		
CM CCOFF	CM CCOFF WS 2022-11-01 NP	2022-11-01	1350	0.0245	0.00028	0.00024	0.0258	< 0.020	< 0.000050	0.052	0.000525	295	0.00012	0.00034	0.0005	0.039	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-11-08 NP	2022-11-08	1260	0.128	0.00028	0.00025	0.0274	< 0.020	< 0.000050	0.088	0.000265	274	0.00041	0.00068	< 0.00050	0.173	0.000104		
CM CCOFF	CM CCOFF WS 2022-11-15 NP	2022-11-15	1170	0.0433	0.0003	0.00021	0.0306	< 0.040	< 0.000100	0.098	0.000214	255	0.0002	0.00283	< 0.00100	0.127	< 0.000100		
CM CCOFF	CM CCOFF WS 2022-11-22 NP	2022-11-22	1350	0.0187	0.00032	0.00021	0.0259	0.000028	< 0.000050	0.1	0.000234	274	0.00018	0.00376	0.0005	0.135	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-11-29 NP	2022-11-29	1220	0.0156	0.00031	0.00025	0.0265	0.000023	< 0.000050	0.118	0.000201	281	0.00012	0.00356	0.00061	0.129	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-12-06 NP	2022-12-07	1460	0.0088	0.0003	0.00022	0.0285	< 0.020	< 0.000050	0.091	0.000226	267	0.00013	0.00273	< 0.00050	0.11	< 0.000050		
CM CCOFF	CM CCOFF WS 2022-12-13 NP	2022-12-13	1360	0.009	0.00029	< 0.00020	0.0309	< 0.040	< 0.000100	0.074	0.00021	297	< 0.00020	0.0015	< 0.00100	0.076	< 0.000100		
CM CCOFF	CM CCOFF WS 2022-12-28 NP	2022-12-28	1400	0.0085	0.00029	0.00019	0.0256	< 0.020	< 0.000050	0.094	0.000181	248	< 0.00010	0.00139	< 0.00050	0.154	< 0.000050		
CM SPD	CM NNP WS 2022-01-04 N	2022-01-06	1320	0.018	0.00027	0.00017	0.027	< 0.020	< 0.000050	0.11	0.000122	274	0.00015	0.00105	< 0.00050	0.135	< 0.000050		
CM SPD	CM SPD WS 2022-01-11 N	2022-01-11	727	0.01763333	0.00047	0.000173	0.0212667	< 0.020	< 0.000050	0.087667	0.000151	190.35	< 0.00010	<b>0.02146667</b>	< 0.00050	0.060333	< 0.000050		
CM SPD	CM SPD WS 2022-02-01 N	2022-02-01	1030	0.0176	0.00056	0.00019	0.0287	< 0.020	< 0.000050	0.096	0.000178	235	< 0.00010	<b>0.0242</b>	< 0.00050	0.069	< 0.000050		
CM SPD	CM NNP WS 2022-02-01 N	2022-02-01	1110	0.0098	0.00092	0.00022	0.0242	< 0.020	< 0.000050	0.134	0.00036	264	0.00017	<b>0.033</b>	< 0.00050	0.063	< 0.000050		

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

		Total Metals																		
Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03 <sup>a</sup>	0.0009-0.01 <sup>a</sup>	0.025-0.15 <sup>b</sup>	n/a	2	0.0001-0.003 <sup>c</sup>	0.00005-0.0015 <sup>c</sup>	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2 <sup>b</sup>	0.0075-2 <sup>b</sup>
Coal Mountain Mine																				
CM CCOFF	CM CCOFF WS 2022-04-12 NP	2022-04-12	1050	0.071	120	<b>0.0483</b>		0.0418	3.18	<b>23.2</b>	< 0.000010	73	1.37	0.000054	< 0.00010	< 0.00030	0.00777		0.0347	
CM CCOFF	CM CCOFF WS 2022-04-19 NP	2022-04-19	1070	0.072	148	<b>0.0358</b>		0.0384	3.6	<b>28.3</b>	< 0.000010	70.1	1.33	0.000053	< 0.00010	< 0.00030	0.00825		0.0242	
CM CCOFF	CM CCOFF WS 2022-04-26 NP	2022-04-26	1060	0.076	126	<b>0.0276</b>		0.0331	3.46	<b>24.5</b>	< 0.000020	71.4	1.16	0.000046	< 0.00020	< 0.00060	0.00758		0.0186	
CM CCOFF	CM CCOFF WS 2022-05-03 NP	2022-05-03	912	0.074	125	<b>0.0288</b>		0.0314	3.32	<b>24</b>	< 0.000010	69.1	1.05	0.000043	< 0.00010	0.00092	0.0065		0.0204	
CM CCOFF	CM CCOFF 2022-05-06 NP1	2022-05-06	878	0.096	100	<b>0.0294</b>		0.0353	3.27	<b>18.8</b>	< 0.000010	93.4	1.23	0.000052	< 0.00010	< 0.00090	0.0057		0.0156	
CM CCOFF	CM CCOFF 2022-05-07 NP1	2022-05-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CCOFF	CM CCOFF WS 2022-05-10 NP	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CCOFF	CM CCOFF WS 2022-05-17 NP	2022-05-17	825	0.074	94.3	<b>0.0293</b>		0.0323	2.96	<b>22.2</b>	< 0.000010	71.8	0.98	0.000044	< 0.00010	0.00149	0.00442		0.0322	
CM CCOFF	CM CCOFF WS 2022-05-24 NP	2022-05-24	776	0.053	101	<b>0.0171</b>		0.0255	3	<b>23.4</b>	< 0.000010	50.5	0.76	0.000043	< 0.00010	0.00051	0.00498		0.0284	
CM CCOFF	CM CCOFF WS 2022-05-31 NP	2022-05-31	750	0.034	90.7	<b>0.0039</b>		0.0206	2.65	<b>26.2</b>	< 0.000010	32.2	0.55	0.000034	< 0.00010	< 0.00060	0.00474		0.0255	
CM CCOFF	CM CCOFF WS 2022-06-07 NP	2022-06-07	691	0.025	81.9	<b>0.0043</b>		0.0218	2.55	<b>25.6</b>	< 0.000010	19.9	0.41	0.000033	< 0.00010	0.00124	0.00417		0.0303	
CM CCOFF	CM CCOFF WS 2022-06-14 NP	2022-06-15	642	0.022	73.8	<b>0.0058</b>		0.0246	2.55	<b>24.7</b>	< 0.000010	16.4	0.37	0.000035	< 0.00010	0.00056	0.00396		0.0436	
CM CCOFF	CM CCOFF WS 2022-06-21 NP	2022-06-21	591	0.021	78.1	<b>0.00709</b>		0.0276	2.78	<b>23.8</b>	< 0.000010	16.9	0.35	0.000037	< 0.00010	0.00222	0.00383		0.0491	
CM CCOFF	CM CCOFF WS 2022-06-28 NP	2022-06-28	708	0.023	71.6	<b>0.00894</b>		0.0277	2.41	<b>20.5</b>	< 0.000072	18	0.38	0.000039	< 0.00010	0.00057	0.00349		0.0486	
CM CCOFF	CM CCOFF WS 2022-07-05 NP	2022-07-05	806	0.031	100	<b>0.0103</b>		0.0334	2.9	<b>25.6</b>	< 0.000010	24.6	0.57	0.000044	< 0.00010	0.00051	0.00519		0.0562	
CM CCOFF	CM CCOFF WS 2022-07-12 NP	2022-07-12	988	0.028	99.8	<b>0.00748</b>		0.028	2.5	<b>25.1</b>	< 0.000010	20.8	0.51	0.000042	< 0.00010	0.00113	0.00526		0.0437	
CM CCOFF	CM CCOFF WS 2022-07-19 NP	2022-07-19	1170	0.028	134	0.00472		0.037	3.34	<b>36.9</b>	< 0.000010	17.1	0.52	0.000048	< 0.00010	0.00038	0.00724		0.0577	
CM CCOFF	CM CCOFF WS 2022-07-26 NP	2022-07-26	1100	0.038	136	<b>0.00576</b>		0.0378	3.62	<b>32.2</b>	< 0.000010	24.4	0.65	0.000061	< 0.00010	0.00032	0.00737		0.0507	
CM CCOFF	CM CCOFF WS 2022-08-02 NP	2022-08-02	1180	0.032	139	0.00516		0.0392	3.41	<b>27.6</b>	< 0.000010	26.1	0.67	0.000047	< 0.00010	0.0003	0.00796		0.0472	
CM CCOFF	CM CCOFF WS 2022-08-09 NP	2022-08-10	1180	0.035	151	<b>0.00648</b>		0.0367	3.63	<b>29.7</b>	< 0.000010	25.2	0.68	0.000053	< 0.00010	0.00091	0.00795		0.0433	
CM CCOFF	CM CCOFF WS 2022-08-16 NP	2022-08-16	1310	0.035	138	0.00503		0.0364	3.48	<b>30</b>	< 0.000010	21.3	0.71	0.000046	< 0.00010	0.00034	<b>0.00905</b>		0.0387	
CM CCOFF	CM CCOFF WS SESMP 2022-08 N	2022-08-16	1210	0.035	158	0.00544		0.0383	3.93	<b>30.5</b>	< 0.000010	25.6	0.71	0.000056	< 0.00010	0.00103	0.00795		0.0336	
CM CCOFF	CM CCOFF WS 2022-08-23 NP	2022-08-23	1220	0.036	158	0.00527		0.0378	3.71	<b>30.9</b>	< 0.000010	24.4	0.74	0.000059	< 0.00010	0.0005	<b>0.00889</b>		0.0356	
CM CCOFF	CM CCOFF 2022-08-25 NP1	2022-08-25	1340	0.034	168	0.00514		0.038	3.81	<b>28.7</b>	< 0.000010	24.9	0.68	0.000045	< 0.00010	< 0.00030	0.00829		0.0351	
CM CCOFF	CM CCOFF 2022-08-25 NP2	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CCOFF	CM CCOFF 2022-08-25 NP3	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CCOFF	CM CCOFF WS 2022-08-30 NP	2022-08-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM CCOFF	CM CCOFF WS 2022-09-06 NP	2022-09-06	1250	0.033	162	0.00568		0.0367	3.95	<b>30.4</b>	< 0.000010	25.5	0.73	0.000056	< 0.00010	0.00075	<b>0.00888</b>		0.0331	
CM CCOFF	CM CCOFF WS 2022-09-13 NP	2022-09-13	1350	0.036	159	0.00548		0.0371	3.67	<b>29.9</b>	< 0.000020	26	0.75	0.000055	< 0.00020	< 0.00060	0.007		0.0318	
CM CCOFF	CM CCOFF WS 2022-09-20 NP	2022-09-20	1280	0.038	165	0.00495		0.0389	3.57	<b>28.6</b>	< 0.000020	25.3	0.75	0.000052	< 0.00020	< 0.00060	0.00829		0.0273	
CM CCOFF	CM CCOFF WS 2022-09-27 NP	2022-09-27	1250	0.037	162	0.00499		0.0373	3.95	<b>30.2</b>	< 0.000010	23.1	0.74	0.000047	< 0.00010	0.00034	<b>0.00906</b>		0.0321	
CM CCOFF	CM CCOFF WS 2022-10-04 NP	2022-10-04	1370	0.031	165	0.00499		0.0375	3.68	<b>30.2</b>	< 0.000010	25.2	0.75	0.000053	< 0.00010	0.00033	0.00838		0.027	
CM CCOFF	CM CCOFF WS 2022-10-11 NP	2022-10-11	1360	0.032	176	0.005		0.04	3.98	<b>31.8</b>	< 0.000010	21.3	0.68	0.000057	< 0.00010	0.00049	<b>0.00859</b>		0.0317	
CM CCOFF	CM CCOFF WS 2022-10-18 NP	2022-10-18	1370	0.029	151	<b>0.00709</b>		0.0404	3.85	<b>34.9</b>	< 0.000010	15.7	0.6	0.000054	< 0.00010	0.00032	<b>0.00856</b>		0.0381	
CM CCOFF	CM CCOFF WS 2022-10-25 NP	2022-10-25	1410	0.036	173	<b>0.00801</b>		0.0429	4.09	<b>32.8</b>	< 0.000020	22.9	0.76	0.000066	< 0.00020	0.00075	<b>0.00902</b>		0.0332	
CM CCOFF	CM CCOFF WS 2022-11-01 NP	2022-11-01	1350	0.03	181	<b>0.00714</b>		0.0416	4.11	<b>34.4</b>	< 0.000010	18.2	0.63	0.000055	< 0.00010	0.00072	<b>0.00877</b>		0.0379	
CM CCOFF	CM CCOFF WS 2022-11-08 NP	2022-11-08	1260	0.038	158	<b>0.0124</b>		0.0343	3.87	<b>30.5</b>	< 0.000010	27.4	0.84	0.000051	< 0.00010	0.0031	0.00804		0.0213	
CM CCOFF	CM CCOFF WS 2022-11-15 NP	2022-11-15	1170	0.045	159	<b>0.0233</b>		0.0382	3.92	<b>28.8</b>	< 0.000020	34.1	1.03	0.000053	< 0.00020	0.00117	0.00839		0.0185	
CM CCOFF	CM CCOFF WS 2022-11-22 NP	2022-11-22	1350	0.055	142	<b>0.032</b>		0.0421	3.7	<b>30.9</b>	< 0.000010	38.6	1.14	0.000058	< 0.00010	< 0.00030	0.00822		0.0219	
CM CCOFF	CM CCOFF WS 2022-11-29 NP	2022-11-29	1220	0.055	166	<b>0.0324</b>		0.0391	3.89	<b>27.6</b>	< 0.000010	48.5	1.19	0.000053	< 0.00010	0.00031	<b>0.00851</b>		0.0186	
CM CCOFF	CM CCOFF WS 2022-12-06 NP	2022-12-07	1460	0.05	156	<b>0.0284</b>		0.0366	3.69	<b>28.9</b>	< 0.000010	45.7	1.09	0.000044	< 0.00010	< 0.00030	0.00802		0.016	
CM CCOFF	CM CCOFF WS 2022-12-13 NP	2022-12-13	1360	0.041	174	<b>0.0217</b>		0.0357	4.18	<b>35.8</b>	< 0.000020	29.1	0.8	0.000052	< 0.00020	< 0.00060	<b>0.00949</b>		0.0163	
CM CCOFF	CM CCOFF WS 2022-12-28 NP	2022-12-28	1400	0.047	158	<b>0.0189</b>		0.0287	3.79	<b>32.8</b>	< 0.000010	43.2	1.05	0.000047	< 0.00010	< 0.00030	<b>0.00934</b>		0.0129	
CM SPD	CM NNP WS 2022-01-04 N	2022-01-06	1320	0.052	171	<b>0.0181</b>		0.028	3.76	<b>32.1</b>	< 0.000010	42.9	1.01	0.000047	< 0.00010	0.00065	<b>0.00885</b>		0.0087	
CM SPD	CM SPD WS 2022-01-11 N	2022-01-11	727	0.053	78	<b>0.160366667</b>		0.1005	3.3433	<b>4.85</b>	< 0.000010	30.9	0.87	0.000042	< 0.00010	< 0.00060	0.0051		0.0191	
CM SPD	CM SPD WS 2022-02-01 N	2022-02-01	1030	0.061	107	<b>0.173</b>		0.117	4.21	<b>7.5</b>	< 0.000010	39.3	1.16	0.000046	< 0.00010	< 0.00060	0.00704		0.0218	
CM SPD	CM NNP WS 2022-02-01 N	2022-02-01	1110	0.077	105	<b>0.185</b>		0.18	5.2	<b>5.57</b>	< 0.000010	52.5	1.45	0.000074	< 0.00010	< 0.00030	0.00757		0.039	
CM SPD	CM SPD WS 2022-03-01 N	2022-03-01	550	0.04	50	<b>0.09005</b>		0.08725	2.53	<b>2.79</b>	< 0.000010	25.3	0.74	0.0000445	< 0.00010	< 0.00030	0.00385		0.0203	
CM SPD	CM SPD WS																			

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt		Copper mg/L	Iron mg/L	Lead	
														Acute mg/L	Chronic mg/L			Acute mg/L	Chronic mg/L
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>a</sup>	3.3-3.5 <sup>a</sup>
Coal Mountain Mine																			
CM SPD	CM SPD WS 2022-03-29 N	2022-03-29	1170	0.0146	0.00045	< 0.00020	0.0313	< 0.040	< 0.000100	0.072	0.0000694	261	< 0.00020	<b>0.0141</b>	< 0.00100	0.025	< 0.000100		
CM SPD	CM SPD WS 2022-04-05 N	2022-04-05	977	0.0541	0.00039	0.00021	0.0339	< 0.020	< 0.000050	0.058	0.0000734	216	0.00015	<b>0.0123</b>	< 0.00050	0.074	< 0.000075		
CM SPD	CM SPD WS 2022-04-12 N	2022-04-12	1010	0.024	0.00038	0.00025	0.0311	< 0.020	< 0.000050	0.051	0.0000927	218	0.00022	<b>0.011</b>	< 0.00050	0.054	< 0.000050		
CM SPD	CM SPD WS 2022-04-19 N	2022-04-19	991	0.0202	0.00039	0.00018	0.0308	< 0.020	< 0.000050	0.053	0.0000761	231	< 0.00010	<b>0.0121</b>	< 0.00050	0.048	< 0.000050		
CM SPD	CM SPD WS 2022-04-26 N	2022-04-26	1000	0.0238	0.00038	< 0.00020	0.0311	< 0.040	< 0.000100	0.064	0.0000784	230	< 0.00020	<b>0.0131</b>	< 0.00100	0.045	< 0.000100		
CM SPD	CM SPD WS 2022-04-27 N	2022-04-27	903	0.0372	0.00038	0.00017	0.0318	< 0.020	< 0.000050	0.064	0.0000684	223	< 0.00010	<b>0.0113</b>	< 0.00050	0.047	< 0.000050		
CM SPD	CM SPD WS 2022-04-28 N	2022-04-28	888	0.0373	0.00041	0.00023	0.0339	< 0.020	< 0.000050	0.064	0.0000849	226	0.00011	<b>0.0123</b>	< 0.00050	0.068	< 0.000057		
CM SPD	CM SPD WS 2022-04-29 N	2022-04-29	899	0.0466	0.00039	0.0002	0.0325	< 0.020	< 0.000050	0.066	0.0000886	201	0.00011	<b>0.0123</b>	< 0.00050	0.065	< 0.000050		
CM SPD	CM SPD WS 2022-05-03 N	2022-05-03	910	0.0414	0.00043	0.00018	0.0321	< 0.020	< 0.000050	0.075	0.00011	206	< 0.00010	<b>0.0165</b>	< 0.00050	0.074	< 0.000055		
CM SPD	CM SPD 2022-05-06 N2	2022-05-06	820	0.0461	0.00045	0.00021	0.0341	< 0.020	< 0.000050	0.081	0.000147	198	0.00014	<b>0.0196</b>	< 0.00050	0.093	0.000064		
CM SPD	CM SPD 2022-05-06 N1	2022-05-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM SPD	CM SPD 2022-05-07 N1	2022-05-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM SPD	CM NNP WS 2022-05-10 N	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM SPD	CM SPD WS 2022-05-17 N	2022-05-17	478	0.03166667	0.000333333	0.000187	0.0261333	< 0.020	< 0.000050	0.049	0.000153	113.35	0.00018333	<b>0.01086667</b>	0.00053667	0.055667	0.000086		
CM SPD	CM NNP WS 2022-05-24 N	2022-05-24	838	0.0452	0.00057	0.00024	0.0299	< 0.020	< 0.000050	0.099	0.000288	197	0.00017	<b>0.0228</b>	0.00058	0.07	0.00006		
CM SPD	CM NNP WS 2022-05-31 N	2022-05-31	565	0.0342	0.00041	0.000157	0.0180333	< 0.020	< 0.000050	0.061333	0.000177	127.68333	0.00011	<b>0.01573333</b>	< 0.00050	0.040333	< 0.000050		
CM SPD	CM NNP WS 2022-06-07 N	2022-06-07	560	0.02196667	0.000453333	0.000157	0.0183333	< 0.020	< 0.000050	0.065667	0.000146667	128.68333	< 0.00010	<b>0.01666667</b>	< 0.00050	0.037333	< 0.000050		
CM SPD	CM SPD WS 2022-06-14 N	2022-06-14	557	0.02313333	0.00041	0.000203	0.0166	< 0.020	< 0.000050	0.075333	0.000122	136.68333	0.00011333	<b>0.02113333</b>	< 0.00050	0.055	< 0.000050		
CM SPD	CM SPD 2022-06-15 N1	2022-06-15	712	0.227	0.00048	0.00047	0.0389	0.000037	< 0.000050	0.088	0.000176	167	0.00036	<b>0.023</b>	0.00078	0.212	0.000277		
CM SPD	CM SPD WS 2022-06-21 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM SPD	CM SPD WS 2022-06-28 N	2022-06-28	858	0.0359	0.00057	0.00029	0.0278	< 0.020	< 0.000050	0.104	0.000191	194	0.00013	<b>0.0298</b>	< 0.00050	0.081	< 0.000050		
CM SPD	CM NNP WS 2022-07-05 N	2022-07-05	990	0.0159	0.00076	0.00026	0.0232	< 0.020	< 0.000050	0.093	0.000219	241	0.00011	<b>0.0361</b>	< 0.00050	0.058	< 0.000050		
CM SPD	CM SPD WS 2022-07-12 N	2022-07-12	603	0.0195	0.00059	0.000247	0.014	< 0.020	< 0.000050	0.086667	0.000092	146.35	< 0.00010	<b>0.02183333</b>	< 0.00050	0.044	< 0.000050		
CM SPD	CM SPD WS 2022-07-26 N	2022-07-26	1050	0.0143	0.00089	0.00028	0.0197	< 0.020	< 0.000050	0.142	0.000103	217	< 0.00010	<b>0.0336</b>	< 0.00050	0.049	< 0.000050		
CM SPD	CM SPD WS 2022-08-02 N	2022-08-02	936	0.0105	0.001	0.00022	0.017	< 0.020	< 0.000050	0.125	0.000136	228	0.00014	<b>0.0329</b>	< 0.00050	0.042	< 0.000050		
CM SPD	CM SPD WS 2022-08-09 N	2022-08-09	1020	0.0101	0.00106	0.00024	0.0176	< 0.020	< 0.000050	0.15	0.000218	249	0.00027	<b>0.0306</b>	< 0.00050	0.046	< 0.000050		
CM SPD	CM SPD WS 2022-08-10 N	2022-08-10	962	0.0138	0.00106	0.00026	0.0168	< 0.020	< 0.000050	0.165	0.000238	232	< 0.00010	<b>0.0267</b>	< 0.00050	0.045	< 0.000050		
CM SPD	CM SPD WS 2022-08-11 N	2022-08-11	1020	0.0104	0.00107	0.00017	0.0172	< 0.020	< 0.000050	0.164	0.000224	267	< 0.00010	<b>0.0272</b>	< 0.00050	0.036	< 0.000050		
CM SPD	CM SPD WS SESMP 2022-08 N	2022-08-16	1050	0.0169	0.00094	0.00018	0.0153	< 0.020	< 0.000050	0.148	0.000243	233	0.0006	<b>0.0271</b>	< 0.00050	0.04	< 0.000050		
CM SPD	CM SPD 2022-08-25 N1	2022-08-25	968	0.0102	0.00102	0.00022	0.0157	< 0.020	< 0.000050	0.169	0.000269	227	< 0.00010	<b>0.027</b>	0.00052	0.04	< 0.000050		
CM SPD	CM SPD WS 2022-09-06 N	2022-09-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CM SPD	CM SPD WS 2022-10-04 N	2022-10-04	966	0.016	0.00094	0.0003	0.0171	< 0.020	< 0.000050	0.152	0.000119	214	< 0.00010	<b>0.0162</b>	< 0.00050	0.032	< 0.000050		
CM SPD	CM SPD WS 2022-11-01 N	2022-11-01	714	0.01133333	0.000473333	0.0002	0.01546667	< 0.020	< 0.000050	0.072667	4.28333E-05	167.68333	< 0.00010	<b>0.00746667</b>	< 0.00050	0.017	< 0.000050		
CM SPD	CM SPD WS 2022-11-01 N	2022-11-01	1060	0.172	0.00055	0.00024	0.0275	< 0.020	< 0.000050	0.108	0.0000518	249	0.00022	<b>0.0131</b>	< 0.00050	0.074	0.000093		

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness	Lithium	Magnesium	Manganese		Nickel*	Potassium	Selenium	Silver		Sodium	Strontium	Thallium	Tin	Titanium	Uranium*	Zinc	
						mg/L	mg/L				mg/L	mg/L							mg/L	µg/L
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03 <sup>a</sup>	0.0009-0.01 <sup>a</sup>	0.025-0.15 <sup>b</sup>	n/a	2	0.0001-0.003 <sup>a</sup>	0.00005-0.0015 <sup>b</sup>	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2 <sup>a</sup>	0.0075-2 <sup>a</sup>
Coal Mountain Mine																				
CM SPD	CM SPD WS 2022-03-29 N	2022-03-29	1170	0.054	128	<b>0.0959</b>	0.0866	4.07	<b>9.44</b>	< 0.000020	36.7	0.93	0.000039	< 0.00020	< 0.00060	0.00671	0.0132			
CM SPD	CM SPD WS 2022-04-05 N	2022-04-05	977	0.044	106	<b>0.0991</b>	0.0646	3.65	<b>8.19</b>	< 0.000010	28.5	0.77	0.000033	< 0.00010	0.00145	0.00526	0.0123			
CM SPD	CM SPD WS 2022-04-12 N	2022-04-12	1010	0.039	111	<b>0.0854</b>	0.0598	3.18	<b>8.78</b>	< 0.000010	27.7	0.77	0.000029	< 0.00010	0.00041	0.00553	0.0126			
CM SPD	CM SPD WS 2022-04-19 N	2022-04-19	991	0.041	117	<b>0.0895</b>	0.0631	3.41	<b>9.35</b>	< 0.000010	30.7	0.83	0.00003	< 0.00010	< 0.00030	0.00541	0.0124			
CM SPD	CM SPD WS 2022-04-26 N	2022-04-26	1000	0.045	119	<b>0.0911</b>	0.0681	3.66	<b>9.3</b>	< 0.000020	32.3	0.78	0.000026	< 0.00020	0.00079	0.00565	0.0127			
CM SPD	CM SPD WS 2022-04-27 N	2022-04-27	903	0.046	114	<b>0.0848</b>	0.0625	3.44	<b>9.61</b>	< 0.000010	31.9	0.76	0.000031	< 0.00010	< 0.00090	0.00521	0.0117			
CM SPD	CM SPD WS 2022-04-28 N	2022-04-28	888	0.043	109	<b>0.0952</b>	0.0652	3.58	<b>9.85</b>	< 0.000010	30.5	0.82	0.000031	< 0.00010	0.00056	0.00503	0.0125			
CM SPD	CM SPD WS 2022-04-29 N	2022-04-29	899	0.041	99.3	<b>0.0965</b>	0.0667	3.43	<b>8.7</b>	< 0.000010	27.8	0.8	0.000031	< 0.00010	< 0.00120	0.00518	0.0119			
CM SPD	CM SPD WS 2022-05-03 N	2022-05-03	910	0.047	93.8	<b>0.125</b>	0.0783	3.61	<b>7.7</b>	< 0.000010	29.2	0.84	0.000035	< 0.00010	< 0.00540	0.00528	0.0142			
CM SPD	CM SPD 2022-05-06 N2	2022-05-06	820	0.047	90.6	<b>0.148</b>	0.088	3.83	<b>9.07</b>	< 0.000010	29.6	0.91	0.000042	< 0.00010	< 0.00090	0.00546	0.0161			
CM SPD	CM SPD 2022-05-06 N1	2022-05-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM SPD	CM SPD 2022-05-07 N	2022-05-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM SPD	CM NNP WS 2022-05-10 N	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM SPD	CM SPD WS 2022-05-17 N	2022-05-17	478	0.026	55.44	<b>0.076366667</b>	0.0541	2.15	<b>7.91667</b>	< 0.000010	16.3	0.54	0.000029	< 0.00010	0.0007533	0.00303333	0.021266667			
CM SPD	CM NNP WS 2022-05-24 N	2022-05-24	838	0.052	89.4	<b>0.152</b>	0.112	3.67	<b>8.5</b>	< 0.000010	32.3	1.01	0.000055	< 0.00010	0.00109	0.00581	0.0333			
CM SPD	CM NNP WS 2022-05-31 N	2022-05-31	565	0.036	60.44	<b>0.101366667</b>	0.0755	2.57	<b>6.05667</b>	< 0.000010	23.2	0.7	0.000038	< 0.00010	< 0.00150	0.00437667	0.019366667			
CM SPD	CM NNP WS 2022-06-07 N	2022-06-07	560	0.034	58.24	<b>0.096366667</b>	0.078833333	2.5033	<b>5.54333</b>	< 0.000010	21.7	0.65	0.00004	< 0.00010	0.0006667	0.00424667	0.019333333			
CM SPD	CM SPD WS 2022-06-14 N	2022-06-14	557	0.04	55.17	<b>0.139033333</b>	0.090166667	2.68	<b>3.85</b>	< 0.000010	23.8	0.73	3.96667E-05	< 0.00010	0.0006833	0.00478333	0.018833333			
CM SPD	CM SPD 2022-06-15 N1	2022-06-15	712	0.046	71.7	<b>0.16</b>	0.0987	3.26	<b>5.18</b>	0.00001	26.2	0.81	0.000052	< 0.00010	0.00832	0.00507	0.0226			
CM SPD	CM SPD WS 2022-06-21 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM SPD	CM SPD WS 2022-06-28 N	2022-06-28	858	0.056	82	<b>0.192</b>	0.129	3.88	<b>6.52</b>	0.000041	33.3	0.98	0.00005	< 0.00010	0.00094	0.00616	0.0247			
CM SPD	CM NNP WS 2022-07-05 N	2022-07-05	990	0.068	98	<b>0.214</b>	0.162	4.6	<b>5.23</b>	< 0.000010	41.4	1.24	0.000064	< 0.00010	0.0005	0.00742	0.0272			
CM SPD	CM SPD WS 2022-07-12 N	2022-07-12	603	0.047	65.24	<b>0.125366667</b>	0.1045	2.9467	<b>3.14</b>	< 0.000010	26.6	0.78	0.000047	< 0.00010	0.0006933	0.00487333	0.014833333			
CM SPD	CM SPD WS 2022-07-26 N	2022-07-26	1050	0.077	96.7	<b>0.175</b>	0.17	4.85	<b>4.79</b>	< 0.000010	46.6	1.28	0.000072	< 0.00010	0.00039	0.0077	0.0147			
CM SPD	CM SPD WS 2022-08-02 N	2022-08-02	936	0.07	98.2	<b>0.144</b>	0.181	4.77	<b>3.52</b>	< 0.000010	47.9	1.28	0.000068	< 0.00010	< 0.00030	0.00786	0.0086			
CM SPD	CM SPD WS 2022-08-09 N	2022-08-09	1020	0.085	114	<b>0.128</b>	0.182	5.46	<b>4.01</b>	< 0.000010	54.7	1.35	0.000077	< 0.00010	< 0.00030	0.00775	0.0069			
CM SPD	CM SPD WS 2022-08-10 N	2022-08-10	962	0.082	101	<b>0.119</b>	0.17	5.44	<b>3.92</b>	< 0.000010	52.6	1.32	0.000081	< 0.00010	0.00045	0.00785	0.0081			
CM SPD	CM SPD WS 2022-08-11 N	2022-08-11	1020	0.089	109	<b>0.118</b>	0.172	5.37	<b>3.51</b>	< 0.000010	53.7	1.36	0.000085	< 0.00010	< 0.00030	0.00785	0.0076			
CM SPD	CM SPD WS SESMP 2022-08 N	2022-08-16	1050	0.075	95.5	<b>0.118</b>	0.165	4.67	<b>3.3</b>	< 0.000010	46	1.29	0.000064	< 0.00010	0.00054	0.00744	0.0094			
CM SPD	CM SPD 2022-08-25 N1	2022-08-25	968	0.082	103	<b>0.111</b>	0.169	5.11	<b>3.47</b>	< 0.000010	50.5	1.39	0.000077	< 0.00010	< 0.00030	0.00808	0.0096			
CM SPD	CM SPD WS 2022-09-06 N	2022-09-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CM SPD	CM SPD WS 2022-10-04 N	2022-10-04	966	0.07	103	<b>0.0634</b>	0.134	4.68	<b>4.46</b>	< 0.000010	49.1	1.2	0.000068	< 0.00010	0.0004	0.00606	0.0048			
CM SPD	CM SPD WS 2022-11-01 N	2022-11-01	714	0.043	82	<b>0.030133333</b>	0.077833333	3.2367	<b>3.57333</b>	< 0.000010	30.6	0.78	0.000037	< 0.00010	0.00038	0.0047	< 0.0030			
CM SPD	CM SPD WS 2022-11-17 N	2022-11-17	1060	0.06	120	<b>0.065</b>	0.102	4.65	5.73	< 0.000010	39.4	1.06	0.000041	< 0.00010	0.00431	0.00653	0.0041			

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium <sup>a</sup> mg/L	Beryllium <sup>a</sup> mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L		Copper mg/L	Iron mg/L	Lead mg/L	
														Acute	Chronic			Acute	Chronic
<b>BC WQG FWAL</b>			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>b</sup>	3.3-3.5 <sup>b</sup>
<b>Elkview Operation</b>																			
EV AQ6	EV AQ6 WS 2022-Q1 N	2022-01-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-02 MON N	2022-02-07	370	0.0391	0.00014	0.00018	0.193	< 0.020	< 0.000050	0.017	0.0000193	83.7	< 0.00010	< 0.10	< 0.00050	0.047		0.00006	
EV AQ6	EV AQ6 WS 2022-03 MON N	2022-03-16	346	0.012	0.00015	0.00015	0.2	< 0.020	< 0.000050	0.017	0.0000079	78.7	< 0.00010	< 0.10	< 0.00050	0.012		< 0.000050	
EV AQ6	EV AQ6 WS 2022-03 WEK13 N	2022-03-22	413	0.0128	0.00015	0.00018	0.2	< 0.020	< 0.000050	0.015	0.0000138	92.8	< 0.00010	< 0.10	< 0.00050	0.015		< 0.000050	
EV AQ6	EV AQ6 WS 2022-03 WEK14 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-04 WEK15 N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-Q2 N	2022-04-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV MC5 WS 2022-Q2 N	2022-04-13	379	0.0115	0.00019	0.00019	0.282	< 0.020	< 0.000050	0.02	0.0000135	103	< 0.00010	< 0.10	< 0.00050	0.017		< 0.000050	
EV AQ6	EV MC7 WS 2022-Q2 N	2022-04-13	378	0.0093	0.00018	0.00018	0.258	< 0.020	< 0.000050	0.019	0.0000118	100	< 0.00010	< 0.10	< 0.00050	0.016		< 0.000050	
EV AQ6	EV AQ6 WS 2022-04 WEK17 N	2022-04-18	< 0.50	< 0.0030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010		< 0.000050	
EV AQ6	EV AQ6 WS 2022-04 WEK18 N	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-05 MON N	2022-05-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-05 WEK20 N	2022-05-11	361	< 0.0150	0.00015	0.00019	0.235	< 0.020	< 0.000050	0.019	0.0000058	91.7	< 0.00010	< 0.10	0.00107	0.013		0.000055	
EV AQ6	EV AQ6 WS 2022-05 WEK21 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-05 WEK22 N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-05 WEK23 N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV MC8 WS 2022-06 MON N	2022-06-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV MC6 WS 2022-06 MON N	2022-06-07	< 0.50	< 0.0030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	0.051	< 0.00010	< 0.10	< 0.00050	< 0.010		< 0.000050	
EV AQ6	EV AQ6 WS 2022-06 MON N	2022-06-08	394	0.0071	0.00014	0.00017	0.193	< 0.020	< 0.000050	0.017	< 0.0050	77.5	0.00014	< 0.10	< 0.00050	< 0.010		< 0.000050	
EV AQ6	EV AQ6 WS 2022-06-13 N 1743	2022-06-13	355	0.0069	0.00014	0.00023	0.194	< 0.020	< 0.000050	0.018	< 0.0050	78.1	< 0.00010	< 0.10	< 0.00050	< 0.010		< 0.000050	
EV AQ6	EV AQ6 WS 2022-06 WEK25 N	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-06-14 N 1725	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-06-14 N 0650	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-06 WEK26 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-06 WEK27 N	2022-06-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-Q3 N	2022-07-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV MC6 WS 2022-Q3 N	2022-07-06	389	0.019	0.00014	0.00024	0.238	< 0.020	< 0.000050	0.018	< 0.0050	87.6	< 0.00010	< 0.10	0.00069	0.013		< 0.000050	
EV AQ6	EV MC8 WS 2022-Q3 N	2022-07-06	372	0.0064	0.00014	0.00022	0.231	< 0.020	< 0.000050	0.018	0.0000053	88.5	< 0.00010	< 0.10	< 0.00050	0.016		< 0.000050	
EV AQ6	EV AQ6 WS 2022-07 WEK29 N	2022-07-12	< 0.50	< 0.0030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010		< 0.000050	
EV AQ6	EV AQ6 WS 2022-08 MON N	2022-08-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS SESMP 2022 08 N	2022-08-11	318	0.0119	0.00014	0.00032	0.17	0.000025	< 0.000050	0.019	0.0000182	58.3	< 0.00010	< 0.10	< 0.00050	0.033		< 0.000050	
EV AQ6	EV AQ6 WS 2022-09 MON N	2022-09-07	305	0.0099	0.00014	0.00025	0.175	< 0.020	< 0.000050	0.02	< 0.0050	66.1	< 0.00010	< 0.10	< 0.00050	0.035		< 0.000050	
EV AQ6	EV MC8 WS 2022-09 MON N	2022-09-07	302	0.0126	0.00012	0.00029	0.203	< 0.020	< 0.000050	0.02	< 0.0050	65.4	< 0.00010	< 0.10	< 0.00050	0.032		< 0.000050	
EV AQ6	EV AQ6 WS 2022-09-08 N	2022-09-08	< 0.50	0.0054	< 0.00010	< 0.00010	0.00043	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	0.032		< 0.000050	
EV AQ6	EV AQ6 WS 2022-09-09 N	2022-09-09	305	0.0133	0.00012	0.00033	0.185	< 0.020	< 0.000050	0.019	0.0000052	57.2	< 0.00010	< 0.10	< 0.00050	0.034		< 0.000050	
EV AQ6	EV AQ6 WS 2022-09-10 N	2022-09-10	288	0.016	0.00012	0.00034	0.193	< 0.020	< 0.000050	0.018	0.0000063	56.3	< 0.00010	< 0.10	< 0.00050	0.038		< 0.000050	
EV AQ6	EV AQ6 WS 2022-04 N	2022-10-07	299	0.0171	0.00012	0.00034	0.188	< 0.020	< 0.000050	0.018	0.0000068	58.4	< 0.00010	< 0.10	< 0.00050	0.039		< 0.000050	
EV AQ6	EV MC6 WS 2022-Q4 N	2022-10-07	294	0.012	0.0001	0.00015	0.156	< 0.020	< 0.000050	0.016	< 0.0050	54.5	< 0.00010	< 0.10	< 0.00050	0.036		< 0.000050	
EV AQ6	EV MC8 WS 2022-Q4 N	2022-10-07	300	0.0102	0.00013	0.00022	0.174	< 0.020	< 0.000050	0.021	0.000008	59.6	< 0.00010	< 0.10	< 0.00050	0.036		< 0.000050	
EV AQ6	EV AQ6 WS 2022-11 MON N	2022-11-09	< 0.50	< 0.0030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010		< 0.000050	
EV AQ6	EV MC6 WS 2022-11 MON N	2022-11-09	386	0.0114	0.00014	0.00022	0.209	< 0.020	< 0.000050	0.019	0.0000065	81.9	< 0.00010	0.00011	< 0.00050	0.067		< 0.000050	
EV AQ6	EV MC8 WS 2022-11 MON N	2022-11-09	386	0.0114	0.00013	0.00021	0.209	< 0.020	< 0.000050	0.019	< 0.0050	82.4	< 0.00010	< 0.10	< 0.00050	0.064		< 0.000050	
EV BC1	EV BC1 WS 2022-01-03 N-SRF	2022-01-03	< 0.50	< 0.0030	< 0.00010	< 0.00010	0.00038	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010		< 0.000050	
EV BC1	EV BC1 WS 2022-Q1 N	2022-01-18	1380	< 0.0060	0.00062	0.0004	0.0664	< 0.040	< 0.000100	0.074	0.000113	275	< 0.00020	0.00053	< 0.00100	0.089		< 0.000100	
EV BC1	EV BC1 WS 2022-01-18 N-SRF	2022-01-18	1530	0.007	0.0006	0.00025	0.0619	< 0.040	< 0.000100	0.068	0.000124	277	< 0.00020	0.0004	< 0.00100	0.06		< 0.000100	
EV BC1	EV BC1 WS 2022-02-01 N-SRF	2022-02-01	1550	0.0103	0.00055	0.00027	0.0674	< 0.040	< 0.000100	0.068	0.000114	275	< 0.00020	0.00043	< 0.00100	0.064		< 0.000100	
EV BC1	EV BC1 WS 2022-02 MON N	2022-02-08	1630	< 0.0060	0.00061	0.00033	0.0647	< 0.040	< 0.000100	0.064	0.000147	306	< 0.00020	0.0004	< 0.00100	0.068		< 0.000100	
EV BC1	EV BC1 WS 2022-02-15 N-SRF	2022-02-15	1310	0.006	0.00105	0.00026	0.0908	< 0.040	< 0.000100	0.048	0.0000685	251	< 0.00020	0.00024	< 0.00100	0.055		< 0.000100	
EV BC1	EV BC1 WS 2022-03-01 N-SRF	2022-03-01	1360	< 0.0060	0.00103	0.00022	0.0948	< 0.040	< 0.000100	0.043	0.0000321	248	< 0.00020	< 0.20	< 0.00100	0.025		< 0.000100	
EV BC1	EV BC1 WS 2022-03-15 N-SRF	2022-03-15	1350	0.0425	0.00099	0.00031	0.0823	< 0.040	< 0.000100	0.048	0.0000882	283	0.00021	0.00035	< 0.00100	0.14		0.000176	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short-term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Elkview Operation																				
EV AQ6	EV AQ6 WS 2022-Q1 N	2022-01-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV AQ6	EV AQ6 WS 2022-02 MON N	2022-02-07	370	0.017	38.7	<b>0.00587</b>	0.00088	1.44	<b>4.99</b>	< 0.000010	5.75	0.26	< 0.000010	< 0.00010	0.00073	0.0012	-	-	0.008	
EV AQ6	EV AQ6 WS 2022-03 MON N	2022-03-16	346	0.017	38.9	0.00145	0.00069	1.48	<b>5.59</b>	< 0.000010	5.04	0.26	< 0.000010	< 0.00010	< 0.00030	0.00117	-	-	0.0082	
EV AQ6	EV AQ6 WS 2022-03 WEK13 N	2022-03-22	413	0.016	33.5	0.0018	0.00062	1.38	<b>6.94</b>	< 0.000010	7.34	0.27	< 0.000010	< 0.00010	< 0.00030	0.00118	-	-	0.0038	
EV AQ6	EV AQ6 WS 2022-03 WEK14 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-04 WEK15 N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-Q2 N	2022-04-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV MC5 WS 2022-Q2 N	2022-04-13	379	0.019	43	0.00119	0.00101	1.82	<b>9.39</b>	< 0.000010	10.5	0.33	< 0.000010	< 0.00010	< 0.00030	0.00137	-	-	0.0034	
EV AQ6	EV MC7 WS 2022-Q2 N	2022-04-13	378	0.018	40.5	0.00122	0.00097	1.72	<b>9.06</b>	< 0.000010	9.78	0.32	< 0.000010	< 0.00010	< 0.00030	0.00132	-	-	0.0033	
EV AQ6	EV AQ6 WS 2022-04 WEK17 N	2022-04-18	< 0.50*	0.001*	0.0050*	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.00010	< 0.00030	< 0.000010	-	-	< 0.0030	
EV AQ6	EV AQ6 WS 2022-04 WEK18 N	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-05 MON N	2022-05-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-05 WEK20 N	2022-05-11	361	0.017	37.6	0.00164	0.00089	1.56	<b>6.67</b>	< 0.000010	7.65	0.28	< 0.000010	< 0.00010	< 0.00030	0.00121	-	-	0.0037	
EV AQ6	EV AQ6 WS 2022-05 WEK21 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-05 WEK22 N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-05 WEK23 N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV MC8 WS 2022-06 MON N	2022-06-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV MC6 WS 2022-06 MON N	2022-06-07	< 0.50*	0.001*	0.023	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.00010	< 0.00030	< 0.000010	-	-	< 0.0030	
EV AQ6	EV AQ6 WS 2022-06 MON N	2022-06-08	394	0.015	39.4	0.00102	0.00082	1.41	<b>4.75</b>	< 0.000010	6.62	0.25	< 0.000010	< 0.00010	< 0.00030	0.00109	-	-	< 0.0030	
EV AQ6	EV AQ6 WS 2022-06-13 N 1743	2022-06-13	355	0.017	37.8	0.00126	0.00074	1.5	<b>4.4</b>	< 0.000010	6.46	0.25	< 0.000010	< 0.00010	< 0.00030	0.00114	-	-	< 0.0030	
EV AQ6	EV AQ6 WS 2022-06 WEK25 N	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-06-14 N 1725	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-06-14 N 0650	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-06 WEK26 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-06 WEK27 N	2022-06-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS 2022-Q3 N	2022-07-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV MC6 WS 2022-Q3 N	2022-07-06	389	0.016	36.3	<b>0.00273</b>	0.00072	1.46	<b>4.8</b>	< 0.000010	7.28	0.28	< 0.000010	< 0.00010	< 0.00030	0.00104	-	-	< 0.0030	
EV AQ6	EV MC8 WS 2022-Q3 N	2022-07-06	372	0.016	36.8	<b>0.00303</b>	0.00075	1.46	<b>4.97</b>	< 0.000010	7.36	0.28	< 0.000010	< 0.00010	< 0.00030	0.00105	-	-	< 0.0030	
EV AQ6	EV AQ6 WS 2022-07 WEK29 N	2022-07-12	< 0.50*	0.001*	0.0050*	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.00010	< 0.00030	< 0.000010	-	-	< 0.0030	
EV AQ6	EV AQ6 WS 2022-08 MON N	2022-08-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV AQ6	EV AQ6 WS SESMP 2022 08 N	2022-08-11	318	0.015	37.8	<b>0.01</b>	0.00124	1.42	<b>4.32</b>	< 0.000010	3.72	0.21	0.000014	< 0.00010	< 0.00030	0.000879	-	-	< 0.0030	
EV AQ6	EV AQ6 WS 2022-09 MON N	2022-09-07	305	0.016	38.3	<b>0.0108</b>	0.00076	1.4	<b>4.4</b>	< 0.000010	3.77	0.22	< 0.000010	< 0.00010	< 0.00030	0.000902	-	-	< 0.0030	
EV AQ6	EV MC8 WS 2022-09 MON N	2022-09-07	302	0.019	43.5	<b>0.00676</b>	0.00072	1.43	<b>4.25</b>	< 0.000010	3.69	0.26	< 0.000010	< 0.00010	< 0.00030	0.000808	-	-	< 0.0030	
EV AQ6	EV AQ6 WS 2022-09-08 N	2022-09-08	< 0.50*	0.001*	0.0050*	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.00010	< 0.00030	< 0.000010	-	-	< 0.0030	
EV AQ6	EV AQ6 WS 2022-09-09 N	2022-09-09	305	0.016	35.1	<b>0.00838</b>	0.0009	1.39	<b>4.07</b>	< 0.000010	3.42	0.22	< 0.000010	< 0.00010	< 0.00030	0.000772	-	-	< 0.0030	
EV AQ6	EV AQ6 WS 2022-09-10 N	2022-09-10	288	0.017	34.2	<b>0.00678</b>	0.00102	1.36	<b>4.21</b>	< 0.000010	3.29	0.21	< 0.000010	< 0.00010	0.00053	0.000745	-	-	< 0.0030	
EV AQ6	EV AQ6 WS 2022-04 N	2022-10-07	299	0.016	33.7	<b>0.00671</b>	0.00096	1.46	<b>4.17</b>	< 0.000010	3.33	0.22	< 0.000010	< 0.00010	0.00042	0.000789	-	-	< 0.0030	
EV AQ6	EV MC6 WS 2022-04 N	2022-10-07	294	0.014	32.8	<b>0.00458</b>	0.00051	1.39	<b>3.17</b>	< 0.000010	2.92	0.2	< 0.000010	< 0.00010	< 0.00030	0.000701	-	-	< 0.0030	
EV AQ6	EV MC8 WS 2022-04 N	2022-10-07	300	0.015	37.6	<b>0.00484</b>	0.00068	1.55	<b>4.16</b>	< 0.000010	3.28	0.22	< 0.000010	< 0.00010	< 0.00030	0.000795	-	-	0.0045	
EV AQ6	EV AQ6 WS 2022-11 MON N	2022-11-09	< 0.50*	0.001*	0.0050*	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.00010	< 0.00030	< 0.000010	-	-	< 0.0030	
EV AQ6	EV MC6 WS 2022-11 MON N	2022-11-09	386	0.02	43.2	<b>0.00853</b>	0.00082	1.78	<b>4.69</b>	< 0.000010	3.99	0.27	< 0.000010	< 0.00010	< 0.00030	0.000974	-	-	0.0033	
EV AQ6	EV MC8 WS 2022-11 MON N	2022-11-09	386	0.02	42.9	<b>0.00855</b>	0.00083	1.77	<b>4.81</b>	< 0.000010	3.96	0.27	< 0.000010	< 0.00010	< 0.00030	0.000962	-	-	0.0035	
EV BC1	EV BC1 WS 2022-01-03 N-SRF	2022-01-03	< 0.50*	0.001*	0.005	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.160	0.000	< 0.000010	< 0.00010	< 0.00030	< 0.000010	-	-	< 0.0030	
EV BC1	EV BC1 WS 2022_Q1 N	2022-01-18	1380	0.173	184	<b>0.0334</b>	0.0243	6.47	<b>292</b>	< 0.000020	7.44	1.71	0.000031	< 0.00020	< 0.00060	0.00786	-	-	0.0134	
EV BC1	EV BC1 WS 2022-01-18 N-SRF	2022-01-18	1530	0.168	211	<b>0.0239</b>	0.0248	6.36	<b>334</b>	< 0.000020	7.13	1.62	0.000036	< 0.00020	< 0.00060	<b>0.0087</b>	-	-	0.0114	
EV BC1	EV BC1 WS 2022-02-01 N-SRF	2022-02-01	1550	0.167	212	<b>0.0253</b>	0.0248	6.25	<b>339</b>	< 0.000020	7.3	1.57	0.000034	< 0.00020	< 0.00060	<b>0.00866</b>	-	-	0.0123	
EV BC1	EV BC1 WS 2022-02 MON N	2022-02-08	1630	0.172	212	<b>0.0274</b>	0.026	6.69	<b>358</b>	< 0.000020	7.28	1.63	0.000027	< 0.00020	< 0.00060	0.00836	-	-	0.0124	
EV BC1	EV BC1 WS 2022-02-15 N-SRF	2022-02-15	1310	0.129	190	<b>0.0123</b>	0.0276	6.12	<b>193</b>	< 0.000020	7.15	1.01	0.000028	< 0.00020	< 0.00060	<b>0.0113</b>	-	-	0.0085	
EV BC1	EV BC1 WS 2022-03-01 N-SRF	2022-03-01	1360	0.106	192	0.0057	0.0289	5.67	<b>139</b>	< 0.000020	6.88	0.83	0.00003	< 0.00020	< 0.00060	<b>0.0112</b>	-	-	< 0.0060	
EV BC1	EV BC1 WS 2022-03-15 N-SRF	2022-03-15	1350	0.124	211	<b>0.0135</b>	0.0281	6.19	<b>169</b>	< 0.000020	8.46	0.95	0.000033	< 0.00020	0.00078	<b>0.0108</b>	-	-	0.0064	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness	Aluminum	Antimony	Arsenic	Barium <sup>a</sup>	Beryllium <sup>a</sup>	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead		
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
							Acute	Chronic	Chronic				Acute	Chronic		Acute	Acute	Chronic	
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>b</sup>	3.3-3.5 <sup>b</sup>
Elkview Operation																			
EV BC1	EV BC1 WS 2022-03 MON N	2022-03-16	1200	0.0396	0.001	< 0.00020	0.108	< 0.040	< 0.000100	0.053	0.0000541	277	< 0.00020	0.00032	< 0.00100	0.094	0.000101		
EV BC1	EV BC1 WS 2022-03-22 N-SRF	2022-03-22	1320	0.0448	0.00094	0.0003	0.0922	< 0.020	< 0.000050	0.044	< 0.0700	244	0.00014	0.00036	0.00054	0.11	0.000168		
EV BC1	EV BC1 WS 2022-03 WEK13 N	2022-03-22	1320	0.0096	0.00089	0.00023	0.104	< 0.020	< 0.000050	0.043	0.0000245	236	< 0.00010	0.0002	< 0.00050	0.038	< 0.000050		
EV BC1	EV BC1 WS 2022-03 WEK14 N	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV BC1	EV BC1 WS 2022-03-29 N-SRF	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV BC1	EV BC1 WS 2022-04-05 N-SRF	2022-04-05	1240	0.006	0.00091	0.00024	0.0986	< 0.020	< 0.000050	0.046	0.0000162	234	< 0.00010	0.00013	< 0.00050	0.032	< 0.000050		
EV BC1	EV BC1 WS 2022-04 WEK15 N	2022-04-05	1340	0.0054	0.00092	0.00027	0.0849	< 0.020	< 0.000050	0.044	0.0000218	231	< 0.00010	0.00014	< 0.00050	0.042	< 0.000050		
EV BC1	EV BC1 WS 2022-02 N	2022-04-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV BC1	EV BC1 WS 2022-04-12 N-SRF	2022-04-12	1250	0.0072	0.00087	0.00026	0.0658	< 0.020	< 0.000050	0.041	< 0.0150	224	< 0.00010	0.00012	< 0.00050	0.032	< 0.000050		
EV BC1	EV BC1 WS 2022-04-19 N-SRF	2022-04-19	1260	0.0034	0.00091	0.00028	0.0653	< 0.020	< 0.000050	0.045	< 0.0150	224	0.00011	0.00012	< 0.00050	0.027	< 0.000050		
EV BC1	EV BC1 WS 2022-04 WEK17 N	2022-04-19	1190	0.004	0.00089	0.00024	0.0751	< 0.020	< 0.000050	0.041	< 0.0150	229	< 0.00010	0.00011	< 0.00050	0.034	< 0.000050		
EV BC1	EV BC1 WS 2022-04-26 N-SRF	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV BC1	EV BC1 WS 2022-04 WEK18 N	2022-04-26	1260	0.0045	0.00089	0.00027	0.0626	< 0.020	< 0.000050	0.037	0.0000071	209	< 0.00010	< 0.10	< 0.00050	0.024	< 0.000050		
EV BC1	EV BC1 WS 2022-05-03 N-SRF	2022-05-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV BC1	EV BC1 WS 2022-05 MON N	2022-05-03	1200	0.003	0.00085	0.0003	0.062	< 0.020	< 0.000050	0.038	< 0.0150	216	0.00014	< 0.10	< 0.00050	0.017	< 0.000050		
EV BC1	EV BC1 WS 2022-05-10 N-SRF	2022-05-10	1200	< 0.0060	0.00081	0.00026	0.0544	< 0.020	< 0.000050	0.04	< 0.0100	219	< 0.00010	< 0.10	< 0.00050	0.014	< 0.000050		
EV BC1	EV BC1 WS 2022-05 WEK20 N	2022-05-11	1180	0.0042	0.00085	0.00023	0.0592	< 0.020	< 0.000050	0.037	< 0.0100	222	< 0.00010	< 0.10	< 0.00050	0.01	< 0.000050		
EV BC1	EV BC1 WS 2022-05 WEK21 N	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV BC1	EV BC1 WS 2022-05-17 N-SRF	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV BC1	EV BC1 WS 2022-05-24 N-SRF	2022-05-24	1230	0.0039	0.00082	0.00026	0.0584	< 0.020	< 0.000050	0.044	< 0.0100	207	0.00011	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV BC1	EV BC1 WS 2022-05 WEK22 N	2022-05-24	1220	< 0.0060	0.00084	0.00028	0.0583	< 0.040	< 0.000100	0.048	< 0.0100	228	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
EV BC1	EV BC1 WS 2022-05 WEK23 N	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV BC1	EV BC1 WS 2022-05-31 N-SRF	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV BC1	EV BC1 WS 2022-06 MON N	2022-06-06	1220	< 0.0060	0.00092	0.00023	0.0637	< 0.040	< 0.000100	0.045	< 0.0100	205	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
EV BC1	EV BC1 WS 2022-06-07 N-SRF	2022-06-07	1300	0.0033	0.0008	0.00031	0.236	< 0.020	< 0.000050	0.042	0.0000862	234	< 0.00010	0.00016	< 0.00050	0.091	< 0.000050		
EV BC1	EV BC1 WS 2022-06 WEK25 N	2022-06-13	1260	0.003	0.00085	0.00035	0.209	< 0.020	< 0.000050	0.047	0.0000863	241	< 0.00010	0.00018	< 0.00050	0.096	< 0.000050		
EV BC1	EV BC1 WS 2022-06-14 N-SRF	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV BC1	EV BC1 WS 2022-06-21 N-SRF	2022-06-21	1170	0.0476	0.00082	0.00036	0.163	< 0.020	< 0.000050	0.046	0.0000712	217	0.00015	0.00052	0.00059	0.122	0.000178		
EV BC1	EV BC1 WS 2022-06 WEK26 N	2022-06-21	1200	0.0069	0.00082	0.00031	0.224	< 0.020	< 0.000050	0.044	0.0000301	219	< 0.00010	0.00016	< 0.00050	0.033	< 0.000050		
EV BC1	EV BC1 WS 2022-06-28 N-SRF	2022-06-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV BC1	EV BC1 WS 2022-06 WEK27 N	2022-06-28	1270	0.0045	0.00094	0.00032	0.246	< 0.020	< 0.000050	0.044	< 0.0200	246	< 0.00010	0.00012	< 0.00050	0.028	< 0.000050		
EV BC1	EV BC1 WS 2022-07-05 N	2022-07-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV BC1	EV BC1 WS 2022-07-05 N-SRF	2022-07-05	1180	0.0105	0.00084	0.00029	0.126	< 0.020	< 0.000050	0.051	0.0000235	226	< 0.00010	0.00016	< 0.00050	0.036	< 0.000050		
EV BC1	EV BC1 WS 2022-07-12 N-SRF	2022-07-12	1160	0.0086	0.00086	0.00028	0.122	< 0.020	< 0.000050	0.05	0.0000327	234	< 0.00010	0.00017	< 0.00050	0.046	< 0.000050		
EV BC1	EV BC1 WS 2022-07 WEK29 N	2022-07-12	1160	< 0.0030	0.00083	0.00024	0.117	< 0.020	< 0.000050	0.054	0.0000128	217	< 0.00010	0.00012	< 0.00050	0.022	< 0.000050		
EV BC1	EV BC1 WS 2022-07-19 N-SRF	2022-07-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV BC1	EV BC1 WS 2022-08-02 N-SRF	2022-08-02	1150	0.0038	0.00092	0.00037	0.0827	< 0.020	< 0.000050	0.058	0.0000168	207	< 0.00010	0.00011	< 0.00050	0.015	< 0.000050		
EV BC1	EV BC1 WS 2022-08 MON N	2022-08-10	1130	0.0038	0.00089	0.00022	0.0684	< 0.020	< 0.000050	0.05	0.0000065	217	< 0.00010	< 0.10	< 0.00050	0.015	0.000138		
EV BC1	EV BC1 WS 2022-08-16 N-SRF	2022-08-16	1280	< 0.0060	0.00082	0.0004	0.0745	< 0.040	< 0.000100	0.051	< 0.0100	211	< 0.00020	< 0.20	< 0.00100	0.022	< 0.000100		
EV BC1	EV BC1 WS 2022-08-30 N-SRF	2022-08-30	1240	0.0055	0.0008	0.00025	0.0782	< 0.020	< 0.000050	0.052	< 0.0050	221	< 0.00010	< 0.10	< 0.00050	0.019	< 0.000050		
EV BC1	EV BC1 WS 2022-09 MON N	2022-09-06	1150	< 0.0060	0.00075	0.00032	0.0793	< 0.040	< 0.000100	0.054	< 0.0100	215	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
EV BC1	EV BC1 WS SEPT-2022 N	2022-09-09	1260	0.0081	0.00071	0.00034	0.0771	< 0.020	< 0.000050	0.052	0.0000078	216	< 0.00010	< 0.10	< 0.00050	0.01	< 0.000050		
EV BC1	EV BC1 WS 2022-09-13 N-SRF	2022-09-13	1260	< 0.0030	0.00073	0.00027	0.0623	< 0.020	< 0.000050	0.056	0.0000143	204	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV BC1	EV BC1 WS 2022-09-27 N-SRF	2022-09-27	1090	< 0.0060	0.00072	0.00024	0.0617	< 0.040	< 0.000100	0.054	< 0.0100	222	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
EV BC1	EV BC1 WS 2022-10-04 N-SRF	2022-10-04	1300	0.0045	0.00074	0.00024	0.0569	< 0.020	< 0.000050	0.046	0.0000117	200	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV BC1	EV BC1 WS 2022-Q4 N	2022-10-06	1310	0.0049	0.0007	0.00024	0.239	< 0.020	< 0.000050	0.045	0.0000273	236	< 0.00010	< 0.10	< 0.00050	0.029	< 0.000050		
EV BC1	EV BC1 WS 2022-10-06 N-SRF	2022-10-06	1310	0.0055	0.00073	0.00028	0.215	< 0.020	< 0.000050	0.05	0.0000198	262	< 0.00010	< 0.10	< 0.00050	0.021	< 0.000050		
EV BC1	EV BC1 WS 2022-10-18 N-SRF	2022-10-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV BC1	EV BC1 WS 2022-11-01 N-SRF	2022-11-01	1240	< 0.0060	0.0007	0.00023	0.0716	< 0.040	< 0.000100	0.05	< 0.0100	235	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
EV BC1	EV BC1 WS 2022-11 MON N	2022-11-14	1250	0.0058	0.00065	0.00019	0.0446	< 0.020	< 0.000050	0.046	< 0.0050	202	< 0.00010	< 0.10	< 0.				



APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																		
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L		Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic	Chronic	Chronic			Acute	Chronic								
																				0.001-0.03*	0.0009-0.01*
BC WQG FWAL			n/a	n/a	n/a																
Elkview Operation																					
EV BC1	EV BC1 WS 2022-03 MON N	2022-03-16	1200	0.126	225	<b>0.0132</b>	0.0274	6.15	<b>216</b>	< 0.000020	7.79	1.04	0.000026	< 0.00020	0.00085	<b>0.0116</b>	0.0116				
EV BC1	EV BC1 WS 2022-03-22 N-SRF	2022-03-22	1320	0.111	163	<b>0.0133</b>	0.0233	5.33	<b>175</b>	< 0.000010	6.92	0.92	0.000032	< 0.00010	0.00123	<b>0.0105</b>	0.0039				
EV BC1	EV BC1 WS 2022-03 WEK13 N	2022-03-22	1320	0.107	178	<b>0.0087</b>	0.0227	5.66	<b>151</b>	< 0.000010	7.13	0.86	0.000026	< 0.00010	< 0.00030	<b>0.0102</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-03 WEK14 N	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-03-29 N-SRF	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-04-05 N-SRF	2022-04-05	1240	0.114	179	0.00503	0.0231	5.84	<b>160</b>	< 0.000010	7.22	0.83	0.000025	< 0.00010	< 0.00030	<b>0.0103</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-04 WEK15 N	2022-04-05	1340	0.115	184	0.00495	0.0226	5.34	<b>178</b>	< 0.000010	7.06	0.87	0.000028	< 0.00010	< 0.00030	<b>0.0105</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-02 N	2022-04-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-04-12 N-SRF	2022-04-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-04-19 N-SRF	2022-04-19	1260	0.104	168	0.00374	0.0228	5.39	<b>156</b>	< 0.000010	7.2	0.85	0.000026	< 0.00010	< 0.00030	<b>0.0116</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-04 WEK17 N	2022-04-19	1260	0.104	168	0.00359	0.0218	5.47	<b>162</b>	< 0.000010	7.27	0.85	0.000025	< 0.00010	< 0.00030	<b>0.0104</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-04-26 N-SRF	2022-04-26	1190	0.103	185	0.00266	0.0238	5.64	<b>130</b>	< 0.000010	7.63	0.76	0.000028	< 0.00010	< 0.00030	<b>0.0111</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-04 WEK18 N	2022-04-26	1260	0.091	173	0.00177	0.023	5.05	<b>111</b>	< 0.000010	7.08	0.72	0.000026	< 0.00010	< 0.00030	<b>0.011</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-05-03 N-SRF	2022-05-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-05 MON N	2022-05-03	1200	0.099	171	0.0014	0.0212	5.21	<b>102</b>	< 0.000010	7.02	0.72	0.000029	< 0.00010	< 0.00030	<b>0.0103</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-05-10 N-SRF	2022-05-10	1200	0.098	166	0.00131	0.0211	5.16	<b>110</b>	< 0.000010	6.77	0.69	0.000027	< 0.00010	< 0.00030	<b>0.0106</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-05 WEK20 N	2022-05-11	1180	0.095	175	0.0015	0.0212	5.34	<b>93.7</b>	0.000019	7.38	0.74	0.000025	< 0.00010	< 0.00030	<b>0.0103</b>	0.0056				
EV BC1	EV BC1 WS 2022-05 WEK21 N	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-05-17 N-SRF	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-05-24 N-SRF	2022-05-24	1230	0.107	169	0.00142	0.0218	5.59	<b>116</b>	< 0.000010	7.94	0.76	0.00003	< 0.00010	< 0.00030	<b>0.0104</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-05 WEK22 N	2022-05-24	1220	0.122	194	0.00168	0.023	5.42	<b>165</b>	< 0.000020	7.75	0.88	0.00003	< 0.00020	< 0.00060	<b>0.0116</b>	< 0.0060				
EV BC1	EV BC1 WS 2022-05 WEK23 N	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-05-31 N-SRF	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-06 MON N	2022-06-06	1220	0.1	178	0.00119	0.0231	5.42	<b>154</b>	< 0.000020	8.5	0.9	0.000034	< 0.00020	< 0.00060	<b>0.0102</b>	< 0.0060				
EV BC1	EV BC1 WS 2022-06-07 N-SRF	2022-06-07	1300	0.114	175	0.00516	0.0326	5.22	<b>66</b>	< 0.000010	10	0.67	0.000042	< 0.00010	< 0.00030	<b>0.0124</b>	0.0039				
EV BC1	EV BC1 WS 2022-06 WEK25 N	2022-06-13	1260	0.117	162	0.00563	0.0334	5.41	<b>66.5</b>	< 0.000010	10.1	0.71	0.000045	< 0.00010	< 0.00030	<b>0.012</b>	0.0038				
EV BC1	EV BC1 WS 2022-06-14 N-SRF	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-06-21 N-SRF	2022-06-21	1170	0.117	146	<b>0.00874</b>	0.0298	5.23	<b>56.1</b>	< 0.000010	9.55	0.7	0.000049	< 0.00010	0.00073	<b>0.0115</b>	0.0157				
EV BC1	EV BC1 WS 2022-06 WEK26 N	2022-06-21	1200	0.122	165	0.00361	0.0302	5.49	<b>89.8</b>	< 0.000010	9.61	0.7	0.000047	< 0.00010	< 0.00030	<b>0.0113</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-06-28 N-SRF	2022-06-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-06 WEK27 N	2022-06-28	1270	0.121	170	0.00278	0.0308	5.34	<b>77.6</b>	< 0.000010	10	0.79	0.000048	< 0.00010	< 0.00030	<b>0.0119</b>	< 0.0030				
EV BC1	EV BC1 WS 2022_Q3 N	2022-07-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-07-05 N-SRF	2022-07-05	1180	0.138	159	0.00439	0.0291	5.53	<b>83.7</b>	< 0.000010	9.97	0.84	0.00005	< 0.00010	< 0.00030	<b>0.0114</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-07-12 N-SRF	2022-07-12	1160	0.126	164	0.00503	0.0301	5.55	<b>90.5</b>	< 0.000010	10	0.84	0.000049	< 0.00010	< 0.00030	<b>0.0112</b>	0.0033				
EV BC1	EV BC1 WS 2022-07 WEK29 N	2022-07-12	1160	0.131	160	0.00422	0.0272	5.47	<b>67.1</b>	< 0.000010	9.84	0.96	0.000045	< 0.00010	< 0.00030	<b>0.0104</b>	0.0056				
EV BC1	EV BC1 WS 2022-07-19 N-SRF	2022-07-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-08-02 N-SRF	2022-08-02	1150	0.141	155	0.00318	0.0273	5.52	<b>69.7</b>	< 0.000010	10.3	0.9	0.000052	< 0.00010	< 0.00030	<b>0.0106</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-08 MON N	2022-08-10	1130	0.143	167	0.00202	0.0251	5.17	<b>73.4</b>	< 0.000010	9.8	0.86	0.000055	< 0.00010	< 0.00030	<b>0.01</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-08-16 N-SRF	2022-08-16	1280	0.133	175	0.00105	0.0252	5.38	<b>125</b>	< 0.000020	9.02	0.89	0.000059	< 0.00020	< 0.00060	<b>0.0101</b>	< 0.0060				
EV BC1	EV BC1 WS 2022-08-30 N-SRF	2022-08-30	1240	0.141	172	0.00091	0.0244	5.32	<b>96.4</b>	< 0.000010	9.62	0.86	0.000051	< 0.00010	< 0.00030	<b>0.0097</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-09 MON N	2022-09-06	1150	0.147	174	0.00085	0.0245	5.47	<b>75</b>	< 0.000020	10.9	0.79	0.000051	< 0.00020	< 0.00060	<b>0.00978</b>	< 0.0060				
EV BC1	EV BC1 WS SEPT-2022 N	2022-09-09	1260	0.138	163	0.00066	0.0229	5.06	<b>75</b>	< 0.000010	10.1	0.78	0.000044	< 0.00010	< 0.00030	<b>0.01</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-09-13 N-SRF	2022-09-13	1260	0.145	159	0.00023	0.021	5.33	<b>76.8</b>	< 0.000010	9.84	0.79	0.000048	< 0.00010	< 0.00030	<b>0.00946</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-09-27 N-SRF	2022-09-27	1090	0.15	175	0.00036	0.0232	5.37	<b>67.2</b>	< 0.000020	10	0.76	0.000045	< 0.00020	< 0.00060	<b>0.01</b>	< 0.0060				
EV BC1	EV BC1 WS 2022-10-04 N-SRF	2022-10-04	1300	0.157	174	0.00057	0.0228	5.77	<b>70.9</b>	< 0.000010	10.6	1.26	0.000049	< 0.00010	< 0.00030	<b>0.0102</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-Q4 N	2022-10-06	1310	0.125	174	0.00185	0.0251	5.76	<b>97.1</b>	< 0.000010	10.6	1.08	0.000051	< 0.00010	< 0.00030	<b>0.0106</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-10-06 N-SRF	2022-10-06	1310	0.14	187	0.00096	0.0243	6.08	<b>96.4</b>	< 0.000010	11.2	1.05	0.000045	< 0.00010	< 0.00030	<b>0.0107</b>	< 0.0030				
EV BC1	EV BC1 WS 2022-10-18 N-SRF	2022-10-18	-	-	-	-	-	-	<b>153</b>	-	-	-	-	-	-	-	-	-	-	-	
EV BC1	EV BC1 WS 2022-11-01 N-SRF	2022-11-01	1240	0.151	184	0.00028	0.0237	5.89	<b>104</b>	< 0.000020	11.3	1	0.000046	< 0.00020	< 0.00060	<b>0.0107</b>	< 0.0060				
EV BC1	EV BC1 WS 2022-11 MON N	2022-11-14	1250	0.13	178	0.0006	0.0228	5.71	<b>145</b>	< 0.000010	10.5	0.91	0.000034	< 0.00010	< 0.00030	<b>0.0101</b>	0.0111				

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium <sup>a</sup> mg/L	Beryllium <sup>a</sup> mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt		Copper mg/L	Iron mg/L	Lead	
														Acute	Chronic			Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>b</sup>	3.3-3.5 <sup>b</sup>
Elkview Operation																			
EV BC1	EV BC1 WS 2022-11-15 N-SRF	2022-11-15	1440	0.0086	0.00068	0.00028	0.0832	< 0.020	< 0.000050	0.051	0.000024	269	< 0.00010	0.00018	< 0.00050	0.011	< 0.000050		
EV EC1	EV EC1 WS 2022-01-05 N-SRF	2022-01-05	1450	0.0061	0.0007	0.00025	0.0905	< 0.040	< 0.000100	0.045	0.000302	279	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
EV EC1	EV EC1 WS 2022-Q1 N	2022-01-17	1390	< 0.0060	0.00045	0.00029	0.0274	< 0.040	< 0.000100	0.032	0.000306	290	< 0.00020	<b>0.00477</b>	< 0.00100	< 0.020	< 0.000100		
EV EC1	EV EC1 WS 2022-01-17 N-SRF	2022-01-17	1220	< 0.0030	0.00042	0.00033	0.0222	< 0.020	< 0.000050	0.028	0.000267	242	< 0.00010	0.0038	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-01-31 N-SRF	2022-01-28	1200	< 0.0030	0.00042	0.00033	0.0224	< 0.020	< 0.000050	0.029	0.000026	240	< 0.00010	0.0037	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-02-14 N-SRF	2022-02-14	1200	< 0.0060	0.00047	0.00035	0.023	< 0.040	< 0.000100	0.03	0.0000231	251	< 0.00020	<b>0.00419</b>	< 0.00100	< 0.020	< 0.000100		
EV EC1	EV EC1 WS 2022-02 MON N	2022-02-16	1200	< 0.0060	0.00046	0.00034	0.027	< 0.040	< 0.000100	0.034	0.0000229	280	< 0.00020	0.0039	< 0.00100	< 0.020	< 0.000100		
EV EC1	EV EC1 WS 2022-02-28 N-SRF	2022-02-28	1240	< 0.0030	0.0004	0.0005	0.0269	< 0.020	< 0.000050	0.028	0.0000254	257	0.00022	0.00311	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-03-14 N-SRF	2022-03-14	1330	< 0.0030	0.00042	0.00036	0.0214	< 0.020	< 0.000050	0.031	0.0000185	243	< 0.00010	0.00388	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-03 MON N	2022-03-17	1130	< 0.0030	0.00036	0.0003	0.0206	< 0.020	< 0.000050	0.027	0.0000136	244	0.00012	0.00329	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-03-21 N-SRF	2022-03-21	1260	< 0.0030	0.00038	0.00031	0.0204	< 0.020	< 0.000050	0.028	0.0000189	240	< 0.00010	0.00316	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-03 WEK13 N	2022-03-22	1230	< 0.0030	0.00035	0.0003	0.0208	< 0.020	< 0.000050	0.028	0.000019	233	< 0.00010	0.00283	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-03-28 N-SRF	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-03-28 N-SRF 1	2022-03-28	1210	< 0.0030	0.00025	0.00032	0.0337	< 0.020	< 0.000050	0.017	0.0000108	239	0.0002	0.00047	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-03 WEK14 N	2022-03-30	1460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-04 N-SRF	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04 WEK15 N	2022-04-06	1230	0.0055	0.00038	0.00039	0.0385	< 0.020	< 0.000050	0.03	0.0000256	277	0.0002	0.00142	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-04-10 N-SRF	2022-04-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-11 N-SRF	2022-04-11	1240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-11 N-SRF 1	2022-04-11	1290	< 0.0030	0.00023	0.00031	0.0372	< 0.020	< 0.000050	0.016	0.0000067	233	< 0.00030	0.00028	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-04-12 N-SRF	2022-04-12	1260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-13 N-SRF	2022-04-13	1120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-Q2 N	2022-04-13	1260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV MC6 WS 2022-Q2 N	2022-04-13	1170	< 0.0030	0.00024	0.00034	0.043	< 0.020	< 0.000050	0.016	0.0000097	243	0.00022	0.00017	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV MC8 WS 2022-Q2 N	2022-04-13	1100	< 0.0030	0.00024	0.00032	0.044	< 0.020	< 0.000050	0.014	0.0000078	245	0.00022	0.00015	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-04-14 N-SRF	2022-04-14	< 0.50	< 0.0030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-04-15 N-SRF	2022-04-15	1170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-16 N-SRF	2022-04-16	1240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-17 N-SRF	2022-04-17	1280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-18 N-SRF	2022-04-18	1230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-18 N-SRF 1	2022-04-18	1120	0.0042	0.00024	0.00026	0.0404	< 0.020	< 0.000050	0.016	0.0000152	238	0.0002	0.00011	< 0.00050	0.011	< 0.000050		
EV EC1	EV EC1 WS 2022-04-19 N-SRF	2022-04-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-20 N-SRF	2022-04-20	1210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04 WEK17 N	2022-04-20	1240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-21 N-SRF	2022-04-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-22 N-SRF	2022-04-22	1240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-23 N-SRF	2022-04-23	1260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-24 N-SRF	2022-04-24	1300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-25 N-SRF	2022-04-25	1240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-25 N-SRF 1	2022-04-25	1180	< 0.0030	0.00023	0.00026	0.0412	< 0.020	< 0.000050	0.013	0.0000072	231	0.00033	0.00016	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-04-26 N-SRF	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-27 N-SRF	2022-04-27	1170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04 WEK18 N	2022-04-27	1180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-28 N-SRF	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-29 N-SRF	2022-04-29	1190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-04-30 N-SRF	2022-04-30	1170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-01 N-SRF	2022-05-01	1210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-02 N-SRF	2022-05-02	1240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-02 N-SRF 1	2022-05-02	1140	< 0.0030	0.00022	0.00036	0.0433	< 0.020	< 0.000050	0.015	0.0000073	236	0.00016	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-05-03 N-SRF	2022-05-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup>Guideline varies with hardness  
<sup>b</sup>Guideline varies with pH and water temperature  
<sup>c</sup>Guideline varies with chloride  
<sup>d</sup>Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc	
						Acute mg/L	Chronic mg/L				Acute mg/L	Chronic mg/L							Acute mg/L	Chronic mg/L
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*	
Elkview Operation																				
EV BC1	EV BC1 WS 2022-11-15 N-SRF	2022-11-15	1440	0.152	206	0.00381	0.0262	6.57	233	< 0.000010	11.4	1.02	0.000041	< 0.00010	< 0.00030	0.0107	< 0.0030			
EV EC1	EV EC1 WS 2022-01-05 N-SRF	2022-01-05	1450	0.137	185	0.00336	0.0243	5.98	180	< 0.000020	10.3	0.97	0.000044	< 0.00020	< 0.00060	0.0116	< 0.0060			
EV EC1	EV EC1 WS 2022-Q1 N	2022-01-17	1390	0.056	188	0.104	0.0327	4.36	63.9	< 0.000020	6.42	0.37	0.000044	< 0.00020	< 0.00060	0.0112	< 0.0060			
EV EC1	EV EC1 WS 2022-01-17 N-SRF	2022-01-17	1220	0.055	157	0.0779	0.0306	4.19	47.4	< 0.000010	5.68	0.33	0.000048	< 0.00010	< 0.00030	0.0117	< 0.0030			
EV EC1	EV EC1 WS 2022-01-31 N-SRF	2022-01-28	1200	0.053	152	0.0752	0.0299	4.02	50.4	< 0.000010	5.65	0.32	0.000042	< 0.00010	< 0.00030	0.0111	< 0.0030			
EV EC1	EV EC1 WS 2022-02-14 N-SRF	2022-02-14	1200	0.053	160	0.0811	0.0327	4.44	42.4	< 0.000020	5.94	0.35	0.00004	< 0.00020	< 0.00060	0.011	< 0.0060			
EV EC1	EV EC1 WS 2022-02 MON N	2022-02-16	1200	0.06	186	0.07	0.0372	4.6	67.4	< 0.000020	6.23	0.37	0.000066	< 0.00020	< 0.00060	0.0135	< 0.0060			
EV EC1	EV EC1 WS 2022-02-28 N-SRF	2022-02-28	1240	0.05	172	0.0543	0.0316	4.31	84.7	< 0.000010	5.4	0.32	0.000049	0.00056	< 0.00030	0.0115	< 0.0030			
EV EC1	EV EC1 WS 2022-03-14 N-SRF	2022-03-14	1330	0.06	182	0.0624	0.0331	4.36	41.8	< 0.000010	6.11	0.34	0.000054	< 0.00010	< 0.00030	0.0115	< 0.0030			
EV EC1	EV EC1 WS 2022-03 MON N	2022-03-17	1130	0.05	166	0.0542	0.0345	4.1	65.1	< 0.000010	8.04	0.32	0.000051	< 0.00010	< 0.00030	0.0122	< 0.0030			
EV EC1	EV EC1 WS 2022-03-21 N-SRF	2022-03-21	1260	0.058	170	0.0553	0.0318	4.49	41.2	< 0.000010	7.04	0.34	0.000052	< 0.00010	< 0.00030	0.0114	< 0.0030			
EV EC1	EV EC1 WS 2022-03 WEK13 N	2022-03-22	1230	0.058	152	0.051	0.0294	4.32	34.2	< 0.000010	6.8	0.32	0.000047	< 0.00010	< 0.00030	0.0106	< 0.0030			
EV EC1	EV EC1 WS 2022-03-28 N-SRF	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-03-28 N-SRF 1	2022-03-28	1210	0.032	148	0.0707	0.0172	3.08	163	< 0.000010	3.47	0.24	0.000027	< 0.00010	< 0.00030	0.00803	< 0.0030			
EV EC1	EV EC1 WS 2022-03 WEK14 N	2022-03-30	1460	-	-	-	-	-	171	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-04 N-SRF	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04 WEK15 N	2022-04-06	1230	0.056	209	0.0187	0.025	4.78	107	< 0.000010	8.06	0.34	0.00003	0.00017	< 0.00030	0.0121	< 0.0030			
EV EC1	EV EC1 WS 2022-04-10 N-SRF	2022-04-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-11 N-SRF	2022-04-11	1240	-	-	-	-	-	142	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-11 N-SRF 1	2022-04-11	1290	0.027	145	0.00358	0.013	2.92	177	< 0.000010	3.46	0.23	0.000023	< 0.00010	< 0.00030	0.00786	< 0.0030			
EV EC1	EV EC1 WS 2022-04-12 N-SRF	2022-04-12	1260	-	-	-	-	-	172	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-13 N-SRF	2022-04-13	1120	-	-	-	-	-	146	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-Q2 N	2022-04-13	1260	-	-	-	-	-	186	-	-	-	-	-	-	-	-	-		
EV EC1	EV MC6 WS 2022-Q2 N	2022-04-13	1170	0.029	153	0.002	0.0114	3.04	172	< 0.000010	3.61	0.25	0.000022	< 0.00010	< 0.00030	0.00866	< 0.0030			
EV EC1	EV MC8 WS 2022-Q2 N	2022-04-13	1100	0.027	149	0.0019	0.0106	2.75	173	< 0.000010	3.4	0.27	0.00002	< 0.00010	< 0.00030	0.00851	< 0.0030			
EV EC1	EV EC1 WS 2022-04-14 N-SRF	2022-04-14	< 0.50*	0.0011*	0.0050*	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.00010	< 0.00030	< 0.000010	< 0.0030			
EV EC1	EV EC1 WS 2022-04-15 N-SRF	2022-04-15	1170	-	-	-	-	-	143	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-16 N-SRF	2022-04-16	1240	-	-	-	-	-	140	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-17 N-SRF	2022-04-17	1280	-	-	-	-	-	161	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-18 N-SRF	2022-04-18	1230	-	-	-	-	-	158	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-18 N-SRF 1	2022-04-18	1120	0.029	159	0.00112	0.00817	2.85	192	< 0.000010	4.74	0.24	0.000016	< 0.00010	< 0.00030	0.00827	< 0.0030			
EV EC1	EV EC1 WS 2022-04-19 N-SRF	2022-04-19	-	-	-	-	-	-	158	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-20 N-SRF	2022-04-20	1210	-	-	-	-	-	154	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04 WEK17 N	2022-04-20	1240	-	-	-	-	-	163	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-21 N-SRF	2022-04-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-21 N-SRF	2022-04-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-22 N-SRF	2022-04-22	1240	-	-	-	-	-	149	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-23 N-SRF	2022-04-23	1260	-	-	-	-	-	154	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-24 N-SRF	2022-04-24	1300	-	-	-	-	-	205	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-25 N-SRF	2022-04-25	1240	-	-	-	-	-	165	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-25 N-SRF 1	2022-04-25	1180	0.027	152	0.00247	0.00616	2.59	151	< 0.000010	3.28	0.24	0.000014	< 0.00010	< 0.00030	0.00792	< 0.0030			
EV EC1	EV EC1 WS 2022-04-26 N-SRF	2022-04-26	-	-	-	-	-	-	149	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-27 N-SRF	2022-04-27	1170	-	-	-	-	-	143	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04 WEK18 N	2022-04-27	1180	-	-	-	-	-	147	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-28 N-SRF	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-29 N-SRF	2022-04-29	1190	-	-	-	-	-	155	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-04-30 N-SRF	2022-04-30	1170	-	-	-	-	-	155	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-05-01 N-SRF	2022-05-01	1210	-	-	-	-	-	144	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-05-02 N-SRF	2022-05-02	1240	-	-	-	-	-	149	-	-	-	-	-	-	-	-	-		
EV EC1	EV EC1 WS 2022-05-02 N-SRF 1	2022-05-02	1140	0.028	160	0.0005	0.00561	2.79	163	< 0.000010	3.61	0.22	0.000011	< 0.00010	< 0.00030	0.00832	< 0.0030			
EV EC1	EV EC1 WS 2022-05-03 N-SRF	2022-05-03	-	-	-	-	-	-	149	-	-	-	-	-	-	-	-	-		

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Total Metals															
				Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium <sup>a</sup> mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	Iron mg/L	Lead mg/L		
						Acute	Chronic	Chronic		Chronic				Acute	Chronic		Acute	Chronic	
<b>BC WQG FWAL</b>			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>b</sup>	3.3-3.5 <sup>b</sup>
<b>Elkview Operation</b>																			
EV EC1	EV EC1 WS 2022-05-04 N-SRF	2022-05-04	1160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-MON N	2022-05-04	1180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-05 N-SRF	2022-05-05	1120	< 0.0030	0.00024	0.00028	0.0478	< 0.020	< 0.000050	0.015	0.0000054	242	0.00019	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-05-05 N	2022-05-05	1190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-06 N-SRF	2022-05-06	1160	< 0.0030	0.00021	0.00028	0.042	< 0.020	< 0.000050	0.014	< 0.0050	234	0.00017	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-05-06 N	2022-05-06	1120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-07 N-SRF	2022-05-07	1130	< 0.0030	0.00024	0.00026	0.0474	< 0.020	< 0.000050	0.014	0.0000057	227	0.00022	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-05-07 N	2022-05-07	1190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-08 N-SRF	2022-05-08	1160	< 0.0060	0.00022	0.00027	0.043	< 0.020	< 0.000050	0.014	0.000005	227	0.00016	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-05-08 N	2022-05-08	1170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-09 N	2022-05-09	1150	< 0.0060	0.00021	0.00029	0.043	< 0.020	< 0.000050	0.013	< 0.0050	224	0.00015	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-05-09 N-SRF	2022-05-09	1110	< 0.0060	0.0002	0.00028	0.0416	< 0.020	< 0.000050	0.013	< 0.0050	221	0.00013	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-05-10 N-SRF	2022-05-10	1180	0.0034	0.00025	0.00026	0.0439	< 0.020	< 0.000050	0.014	0.0000084	218	0.00021	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-05 WEK20 N	2022-05-10	1150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-11 N-SRF	2022-05-11	1050	< 0.0030	0.00021	0.00027	0.043	< 0.020	< 0.000050	0.012	0.0000054	213	0.00018	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-05-12 N-SRF	2022-05-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-13 N-SRF	2022-05-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-14 N-SRF	2022-05-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-15 N-SRF	2022-05-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-16 N-SRF	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-16 N-SRF 1	2022-05-16	1200	< 0.0030	0.00022	0.00025	0.0471	< 0.020	< 0.000050	0.014	0.0000058	228	0.00021	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-05-17 N-SRF	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-18 N-SRF	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05 WEK21 N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-19 N-SRF	2022-05-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-20 N-SRF	2022-05-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-02-21 N-SRF	2022-05-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-22 N-SRF	2022-05-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-23 N-SRF	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-24 N-SRF	2022-05-24	1180	0.0104	0.00024	0.00024	0.0478	< 0.020	< 0.000050	0.014	0.0000061	233	0.0002	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-05-25 N-SRF	2022-05-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05 WEK22 N	2022-05-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-26 N-SRF	2022-05-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-27 N-SRF	2022-05-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-28 N-SRF	2022-05-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-29 N-SRF	2022-05-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-30 N-SRF	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-30 N-SRF 1	2022-05-30	1200	< 0.0030	0.00022	0.00025	0.049	< 0.020	< 0.000050	0.013	0.0000064	259	0.00028	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-05-31 N-SRF	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05 WEK23 N	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-01 N-SRF	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-02 N-SRF	2022-06-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-03 N-SRF	2022-06-03	949	< 0.0030	0.00023	0.00026	0.0458	< 0.020	< 0.000050	0.013	0.000007	222	0.00022	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-06-04 N-SRF	2022-06-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-05 N-SRF	2022-06-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06 MON N	2022-06-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-06 N-SRF	2022-06-06	1170	< 0.0030	0.00021	0.00023	0.0475	< 0.020	< 0.000050	0.013	0.000006	236	0.00018	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-06-07 N-SRF	2022-06-07	1200	< 0.0030	0.00023	0.00028	0.0478	< 0.020	< 0.000050	0.013	0.000006	225	0.00022	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-06-08 N-SRF	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-09 N	2022-06-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

		Total Metals																		
Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Chronic	Acute							Chronic	Acute
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Elkview Operation																				
EV EC1	EV EC1 WS 2022-05-04 N-SRF	2022-05-04	1160	-	-	-	-	-	-	<b>153</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-MON N	2022-05-04	1180	-	-	-	-	-	-	<b>159</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-05 N-SRF	2022-05-05	1120	0.03	156	0.00049	0.00563	3.04	<b>173</b>		< 0.000010	3.62	0.24	0.000015	< 0.00010	< 0.00030	0.0081	-	< 0.0030	
EV EC1	EV EC1 WS 2022-05-05 N	2022-05-05	1190	-	-	-	-	-	-	<b>171</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-06 N-SRF	2022-05-06	1160	0.028	143	0.00044	0.00518	2.7	<b>170</b>		< 0.000010	3.18	0.22	0.000013	< 0.00010	< 0.00030	0.00794	-	< 0.0030	
EV EC1	EV EC1 WS 2022-05-06 N	2022-05-06	1120	-	-	-	-	-	-	<b>141</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-07 N-SRF	2022-05-07	1130	0.028	145	0.00049	0.00504	2.91	<b>169</b>		< 0.000010	3.34	0.23	0.000013	< 0.00010	< 0.00030	0.0081	-	< 0.0030	
EV EC1	EV EC1 WS 2022-05-07 N	2022-05-07	1190	-	-	-	-	-	-	<b>143</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-08 N-SRF	2022-05-08	1160	0.026	149	0.00044	0.00493	2.62	<b>162</b>		< 0.000010	3.24	0.21	0.000011	< 0.00010	< 0.00030	0.00749	-	< 0.0030	
EV EC1	EV EC1 WS 2022-05-08 N	2022-05-08	1170	-	-	-	-	-	-	<b>144</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-09 N	2022-05-09	1150	0.025	145	0.0004	0.00471	2.58	<b>163</b>		< 0.000010	3.13	0.22	0.00001	< 0.00010	< 0.00030	0.00754	-	< 0.0030	
EV EC1	EV EC1 WS 2022-05-09 N-SRF	2022-05-09	1110	0.025	142	0.00035	0.00447	2.58	<b>161</b>		< 0.000010	3.17	0.21	< 0.000010	< 0.00010	< 0.00030	0.00756	-	< 0.0030	
EV EC1	EV EC1 WS 2022-05-10 N-SRF	2022-05-10	1180	0.028	141	0.00048	0.00476	2.72	<b>161</b>		< 0.000010	3.47	0.22	0.000011	< 0.00010	< 0.00030	0.00729	-	0.0155	
EV EC1	EV EC1 WS 2022-05-10 WEK20 N	2022-05-10	1150	-	-	-	-	-	-	<b>156</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-11 N-SRF	2022-05-11	1050	0.026	138	0.00034	0.00451	2.58	<b>162</b>		< 0.000010	3.26	0.22	0.000011	< 0.00010	< 0.00030	0.00737	-	< 0.0030	
EV EC1	EV EC1 WS 2022-05-12 N-SRF	2022-05-12	-	-	-	-	-	-	-	<b>155</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-13 N-SRF	2022-05-13	-	-	-	-	-	-	-	<b>151</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-14 N-SRF	2022-05-14	-	-	-	-	-	-	-	<b>170</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-15 N-SRF	2022-05-15	-	-	-	-	-	-	-	<b>149</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-16 N-SRF	2022-05-16	-	-	-	-	-	-	-	<b>152</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-16 N-SRF 1	2022-05-16	1200	0.028	156	0.00043	0.00433	2.8	<b>195</b>		0.000011	3.56	0.23	0.00001	< 0.00010	< 0.00030	0.00766	-	< 0.0030	
EV EC1	EV EC1 WS 2022-05-17 N-SRF	2022-05-17	-	-	-	-	-	-	-	<b>152</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-18 N-SRF	2022-05-18	-	-	-	-	-	-	-	<b>164</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05 WEK21 N	2022-05-18	-	-	-	-	-	-	-	<b>161</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-19 N-SRF	2022-05-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-20 N-SRF	2022-05-20	-	-	-	-	-	-	-	<b>174</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-02-21 N-SRF	2022-05-21	-	-	-	-	-	-	-	<b>169</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-22 N-SRF	2022-05-22	-	-	-	-	-	-	-	<b>146</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-23 N-SRF	2022-05-23	-	-	-	-	-	-	-	<b>156</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-24 N-SRF	2022-05-24	1180	0.026	158	0.00037	0.00393	2.84	<b>158</b>		< 0.000010	3.45	0.24	0.000011	< 0.00010	< 0.00030	0.0082	-	< 0.0030	
EV EC1	EV EC1 WS 2022-05-25 N-SRF	2022-05-25	-	-	-	-	-	-	-	<b>158</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05 WEK22 N	2022-05-25	-	-	-	-	-	-	-	<b>159</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-26 N-SRF	2022-05-26	-	-	-	-	-	-	-	<b>158</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-27 N-SRF	2022-05-27	-	-	-	-	-	-	-	<b>172</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-28 N-SRF	2022-05-28	-	-	-	-	-	-	-	<b>169</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-29 N-SRF	2022-05-29	-	-	-	-	-	-	-	<b>170</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-30 N-SRF	2022-05-30	-	-	-	-	-	-	-	<b>170</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05-30 N-SRF 1	2022-05-30	1200	0.026	173	0.00027	0.0036	2.63	<b>171</b>		0.000014	2.99	0.24	< 0.000010	< 0.00010	< 0.00030	0.00796	-	< 0.0030	
EV EC1	EV EC1 WS 2022-05-31 N-SRF	2022-05-31	-	-	-	-	-	-	-	<b>166</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-05 WEK23 N	2022-05-31	-	-	-	-	-	-	-	<b>160</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-01 N-SRF	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-02 N-SRF	2022-06-02	-	-	-	-	-	-	-	<b>176</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-03 N-SRF	2022-06-03	949	0.027	155	0.00033	0.00323	2.54	<b>170</b>		< 0.000010	3.23	0.22	0.000012	< 0.00010	< 0.00030	0.0082	-	< 0.0030	
EV EC1	EV EC1 WS 2022-06-04 N-SRF	2022-06-04	-	-	-	-	-	-	-	<b>167</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-05 N-SRF	2022-06-05	-	-	-	-	-	-	-	<b>177</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06 MON N	2022-06-06	-	-	-	-	-	-	-	<b>178</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-06 N-SRF	2022-06-06	1170	0.026	155	0.00028	0.00324	2.5	<b>198</b>		< 0.000010	3.05	0.21	< 0.000010	< 0.00010	< 0.00030	0.00725	-	< 0.0030	
EV EC1	EV EC1 WS 2022-06-07 N-SRF	2022-06-07	1200	0.026	160	0.00031	0.00322	2.61	<b>168</b>		< 0.000010	3.43	0.22	0.000012	< 0.00010	< 0.00030	0.00831	-	< 0.0030	
EV EC1	EV EC1 WS 2022-06-08 N-SRF	2022-06-08	-	-	-	-	-	-	-	<b>181</b>	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-06-09 N	2022-06-09	-	-	-	-	-	-	-	<b>209</b>	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium <sup>a</sup> mg/L	Beryllium <sup>b</sup> mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L		Copper mg/L	Iron mg/L	Lead mg/L	
														Acute	Chronic			Acute	Chronic
<b>BC WQG FWAL</b>			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>c</sup>	3.3-3.5 <sup>d</sup>
<b>Elkview Operation</b>																			
EV EC1	EV EC1 WS 2022-06-09 N-SRF	2022-06-09	1180	< 0.0030	0.00021	0.00021	0.0449	< 0.020	< 0.000050	0.013	< 0.0050	209	0.00017	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-06-10 N-SRF	2022-06-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-10 N	2022-06-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-11 N	2022-06-11	1160	< 0.0030	0.00022	0.00026	0.0476	< 0.020	< 0.000050	0.014	0.0000066	218	0.00021	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-06-11 N-SRF 1	2022-06-11	1180	< 0.0030	0.00022	0.00025	0.0488	< 0.020	< 0.000050	0.013	0.0000064	223	0.00021	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-06-12 N	2022-06-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-12 N-SRF 1	2022-06-12	1250	< 0.0030	0.00023	0.00029	0.0551	< 0.020	< 0.000050	0.014	0.0000076	234	0.00024	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-06-13 N-SRF	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-14 N	2022-06-14	1140	< 0.0030	0.0002	0.00024	0.0495	< 0.020	< 0.000050	0.013	0.0000095	234	0.0003	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-06-15 N	2022-06-15	1020	0.003	0.00021	0.00036	0.0573	< 0.020	< 0.000050	0.011	0.0000125	206	0.00021	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-06 WEK25 N	2022-06-15	1110	< 0.0030	0.00022	0.0004	0.0574	< 0.020	< 0.000050	0.013	0.000013	216	0.00029	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-06-16 N-SRF	2022-06-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-17 N-SRF	2022-06-17	1090	< 0.0030	0.00022	0.00031	0.0549	< 0.020	< 0.000050	0.014	0.0000094	234	0.0002	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-06-18 N-SRF	2022-06-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-19 N-SRF	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-20 N-SRF	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-22 N-SRF	2022-06-22	1140	< 0.0030	0.00021	0.00025	0.0552	< 0.020	< 0.000050	0.012	0.0000082	224	0.00023	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-06-21 N-SRF	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06 WEK26 N	2022-06-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-23 N-SRF	2022-06-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-24 N-SRF	2022-06-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-25 N-SRF	2022-06-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-26 N-SRF	2022-06-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-27 N-SRF	2022-06-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-28 N-SRF	2022-06-28	1180	< 0.0030	0.00022	0.0003	0.0519	< 0.020	< 0.000050	0.012	0.0000069	220	0.0002	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-06-29 N-SRF	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06 WEK27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-30 N-SRF	2022-06-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-01 N-SRF	2022-07-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-02 N-SRF	2022-07-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-03 N-SRF	2022-07-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-04 N-SRF	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-05 N-SRF	2022-07-05	1200	< 0.0030	0.00022	0.00027	0.0515	< 0.020	< 0.000050	0.013	0.0000067	222	0.00018	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-03 N	2022-07-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-03 N	2022-07-06	1120	< 0.0030	0.00022	0.00026	0.0508	< 0.020	< 0.000050	0.012	< 0.0050	211	0.00018	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-03 N	2022-07-06	1120	< 0.0030	0.00021	0.0003	0.0504	< 0.020	< 0.000050	0.012	< 0.0050	211	0.00018	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-07-06 N-SRF	2022-07-06	< 0.50	< 0.0030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-07-07 N-SRF	2022-07-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-08 N-SRF	2022-07-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-09 N-SRF	2022-07-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-10 N-SRF	2022-07-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-11 N-SRF	2022-07-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-12 N-SRF	2022-07-12	1130	< 0.0030	0.00022	0.00025	0.0501	< 0.020	< 0.000050	0.013	0.0000059	222	0.00018	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-07-13 N-SRF	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07 WEK29 N	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-14 N-SRF	2022-07-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-15 N-SRF	2022-07-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-16 N-SRF	2022-07-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-17 N-SRF	2022-07-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-18 N-SRF	2022-07-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Elkview Operation																				
EV EC1	EV EC1 WS 2022-06-09 N-SRF	2022-06-09	1180	0.029	134	0.00028	0.00293	2.64	158	< 0.000010	3.21	0.21	< 0.000010	< 0.00010	< 0.00030	0.00735	< 0.0030			
EV EC1	EV EC1 WS 2022-06-10 N-SRF	2022-06-10	-	-	-	-	-	-	170	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-10 N	2022-06-10	-	-	-	-	-	-	176	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-11 N	2022-06-11	1160	0.027	145	0.00036	0.00305	2.81	168	< 0.000010	3.32	0.21	< 0.000010	< 0.00010	< 0.00030	0.00755	< 0.0030			
EV EC1	EV EC1 WS 2022-06-11 N-SRF 1	2022-06-11	1180	0.027	139	0.00028	0.00319	2.83	168	< 0.000010	3.27	0.21	< 0.000010	< 0.00010	< 0.00030	0.00786	< 0.0030			
EV EC1	EV EC1 WS 2022-06-12 N	2022-06-12	-	-	-	-	-	-	179	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-12 N-SRF 1	2022-06-12	1250	0.027	168	0.00032	0.00326	3.08	189	< 0.000010	3.61	0.23	0.000012	< 0.00010	< 0.00030	0.00778	< 0.0030			
EV EC1	EV EC1 WS 2022-06-13 N-SRF	2022-06-13	-	-	-	-	-	-	185	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-14 N	2022-06-14	1140	0.027	146	0.00052	0.00282	2.79	169	< 0.000010	3.24	0.22	< 0.000010	< 0.00010	< 0.00030	0.00785	< 0.0030			
EV EC1	EV EC1 WS 2022-06-15 N	2022-06-15	1020	0.023	134	0.00042	0.00289	2.77	144	< 0.000010	3.25	0.2	0.000011	< 0.00010	< 0.00030	0.0066	< 0.0030			
EV EC1	EV EC1 WS 2022-06-16 WEK25 N	2022-06-15	1110	0.023	139	0.00039	0.00288	2.69	157	< 0.000010	3.23	0.21	0.000013	< 0.00010	< 0.00030	0.0075	< 0.0030			
EV EC1	EV EC1 WS 2022-06-16 N-SRF	2022-06-16	-	-	-	-	-	-	157	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-17 N-SRF	2022-06-17	1090	0.028	146	0.00038	0.00288	2.97	166	< 0.000010	3.38	0.23	< 0.000010	< 0.00010	< 0.00030	0.00774	0.0072			
EV EC1	EV EC1 WS 2022-06-18 N-SRF	2022-06-18	-	-	-	-	-	-	147	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-19 N-SRF	2022-06-19	-	-	-	-	-	-	149	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-20 N-SRF	2022-06-20	-	-	-	-	-	-	156	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-22 N-SRF	2022-06-22	1140	0.025	141	0.00029	0.0027	2.74	169	< 0.000010	3.07	0.22	< 0.000010	< 0.00010	< 0.00030	0.00836	< 0.0030			
EV EC1	EV EC1 WS 2022-06-21 N-SRF	2022-06-22	-	-	-	-	-	-	174	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06 WEK26 N	2022-06-23	-	-	-	-	-	-	88.2	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-23 N-SRF	2022-06-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-24 N-SRF	2022-06-24	-	-	-	-	-	-	156	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-25 N-SRF	2022-06-25	-	-	-	-	-	-	147	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-26 N-SRF	2022-06-26	-	-	-	-	-	-	177	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-27 N-SRF	2022-06-27	-	-	-	-	-	-	175	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-28 N-SRF	2022-06-28	1180	0.023	140	0.00021	0.00212	2.61	156	< 0.000010	3	0.21	< 0.000010	< 0.00010	< 0.00030	0.00759	< 0.0030			
EV EC1	EV EC1 WS 2022-06-29 N-SRF	2022-06-29	-	-	-	-	-	-	153	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06 WEK27 N	2022-06-29	-	-	-	-	-	-	176	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-06-30 N-SRF	2022-06-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-01 N-SRF	2022-07-01	-	-	-	-	-	-	163	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-02 N-SRF	2022-07-02	-	-	-	-	-	-	166	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-03 N-SRF	2022-07-03	-	-	-	-	-	-	153	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-04 N-SRF	2022-07-04	-	-	-	-	-	-	149	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-05 N-SRF	2022-07-05	1200	0.027	140	0.00023	0.00211	2.69	171	< 0.000010	3.16	0.21	< 0.000010	< 0.00010	< 0.00030	0.00809	< 0.0030			
EV EC1	EV EC1 WS 2022-03 N	2022-07-06	-	-	-	-	-	-	156	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV MC5 WS 2022-03 N	2022-07-06	1120	0.023	131	0.00019	0.00192	2.64	156	< 0.000010	2.97	0.21	< 0.000010	< 0.00010	< 0.00030	0.0077	< 0.0030			
EV EC1	EV MC7 WS 2022-03 N	2022-07-06	1120	0.023	128	0.00026	0.00196	2.5	158	< 0.000010	2.99	0.21	< 0.000010	< 0.00010	< 0.00030	0.00765	< 0.0030			
EV EC1	EV EC1 WS 2022-07-06 N-SRF	2022-07-06	< 0.50*	0.001*	0.005*	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.00010	< 0.00030	< 0.000010	< 0.0030			
EV EC1	EV EC1 WS 2022-07-07 N-SRF	2022-07-07	-	-	-	-	-	-	147	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-08 N-SRF	2022-07-08	-	-	-	-	-	-	151	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-09 N-SRF	2022-07-09	-	-	-	-	-	-	175	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-10 N-SRF	2022-07-10	-	-	-	-	-	-	153	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-11 N-SRF	2022-07-11	-	-	-	-	-	-	161	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-12 N-SRF	2022-07-12	1130	0.026	143	0.00015	0.002	2.52	163	< 0.000010	3.15	0.21	< 0.000010	< 0.00010	< 0.00030	0.0076	< 0.0030			
EV EC1	EV EC1 WS 2022-07-13 N-SRF	2022-07-13	-	-	-	-	-	-	179	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07 WEK29 N	2022-07-13	-	-	-	-	-	-	157	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-14 N-SRF	2022-07-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-15 N-SRF	2022-07-15	-	-	-	-	-	-	152	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-16 N-SRF	2022-07-16	-	-	-	-	-	-	161	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-17 N-SRF	2022-07-17	-	-	-	-	-	-	158	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-18 N-SRF	2022-07-18	-	-	-	-	-	-	156	-	-	-	-	-	-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium <sup>a</sup> mg/L	Beryllium <sup>a</sup> mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt		Copper mg/L	Iron mg/L	Lead	
														Acute mg/L	Chronic mg/L			Acute mg/L	Chronic mg/L
<b>BC WQG FWAL</b>			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>b</sup>	3.3-3.5 <sup>b</sup>
<b>Elkview Operation</b>																			
EV EC1	EV EC1 WS 2022-07-19 N-SRF	2022-07-19	1120	< 0.0030	0.00022	0.00028	0.052	< 0.020	< 0.000050	0.011	< 0.0050	235	0.0002	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-07-20 N-SRF	2022-07-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-21 N-SRF	2022-07-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-22 N-SRF	2022-07-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-23 N-SRF	2022-07-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-24 N-SRF	2022-07-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-25 N-SRF	2022-07-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-26 N-SRF	2022-07-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-27 N-SRF	2022-07-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-28 N-SRF	2022-07-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-29 N-SRF	2022-07-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-30 N-SRF	2022-07-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-31 N-SRF	2022-07-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-01 N-SRF	2022-08-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-02 N-SRF	2022-08-02	1080	< 0.0030	0.00022	0.00019	0.0458	< 0.020	< 0.000050	0.012	0.0000098	220	0.0002	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-08-03 N-SRF	2022-08-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-04 N-SRF	2022-08-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-05 N-SRF	2022-08-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-06 N-SRF	2022-08-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-07 N-SRF	2022-08-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-08 N-SRF	2022-08-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08 MON N	2022-08-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-09 N-SRF	2022-08-09	1040	< 0.0030	0.00022	0.00034	0.0481	< 0.020	< 0.000050	0.014	0.0000072	205	0.00021	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-08-10 N-SRF	2022-08-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-11 N-SRF	2022-08-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-12 N-SRF	2022-08-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-13 N-SRF	2022-08-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-14 N-SRF	2022-08-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-15 N-SRF	2022-08-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-16 N-SRF	2022-08-16	1100	0.0043	0.00022	0.00024	0.0442	< 0.020	< 0.000050	0.013	0.0000078	203	0.00026	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-08-17 N-SRF	2022-08-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-18 N-SRF	2022-08-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-19 N-SRF	2022-08-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-20 N-SRF	2022-08-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-21 N-SRF	2022-08-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-22 N-SRF	2022-08-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-23 N-SRF	2022-08-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-24 N-SRF	2022-08-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-25 N-SRF	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-26 N-SRF	2022-08-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-27 N-SRF	2022-08-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-28 N-SRF	2022-08-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-29 N-SRF	2022-08-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-30 N-SRF	2022-08-30	1240	0.0164	0.00022	0.00029	0.0444	< 0.020	< 0.000050	0.014	< 0.0050	235	0.00027	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-08-31 N-SRF	2022-08-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-01 N-SRF	2022-09-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-02 N-SRF	2022-09-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-03 N-SRF	2022-09-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-04 N-SRF	2022-09-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-05 N-SRF	2022-09-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL



APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
<b>BC WQG FWAL</b>			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
<b>Elkview Operation</b>																				
EV EC1	EV EC1 WS 2022-07-19 N-SRF	2022-07-19	1120	0.024	154	0.00024	0.00235	2.71	159	< 0.000010	3.26	0.21	< 0.000010	< 0.00010	< 0.00030	0.00786	< 0.0030			
EV EC1	EV EC1 WS 2022-07-20 N-SRF	2022-07-20	-	-	-	-	-	-	149	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-21 N-SRF	2022-07-21	-	-	-	-	-	-	150	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-22 N-SRF	2022-07-22	-	-	-	-	-	-	158	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-23 N-SRF	2022-07-23	-	-	-	-	-	-	167	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-24 N-SRF	2022-07-24	-	-	-	-	-	-	146	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-25 N-SRF	2022-07-25	-	-	-	-	-	-	148	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-26 N-SRF	2022-07-26	-	-	-	-	-	-	147	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-27 N-SRF	2022-07-27	-	-	-	-	-	-	141	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-28 N-SRF	2022-07-28	-	-	-	-	-	-	160	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-29 N-SRF	2022-07-29	-	-	-	-	-	-	161	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-30 N-SRF	2022-07-30	-	-	-	-	-	-	165	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-07-31 N-SRF	2022-07-31	-	-	-	-	-	-	163	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-01 N-SRF	2022-08-01	-	-	-	-	-	-	163	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-02 N-SRF	2022-08-02	1080	0.024	144	0.00133	0.0022	2.44	149	< 0.000010	2.95	0.21	< 0.000010	< 0.00010	< 0.00030	0.00782	< 0.0030			
EV EC1	EV EC1 WS 2022-08-03 N-SRF	2022-08-03	-	-	-	-	-	-	161	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-04 N-SRF	2022-08-04	-	-	-	-	-	-	162	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-05 N-SRF	2022-08-05	-	-	-	-	-	-	155	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-06 N-SRF	2022-08-06	-	-	-	-	-	-	150	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-07 N-SRF	2022-08-07	-	-	-	-	-	-	166	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-08 N-SRF	2022-08-08	-	-	-	-	-	-	169	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08 MON N	2022-08-09	-	-	-	-	-	-	130	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-09 N-SRF	2022-08-09	1040	0.026	144	0.00016	0.00211	2.65	160	< 0.000010	3.19	0.21	< 0.000010	< 0.00010	< 0.00030	0.00772	< 0.0030			
EV EC1	EV EC1 WS 2022-08-10 N-SRF	2022-08-10	-	-	-	-	-	-	138	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-11 N-SRF	2022-08-11	-	-	-	-	-	-	138	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-12 N-SRF	2022-08-12	-	-	-	-	-	-	183	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-13 N-SRF	2022-08-13	-	-	-	-	-	-	145	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-14 N-SRF	2022-08-14	-	-	-	-	-	-	153	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-15 N-SRF	2022-08-15	-	-	-	-	-	-	151	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-16 N-SRF	2022-08-16	1100	0.026	140	0.00017	0.00207	2.47	142	< 0.000010	2.9	0.2	< 0.000010	< 0.00010	< 0.00030	0.00766	< 0.0030			
EV EC1	EV EC1 WS 2022-08-17 N-SRF	2022-08-17	-	-	-	-	-	-	150	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-18 N-SRF	2022-08-18	-	-	-	-	-	-	130	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-19 N-SRF	2022-08-19	-	-	-	-	-	-	156	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-20 N-SRF	2022-08-20	-	-	-	-	-	-	156	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-21 N-SRF	2022-08-21	-	-	-	-	-	-	145	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-22 N-SRF	2022-08-22	-	-	-	-	-	-	139	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-23 N-SRF	2022-08-23	-	-	-	-	-	-	149	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-24 N-SRF	2022-08-24	-	-	-	-	-	-	155	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-25 N-SRF	2022-08-25	-	-	-	-	-	-	153	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-26 N-SRF	2022-08-26	-	-	-	-	-	-	136	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-27 N-SRF	2022-08-27	-	-	-	-	-	-	155	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-28 N-SRF	2022-08-28	-	-	-	-	-	-	144	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-29 N-SRF	2022-08-29	-	-	-	-	-	-	149	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-08-30 N-SRF	2022-08-30	1240	0.029	151	0.0002	0.00198	2.54	163	< 0.000010	3.12	0.22	< 0.000010	< 0.00010	< 0.00030	0.00795	< 0.0030			
EV EC1	EV EC1 WS 2022-08-31 N-SRF	2022-08-31	-	-	-	-	-	-	151	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-01 N-SRF	2022-09-01	-	-	-	-	-	-	150	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-02 N-SRF	2022-09-02	-	-	-	-	-	-	168	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-03 N-SRF	2022-09-03	-	-	-	-	-	-	159	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-04 N-SRF	2022-09-04	-	-	-	-	-	-	151	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-05 N-SRF	2022-09-05	-	-	-	-	-	-	170	-	-	-	-	-	-	-	-	-	-	

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 - Denotes analysis not conducted  
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**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness	Aluminum	Antimony	Arsenic	Barium <sup>a</sup>	Beryllium <sup>b</sup>	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead		
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
			n/a	n/a	n/a	Acute 0.005	Chronic 1	Chronic 0.00013	n/a	Chronic 1.2	n/a	n/a	n/a	Acute 0.11	Chronic 0.004	n/a	1	Acute 0.003-5.5 <sup>c</sup>	Chronic 3.3-3.5 <sup>c</sup>
BC WQG FWAL																			
Elkview Operation																			
EV EC1	EV EC1 WS 2022-09-06 N-SRF	2022-09-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-07 N-SRF	2022-09-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09 MON N	2022-09-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV EC1	EV EC1 WS 2022-09-08 N-SRF	2022-09-08	1160	0.0055	0.00019	0.00026	0.0455	< 0.020	< 0.000050	0.014	0.0000056	213	0.00018	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-09-09 N-SRF	2022-09-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-10 N-SRF	2022-09-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-11 N-SRF	2022-09-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-12 N-SRF	2022-09-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-13 N-SRF	2022-09-13	995	0.0034	0.0002	0.00034	0.047	< 0.020	< 0.000050	0.015	0.0000074	213	0.0002	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-09-14 N-SRF	2022-09-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-15 N-SRF	2022-09-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-16 N-SRF	2022-09-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-17 N-SRF	2022-09-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-18 N-SRF	2022-09-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-19 N-SRF	2022-09-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-20 N-SRF	2022-09-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-21 N SRF	2022-09-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-22 N-SRF	2022-09-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-23 N-SRF	2022-09-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-24 N-SRF	2022-09-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-25 N-SRF	2022-09-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-26 N-SRF	2022-09-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-27 N-SRF	2022-09-27	1180	0.0079	0.00023	0.00027	0.0481	< 0.020	< 0.000050	0.013	0.0000098	209	0.00019	< 0.10	< 0.00050	0.013	0.000102		
EV EC1	EV EC1 WS 2022-09-28 N-SRF	2022-09-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-29 N-SRF	2022-09-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-30 N-SRF	2022-09-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-10-01 N-SRF	2022-10-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-10-02 N-SRF	2022-10-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-10-03 N-SRF	2022-10-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-10-04 N-SRF	2022-10-04	1140	0.0063	0.0002	0.00024	0.0456	< 0.020	< 0.000050	0.013	0.0000073	241	0.00022	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-Q4 N	2022-10-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-10-06 N-SRF	2022-10-06	1240	0.0038	0.00021	0.0003	0.0487	< 0.020	< 0.000050	0.021	< 0.0050	252	0.00014	0.00014	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-10-17 N-SRF	2022-10-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-10-31 N-SRF	2022-10-31	1190	< 0.0030	0.00023	0.0003	0.0392	< 0.020	< 0.000050	0.023	0.000013	266	0.00032	0.00069	0.00067	0.01	< 0.000050		
EV EC1	EV EC1 WS 2022-11-14 N-SRF	2022-11-14	1260	0.0071	0.00021	0.00029	0.0363	< 0.040	< 0.000100	0.024	0.0000106	260	< 0.00020	0.0008	< 0.00100	< 0.020	< 0.000100		
EV EC1	EV EC1 WS 2022-11 MON N	2022-11-15	1240	< 0.0030	0.0002	0.0003	0.0333	< 0.020	< 0.000050	0.023	0.0000094	217	0.0001	0.00098	< 0.00050	< 0.010	< 0.000050		
EV EC1	EV EC1 WS 2022-11-21 N-SRF	2022-11-21	1250	< 0.0030	0.00023	0.00029	0.0325	< 0.020	< 0.000050	0.025	0.0000142	239	0.00011	0.00106	< 0.00050	< 0.010	< 0.000050		
EV ER4	EV ER4 WS 2022-Q1 N	2022-01-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV ER4	EV ER4 WS 2022-02 MON N	2022-02-15	256	0.0232	< 0.00010	0.00022	0.0691	< 0.020	< 0.000050	< 0.010	0.0000153	68.1	0.0003	< 0.10	< 0.00050	0.031	< 0.000050		
EV ER4	EV ER4 WS 2022-03 MON N	2022-03-15	301	0.0033	< 0.00010	0.00021	0.0758	< 0.020	< 0.000050	< 0.010	0.0000128	78.2	0.00024	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV ER4	EV ER4 WS 2022-03 WEK13 N	2022-03-21	314	0.0172	< 0.00010	0.00025	0.0784	< 0.020	< 0.000050	< 0.010	0.000025	77.6	0.00026	< 0.10	< 0.00050	0.021	< 0.000050		
EV ER4	EV ER4 WS 2022-03 WEK14 N	2022-03-28	289	0.0102	< 0.00010	0.00025	0.0823	< 0.020	< 0.000050	< 0.010	0.000011	73.5	0.00032	< 0.10	0.00074	0.013	< 0.000050		
EV ER4	EV ER4 WS 2022-04 WEK15 N	2022-04-04	292	0.0533	< 0.00010	0.00029	0.0786	< 0.020	< 0.000050	< 0.010	0.0000216	76.4	0.00032	< 0.10	< 0.00050	0.055	< 0.000050		
EV ER4	EV ER4 WS 2022-Q2 N	2022-04-11	319	0.057	< 0.00010	0.00025	0.0779	< 0.020	< 0.000050	< 0.010	0.0000307	77.4	0.00034	< 0.10	< 0.00050	0.109	0.000097		
EV ER4	EV ER4 WS 2022-04 WEK17 N	2022-04-18	312	0.0184	< 0.00010	0.0002	0.0778	< 0.020	< 0.000050	< 0.010	0.0000193	74.6	0.00021	< 0.10	< 0.00050	0.034	< 0.000050		
EV ER4	EV ER4 WS 2022-04 WEK18 N	2022-04-25	307	0.0141	< 0.00010	0.00018	0.0771	< 0.020	< 0.000050	< 0.010	0.0000156	81.1	0.0002	< 0.10	< 0.00050	0.02	< 0.000050		
EV ER4	EV ER4 WS 2022-05 MON N	2022-05-02	301	0.0141	< 0.00010	0.00017	0.0763	< 0.020	< 0.000050	< 0.010	0.0000175	79.5	0.0002	< 0.10	< 0.00050	0.024	< 0.000050		
EV ER4	EV ER4 WS 2022-05 WEK20 N	2022-05-10	292	0.0761	< 0.00010	0.00026	0.0743	< 0.020	< 0.000050	< 0.010	0.0000214	74.2	0.00047	< 0.10	< 0.00050	0.094	0.000071		
EV ER4	EV ER4 WS 2022-05 WEK21 N	2022-05-16	231	0.234	< 0.00010	0.00032	0.0647	< 0.020	< 0.000050	< 0.010	0.0000461	62.8	0.00062	0.00013	0.0005	0.28	0.000181		
EV ER4	EV ER4 WS 2022-05 WEK22 N	2022-05-24	258	0.0512	< 0.00010	0.00019	0.0668	< 0.020	< 0.000050	< 0.010	0.0000309	68.8	0.00029	< 0.10	0.0006	0.074	0.000067		

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness	Lithium	Magnesium	Manganese		Nickel*	Potassium	Selenium	Silver		Sodium	Strontium	Thallium	Tin	Titanium	Uranium*	Zinc	
						mg/L	mg/L				mg/L	mg/L							mg/L	µg/L
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Elkview Operation																				
EV EC1	EV EC1 WS 2022-09-06 N-SRF	2022-09-06	-	-	-	-	-	-	-	166	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-07 N-SRF	2022-09-07	-	-	-	-	-	-	-	166	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09 MON N	2022-09-08	-	-	-	-	-	-	-	159	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-08 N-SRF	2022-09-08	1160	0.021	156	0.00012	0.00212	2.52	172	< 0.000010	3.39	0.2	< 0.000010	< 0.00010	< 0.00030	0.00782	-	< 0.0030		
EV EC1	EV EC1 WS 2022-09-09 N-SRF	2022-09-09	-	-	-	-	-	-	-	163	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-10 N-SRF	2022-09-10	-	-	-	-	-	-	-	164	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-11 N-SRF	2022-09-11	-	-	-	-	-	-	-	160	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-12 N-SRF	2022-09-12	-	-	-	-	-	-	-	159	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-13 N-SRF	2022-09-13	995	0.026	154	0.00054	0.00192	2.67	156	< 0.000010	3.53	0.22	< 0.000010	< 0.00010	< 0.00030	0.00703	-	< 0.0030		
EV EC1	EV EC1 WS 2022-09-14 N-SRF	2022-09-14	-	-	-	-	-	-	-	157	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-15 N-SRF	2022-09-15	-	-	-	-	-	-	-	145	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-16 N-SRF	2022-09-16	-	-	-	-	-	-	-	160	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-17 N-SRF	2022-09-17	-	-	-	-	-	-	-	162	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-18 N-SRF	2022-09-18	-	-	-	-	-	-	-	154	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-19 N-SRF	2022-09-19	-	-	-	-	-	-	-	164	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-20 N-SRF	2022-09-20	-	-	-	-	-	-	-	152	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-21 N-SRF	2022-09-21	-	-	-	-	-	-	-	146	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-22 N-SRF	2022-09-22	-	-	-	-	-	-	-	162	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-23 N-SRF	2022-09-23	-	-	-	-	-	-	-	161	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-24 N-SRF	2022-09-24	-	-	-	-	-	-	-	152	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-25 N-SRF	2022-09-25	-	-	-	-	-	-	-	142	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-26 N-SRF	2022-09-26	-	-	-	-	-	-	-	145	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-27 N-SRF	2022-09-27	1180	0.026	159	0.00054	0.002	2.71	157	< 0.000010	3.31	0.21	< 0.000010	< 0.00010	< 0.00030	0.00712	-	< 0.0030		
EV EC1	EV EC1 WS 2022-09-28 N-SRF	2022-09-28	-	-	-	-	-	-	-	149	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-29 N-SRF	2022-09-29	-	-	-	-	-	-	-	156	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-09-30 N-SRF	2022-09-30	-	-	-	-	-	-	-	154	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-10-01 N-SRF	2022-10-01	-	-	-	-	-	-	-	154	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-10-02 N-SRF	2022-10-02	-	-	-	-	-	-	-	157	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-10-03 N-SRF	2022-10-03	-	-	-	-	-	-	-	158	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-10-04 N-SRF	2022-10-04	1140	0.031	157	0.00036	0.0018	2.79	177	< 0.000010	3.4	0.22	0.00001	< 0.00010	< 0.00030	0.00749	-	0.0065		
EV EC1	EV EC1 WS 2022-04 N	2022-10-05	-	-	-	-	-	-	-	167	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-10-06 N-SRF	2022-10-06	1240	0.055	170	0.0008	0.00406	3.28	122	< 0.000010	5.56	0.29	0.000015	< 0.00010	< 0.00030	<b>0.00852</b>	-	< 0.0030		
EV EC1	EV EC1 WS 2022-10-17 N-SRF	2022-10-17	-	-	-	-	-	-	-	153	-	-	-	-	-	-	-	-	-	
EV EC1	EV EC1 WS 2022-10-31 N-SRF	2022-10-31	1190	0.071	166	<b>0.012</b>	0.0121	3.7	<b>123</b>	< 0.000010	6.84	0.32	0.000028	< 0.00010	< 0.00030	<b>0.00945</b>	-	< 0.0030		
EV EC1	EV EC1 WS 2022-11-14 N-SRF	2022-11-14	1260	0.074	165	<b>0.0145</b>	0.0122	3.62	<b>97.1</b>	< 0.000020	6.83	0.32	0.000035	< 0.00020	< 0.00060	<b>0.00976</b>	-	0.0086		
EV EC1	EV EC1 WS 2022-11 MON N	2022-11-15	1240	0.062	164	<b>0.018</b>	0.0139	3.56	<b>95.5</b>	< 0.000010	7.2	0.31	0.00003	< 0.00010	< 0.00030	<b>0.00888</b>	-	< 0.0030		
EV EC1	EV EC1 WS 2022-11-21 N-SRF	2022-11-21	1250	0.068	155	<b>0.0188</b>	0.0144	3.56	<b>95.8</b>	< 0.000010	7.52	0.32	0.000036	< 0.00010	< 0.00030	<b>0.0103</b>	-	< 0.0030		
EV ER4	EV ER4 WS 2022-01 N	2022-01-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV ER4	EV ER4 WS 2022-02 MON N	2022-02-15	256	0.013	25.2	<b>0.00266</b>	< 0.00050	0.72	<b>16.7</b>	< 0.000010	3.33	0.26	< 0.000010	< 0.00010	< 0.00060	0.00142	-	< 0.0030		
EV ER4	EV ER4 WS 2022-03 MON N	2022-03-15	301	0.013	27.8	0.00136	< 0.00050	0.758	<b>20.8</b>	< 0.000010	3.59	0.27	< 0.000010	< 0.00010	< 0.00030	0.00142	-	< 0.0030		
EV ER4	EV ER4 WS 2022-03 WEK13 N	2022-03-21	314	0.014	27	<b>0.00236</b>	< 0.00050	0.81	<b>19.6</b>	< 0.000010	3.85	0.26	< 0.000010	< 0.00010	< 0.00060	0.00151	-	< 0.0030		
EV ER4	EV ER4 WS 2022-03 WEK14 N	2022-03-28	289	0.014	28.4	<b>0.00207</b>	0.00054	1.17	<b>18.8</b>	< 0.000010	5.12	0.27	< 0.000010	< 0.00010	< 0.00030	0.00154	-	0.0044		
EV ER4	EV ER4 WS 2022-04 WEK15 N	2022-04-04	292	0.014	26.4	<b>0.00514</b>	< 0.00050	0.892	<b>18.3</b>	< 0.000010	3.78	0.26	< 0.000010	< 0.00010	0.00122	0.00153	-	< 0.0030		
EV ER4	EV ER4 WS 2022-02 N	2022-04-11	319	0.015	27	<b>0.0101</b>	0.0006	0.922	<b>21.7</b>	< 0.000010	3.59	0.26	< 0.000010	< 0.00010	0.00071	0.00165	-	< 0.0030		
EV ER4	EV ER4 WS 2022-04 WEK17 N	2022-04-18	312	0.014	29.9	<b>0.00359</b>	0.00055	0.872	<b>22.6</b>	< 0.000010	3.41	0.25	< 0.000010	< 0.00010	< 0.00030	0.00165	-	< 0.0030		
EV ER4	EV ER4 WS 2022-04 WEK18 N	2022-04-25	307	0.016	29.6	<b>0.00215</b>	0.00067	0.847	<b>24.6</b>	< 0.000010	3.61	0.25	< 0.000010	< 0.00010	< 0.00030	0.0016	-	< 0.0030		
EV ER4	EV ER4 WS 2022-05 MON N	2022-05-02	301	0.016	30.9	<b>0.00269</b>	0.00073	0.862	<b>22.7</b>	< 0.000010	3.3	0.25	< 0.000010	< 0.00010	< 0.00030	0.00178	-	< 0.0030		
EV ER4	EV ER4 WS 2022-05 WEK20 N	2022-05-10	292	0.014	28.8	<b>0.00658</b>	0.00092	0.823	<b>20</b>	< 0.000010	2.85	0.23	< 0.000010	< 0.00010	0.00093	0.0017	-	< 0.0030		
EV ER4	EV ER4 WS 2022-05 WEK21 N	2022-05-16	231	0.011	21.6	<b>0.0133</b>	0.0012	0.801	<b>15.5</b>	< 0.000010	2.22	0.21	0.000011	< 0.00010	< 0.00040	0.00139	-	0.0031		
EV ER4	EV ER4 WS 2022-05 WEK22 N	2022-05-24	258	0.012	23	<b>0.00544</b>	0.0009	0.742	<b>15.3</b>	< 0.000010	2.39	0.23	< 0.000010	< 0.00010	0.00071	0.00149	-	< 0.0030		

< Denotes concentration less than indicated detection limit  
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 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium <sup>a</sup> mg/L	Beryllium <sup>b</sup> mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt		Copper mg/L	Iron mg/L	Lead	
														Acute mg/L	Chronic mg/L			Acute mg/L	Chronic mg/L
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>c</sup>	3.3-3.5 <sup>d</sup>
Elkview Operation																			
EV ER4	EV ER4 WS 2022-05 WEK23 N	2022-05-30	260	0.0726	< 0.00010	0.00024	0.065	< 0.020	< 0.000050	< 0.010	0.000044	68.6	0.00036	< 0.10	< 0.00050	0.099	0.00013		
EV ER4	EV ER4 WS 2022-06 MON N	2022-06-07	217	0.52	0.00011	0.00056	0.0606	0.000035	< 0.000050	< 0.010	0.0000992	56.3	0.0013	0.00034	0.00106	0.699	0.000489		
EV ER4	EV ER4 WS 2022-06 WEK25 N	2022-06-14	185	1.13	0.00016	0.00115	0.0727	0.00011	< 0.000050	< 0.010	0.000244	64.5	0.00265	0.00084	0.00252	1.99	0.0013		
EV ER4	EV ER4 WS 2022-06 WEK26 N	2022-06-20	171	1.29	0.00018	0.00143	0.0693	0.000117	< 0.000050	< 0.010	0.00021	55.3	0.00304	0.00095	0.00266	2.27	0.00137		
EV ER4	EV ER4 WS 2022-06 WEK27 N	2022-06-27	170	2.41	0.00025	0.00242	0.0995	0.000224	< 0.000050	0.01	0.000427	75.1	0.00575	0.0018	0.00488	4.27	0.00272		
EV ER4	EV ER4 WS 2022-03 N	2022-07-04	188	0.56	0.00013	0.00071	0.0598	0.00005	< 0.000050	< 0.010	0.00012	57.8	0.00144	0.00046	0.00137	0.986	0.00065		
EV ER4	EV ER4 WS 2022-07 WEK29 N	2022-07-11	175	0.406	0.0001	0.0005	0.0532	0.000042	< 0.000050	< 0.010	0.0000848	49.8	0.00098	0.0003	0.00093	0.678	0.000479		
EV ER4	EV ER4 WS 2022-08 MON N	2022-08-08	176	0.253	< 0.00010	0.00035	0.0491	0.000023	< 0.000050	< 0.010	0.0000603	50.9	0.00075	< 0.010	0.00068	0.4	0.000255		
EV ER4	EV ER4 WS 2022-09 MON N	2022-09-06	212	0.0611	< 0.00010	0.00022	0.0622	< 0.020	< 0.000050	< 0.010	0.0000283	57.7	0.0004	< 0.10	< 0.00050	0.121	< 0.000077		
EV ER4	EV ER4 WS 2022-04 N	2022-10-03	243	0.0175	< 0.00010	0.00022	0.0617	< 0.020	< 0.000050	< 0.010	0.000013	56.4	0.00026	< 0.10	< 0.00050	0.028	< 0.000050		
EV ER4	EV ER4 WS 2022-11 MON N	2022-11-07	258	0.007	< 0.00010	0.00019	0.0697	< 0.020	< 0.000050	< 0.010	0.0000167	70.6	0.00024	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV GC2	EV GC2 WS 2022-01-02 N	2022-01-02	282	0.0072	< 0.00010	0.00017	0.0745	< 0.020	< 0.000050	< 0.010	0.000013	71	0.00024	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV GC2	EV GC2 WS 2022-01-04 N	2022-01-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01 N	2022-01-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-06 N 0915	2022-01-06	643	0.238	0.00114	0.00022	0.118	0.000022	< 0.000050	0.025	0.000102	140	0.00037	0.00016	0.00074	0.103	0.000216		
EV GC2	EV GC2 WS 2022-01-06 N 1209	2022-01-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-07 N	2022-01-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-08 N	2022-01-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-09 N	2022-01-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-14 N	2022-01-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-22 N	2022-01-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-23 N 1306	2022-01-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-23 N 1628	2022-01-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-24 N	2022-01-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-25 N	2022-01-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-28 N 1448	2022-01-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-28 N 0816	2022-01-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-29 N	2022-01-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-30 N	2022-01-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-31 N 1332	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-31 N 1434	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-31 N 1509	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-31 N 1539	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-31 N 1627	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-31 N 1645	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-31 N 0858	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-31 N 1208	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-01-31 N 1231	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-02-01 N 1304	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-02-01 N 1405	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-02-01 N 1506	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-02-01 N 1538	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-02-01 N 0744	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-02-01 N 0843	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-02-01 N 0933	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-02-01 N 1047	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-02-01 N 1204	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-02-02 N 1508	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-02-02 N 1605	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
EV GC2	EV GC2 WS 2022-02-02 N 0759	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Elkview Operation																				
EV ER4	EV ER4 WS 2022-05 WEK23 N	2022-05-30	260	0.011	22.8	<b>0.00875</b>	0.00094	0.708	<b>14.2</b>	< 0.000010	2.45	0.22	< 0.000010	< 0.00010	0.00099	0.00133	0.003			
EV ER4	EV ER4 WS 2022-06 MON N	2022-06-07	217	0.008	19.9	<b>0.0362</b>	0.0019	0.793	<b>10</b>	0.000012	1.62	0.19	0.000021	< 0.00010	0.00487	0.00116	0.0064			
EV ER4	EV ER4 WS 2022-06 WEK25 N	2022-06-14	185	0.008	18.5	<b>0.111</b>	0.00435	1.02	<b>8.48</b>	0.000032	1.34	0.19	0.000057	< 0.00010	0.00678	0.00117	0.0161			
EV ER4	EV ER4 WS 2022-06 WEK26 N	2022-06-20	171	0.008	15.4	<b>0.126</b>	0.00437	1.04	<b>7.71</b>	0.000039	1.21	0.18	0.000068	0.00014	0.00857	0.00111	0.018			
EV ER4	EV ER4 WS 2022-06 WEK27 N	2022-06-27	170	0.01	20.2	<b>0.246</b>	0.0081	1.67	<b>6.86</b>	0.000061	1.23	0.18	0.000127	0.00011	0.0141	0.00128	0.033			
EV ER4	EV ER4 WS 2022-03 N	2022-07-04	188	0.008	16.7	<b>0.0577</b>	0.0026	0.861	<b>8.64</b>	0.000016	1.32	0.17	0.000034	< 0.00010	0.00408	0.00108	0.0089			
EV ER4	EV ER4 WS 2022-07 WEK29 N	2022-07-11	175	0.007	14.5	<b>0.0328</b>	0.00174	0.73	<b>7.89</b>	0.000013	1.28	0.17	0.000019	< 0.00010	0.00332	0.00101	0.0058			
EV ER4	EV ER4 WS 2022-08 MON N	2022-08-08	176	0.007	14.6	<b>0.022</b>	0.00138	0.641	<b>6.88</b>	< 0.000010	1.32	0.17	0.000013	< 0.00010	< 0.00240	0.000948	0.0044			
EV ER4	EV ER4 WS 2022-09 MON N	2022-09-06	212	0.009	18.7	<b>0.00851</b>	0.0007	0.621	<b>9.96</b>	< 0.000010	1.73	0.22	< 0.000010	< 0.00010	0.00076	0.0012	< 0.0030			
EV ER4	EV ER4 WS 2022-11 MON N	2022-10-03	243	0.009	19.4	<b>0.00368</b>	0.00052	0.592	<b>10.6</b>	< 0.000010	1.88	0.21	< 0.000010	< 0.00010	< 0.00030	0.00113	< 0.0030			
EV GC2	EV GC2 WS 2022-01-02 N	2022-11-07	258	0.011	24.7	<b>0.00211</b>	< 0.00050	0.724	<b>75</b>	< 0.000010	2.81	0.26	< 0.000010	< 0.00010	< 0.00030	0.00129	< 0.0030			
EV GC2	EV GC2 WS 2022-01-02 N	2022-01-02	282	0.012	24	<b>0.00206</b>	< 0.00050	0.687	<b>13.6</b>	< 0.000010	3.14	0.26	< 0.000010	< 0.00010	< 0.00030	0.00131	< 0.0030			
EV GC2	EV GC2 WS 2022-01-04 N	2022-01-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-05 N	2022-01-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-06 N 0915	2022-01-06	643	0.03	77.6	<b>0.0101</b>	0.00167	2.07	<b>92.7</b>	< 0.000010	8.03	0.41	0.000012	0.00013	< 0.00390	0.0041	0.0038			
EV GC2	EV GC2 WS 2022-01-06 N 1209	2022-01-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-07 N	2022-01-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-08 N	2022-01-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-09 N	2022-01-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-14 N	2022-01-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-22 N	2022-01-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-23 N 1306	2022-01-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-23 N 1628	2022-01-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-24 N	2022-01-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-25 N	2022-01-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-28 N 1448	2022-01-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-28 N 0816	2022-01-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-29 N	2022-01-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-30 N	2022-01-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-31 N 1332	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-31 N 1434	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-31 N 1509	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-31 N 1539	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-31 N 1627	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-31 N 1645	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-31 N 0858	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-31 N 1208	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-01-31 N 1231	2022-01-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-02-01 N 1304	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-02-01 N 1405	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-02-01 N 1506	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-02-01 N 1538	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-02-01 N 0744	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-02-01 N 0843	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-02-01 N 0933	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-02-01 N 1047	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-02-01 N 1204	2022-02-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-02-02 N 1508	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-02-02 N 1605	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
EV GC2	EV GC2 WS 2022-02-02 N 0759	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

< Denotes concentration less than indicated detection limit  
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**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness	Aluminum	Antimony	Arsenic	Barium <sup>a</sup>	Beryllium <sup>a</sup>	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead		
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>b</sup>	3.3-3.5 <sup>b</sup>
Elkview Operation																			
EV GC2	EV GC2 WS 2022-02-02 N 1135	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-02 N 1250	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1334	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1434	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1557	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 0725	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 0840	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1000	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1101	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 1336	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 1421	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 0757	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 1054	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 1236	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-05 N	2022-02-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02 MON N	2022-02-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-08 N	2022-02-08	606	0.0674	0.00068	0.00021	0.115	< 0.020	< 0.000050	0.026	0.0000575	129	0.00018	0.00021	< 0.00050	0.062	0.000101		
EV GC2	EV GC2 WS 2022-02-09 N	2022-02-09	620	0.228	0.00082	0.00024	0.114	< 0.020	< 0.000050	0.026	0.0000428	130	0.00023	0.0002	< 0.00050	0.061	0.000115		
EV GC2	EV GC2 WS 2022-02-10 N 1330	2022-02-10	608	0.0771	0.00077	0.0002	0.106	< 0.020	< 0.000050	0.027	0.0000401	139	0.00015	0.00017	< 0.00050	0.044	0.000075		
EV GC2	EV GC2 WS 2022-02-10 N 1722	2022-02-10	596	0.384	0.00068	0.00034	0.126	0.000024	< 0.000050	0.028	0.0000854	127	0.00053	0.00038	0.00091	0.237	0.000292		
EV GC2	EV GC2 WS 2022-02-10 N 0925	2022-02-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-10 N 1005	2022-02-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-11 N	2022-02-11	607	0.27	0.00068	0.0003	0.119	0.00002	< 0.000050	0.029	0.0000737	128	0.00039	0.00038	0.00077	0.194	0.000273		
EV GC2	EV GC2 WS 2022-02-13 N	2022-02-13	542	0.086	0.00066	0.00023	0.105	< 0.020	< 0.000050	0.029	0.000071	116	0.00017	0.00033	0.0006	0.072	0.000146		
EV GC2	EV GC2 WS 2022-02-14 N 1522	2022-02-14	545	0.047	0.00056	0.00025	0.107	< 0.020	< 0.000050	0.028	0.0000702	115	0.00024	0.00021	< 0.00050	0.028	0.000059		
EV GC2	EV GC2 WS 2022-02-14 N 1210	2022-02-14	547	0.0705	0.00056	0.00026	0.11	< 0.020	< 0.000050	0.028	0.0000758	115	0.00019	0.0002	< 0.00050	0.045	0.000077		
EV GC2	EV GC2 WS 2022-02-15 N 1403	2022-02-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-15 N 0759	2022-02-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-16 N 1330	2022-02-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-16 N 0750	2022-02-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-17 N 0820	2022-02-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-17 N 1222	2022-02-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-18 N 1354	2022-02-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-18 N 0745	2022-02-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-19 N	2022-02-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-20 N 1509	2022-02-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-20 N 0900	2022-02-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-22 N 1338	2022-02-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-22 N 0738	2022-02-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-23 N 0724	2022-02-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-23 N 1207	2022-02-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-24 N 1325	2022-02-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-24 N 0726	2022-02-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-25 N 1435	2022-02-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-25 N 0740	2022-02-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-26 N 1457	2022-02-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-26 N 0803	2022-02-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-27 N 1421	2022-02-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-27 N 0932	2022-02-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-28 N 1412	2022-02-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Elkview Operation																				
EV GC2	EV GC2 WS 2022-02-02 N 1135	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-02 N 1250	2022-02-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1334	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1434	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1557	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 0725	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 0840	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1000	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-03 N 1101	2022-02-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 1336	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 1421	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 0757	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 1054	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-04 N 1236	2022-02-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-05 N	2022-02-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02 MON N	2022-02-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-08 N	2022-02-08	606	0.031	69.6	<b>0.0116</b>	0.00144	2.02	<b>79.4</b>	< 0.000010	9.42	0.47	< 0.000010	< 0.00010	0.00059	0.0038	< 0.0030			
EV GC2	EV GC2 WS 2022-02-09 N	2022-02-09	620	0.033	71.2	<b>0.0157</b>	0.00144	1.89	<b>74.5</b>	< 0.000010	9.11	0.46	0.000012	< 0.00010	0.00536	0.00369	< 0.0030			
EV GC2	EV GC2 WS 2022-02-10 N 1330	2022-02-10	608	0.031	71.9	<b>0.0139</b>	0.00127	1.89	<b>83.2</b>	< 0.000010	9.39	0.47	< 0.000010	< 0.00010	< 0.00120	0.00347	< 0.0030			
EV GC2	EV GC2 WS 2022-02-10 N 1722	2022-02-10	596	0.031	68.9	<b>0.0154</b>	0.00198	2.1	<b>75.1</b>	< 0.000010	9.74	0.46	0.000016	< 0.00010	< 0.00900	0.00346	0.0045			
EV GC2	EV GC2 WS 2022-02-10 N 0925	2022-02-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-10 N 1005	2022-02-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-11 N	2022-02-11	607	0.034	69	<b>0.0156</b>	0.00196	2.1	<b>74</b>	< 0.000010	9.7	0.45	0.000014	< 0.00010	< 0.00570	0.00356	0.0048			
EV GC2	EV GC2 WS 2022-02-13 N	2022-02-13	542	0.03	59.8	<b>0.0143</b>	0.00175	2.02	<b>63.9</b>	< 0.000010	10.3	0.46	< 0.000010	< 0.00010	< 0.00150	0.00306	< 0.0030			
EV GC2	EV GC2 WS 2022-02-14 N 1522	2022-02-14	545	0.028	59.5	<b>0.0111</b>	0.00153	1.91	<b>65.5</b>	< 0.000010	10.2	0.46	< 0.000010	< 0.00010	0.00064	0.00301	< 0.0030			
EV GC2	EV GC2 WS 2022-02-14 N 1210	2022-02-14	547	0.027	60.6	<b>0.0114</b>	0.00158	1.9	<b>62.8</b>	< 0.000010	9.97	0.45	< 0.000010	< 0.00010	< 0.00120	0.00299	< 0.0030			
EV GC2	EV GC2 WS 2022-02-15 N 1403	2022-02-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-15 N 0759	2022-02-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-16 N 1330	2022-02-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-16 N 0750	2022-02-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-17 N 0820	2022-02-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-17 N 1222	2022-02-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-18 N 1354	2022-02-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-18 N 0745	2022-02-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-19 N	2022-02-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-20 N 1509	2022-02-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-20 N 0900	2022-02-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-22 N 1338	2022-02-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-22 N 0738	2022-02-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-23 N 0724	2022-02-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-23 N 1207	2022-02-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-24 N 1325	2022-02-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-24 N 0726	2022-02-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-25 N 1435	2022-02-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-25 N 0740	2022-02-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-26 N 1457	2022-02-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-26 N 0803	2022-02-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-27 N 1421	2022-02-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-27 N 0932	2022-02-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02-28 N 1412	2022-02-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium <sup>a</sup> mg/L	Beryllium <sup>b</sup> mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L		Copper mg/L	Iron mg/L	Lead mg/L	
														Acute	Chronic			Acute	Chronic
<b>BC WQG FWAL</b>			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>c</sup>	3.3-3.5 <sup>d</sup>
EV GC2	EV GC2 WS 2022-02-28 N 0740	2022-02-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-01 N 1413	2022-03-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-01 N 1750	2022-03-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-01 N 0723	2022-03-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-02 N 1310	2022-03-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-02 N 0830	2022-03-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-03 N 1310	2022-03-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-03 N 0735	2022-03-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-04 N 1316	2022-03-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-04 N 0751	2022-03-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-05 N 1357	2022-03-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-05 N 0755	2022-03-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-06 N 1437	2022-03-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-06 N 0725	2022-03-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-07 N 0735	2022-03-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-11 N	2022-03-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-16 N	2022-03-16	586	0.0301	0.00052	0.0002	0.104	< 0.020	< 0.000050	0.03	0.0000785	129	0.00014	0.00015	< 0.00050	0.024	0.000051		
EV GC2	EV GC2 WS 2022-03-16 N 0005	2022-03-16	493	0.217	0.00054	0.00026	0.103	< 0.020	< 0.000050	0.03	0.000084	109	0.0003	0.00036	0.00082	0.155	0.000201		
EV GC2	EV GC2 WS 2022-03 MON N	2022-03-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV MC6 WS 2022-03 MON N	2022-03-17	483	0.047	0.00046	0.0002	0.111	< 0.020	< 0.000050	0.031	0.0000754	118	0.00016	0.00022	< 0.00050	0.038	0.000078		
EV GC2	EV MC8 WS 2022-03 MON N	2022-03-17	497	0.0489	0.00047	0.00021	0.111	< 0.020	< 0.000050	0.03	0.0000764	117	< 0.00010	0.00021	< 0.00050	0.041	0.000083		
EV GC2	EV GC2 WS 2022-03 WEK13 N	2022-03-21	< 0.50	< 0.00030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV GC2	EV GC2 WS 2022-03-24 N 0634	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-24 N 1115	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-24 N 1251	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-25 N 0645	2022-03-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-26 N 1401	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-26 N 1557	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-26 N 0752	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-27 N	2022-03-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03 WEK14 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-28 N 0707	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-29 N 1543	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-29 N 0750	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-30 N 1602	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-30 N 0728	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-31 N 1357	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-31 N 0754	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-31 N 1210	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-01 N 1457	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-01 N 1556	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-01 N 0743	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-02 N 1554	2022-04-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-02 N 0807	2022-04-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04 WEK15 N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02 N	2022-04-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04 WEK17 N	2022-04-18	461	0.0628	0.00039	0.00026	0.146	< 0.020	< 0.000050	0.029	0.0000875	115	0.00015	0.00015	0.00078	0.077	0.000132		
EV GC2	EV GC2 WS 2022-04 WEK18 N	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-25 N 0757	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-05 MON N	2022-05-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL



APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Elkview Operation																				
EV GC2	EV GC2 WS 2022-02-28 N 0740	2022-02-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-01 N 1413	2022-03-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-01 N 1750	2022-03-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-01 N 0723	2022-03-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-02 N 1310	2022-03-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-02 N 0830	2022-03-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-03 N 1310	2022-03-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-03 N 0735	2022-03-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-04 N 1316	2022-03-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-04 N 0751	2022-03-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-05 N 1357	2022-03-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-05 N 0755	2022-03-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-06 N 1437	2022-03-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-06 N 0725	2022-03-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-07 N 0735	2022-03-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-11 N	2022-03-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-16 N	2022-03-16	586	0.032	66.4	<b>0.0111</b>	0.00141	1.98	<b>64.6</b>	< 0.000010	12.2	0.53	< 0.000010	< 0.00010	0.00044	0.00313	< 0.0030			
EV GC2	EV GC2 WS 2022-03-16 N 0005	2022-03-16	493	0.029	52	<b>0.0166</b>	0.00174	2.23	<b>48.8</b>	< 0.000010	11.2	0.48	0.00001	< 0.00010	< 0.00360	0.00251	< 0.0030			
EV GC2	EV GC2 WS 2022-03 MON N	2022-03-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV MC6 WS 2022-03 MON N	2022-03-17	483	0.031	58.8	<b>0.0144</b>	0.00146	2.02	<b>51.2</b>	< 0.000010	12	0.51	< 0.000010	< 0.00010	< 0.00060	0.00258	< 0.0030			
EV GC2	EV MC8 WS 2022-03 MON N	2022-03-17	497	0.03	56.3	<b>0.0143</b>	0.00144	1.98	<b>52.3</b>	< 0.000010	11.8	0.51	< 0.000010	< 0.00010	< 0.00060	0.00279	< 0.0030			
EV GC2	EV GC2 WS 2022-03 WEK13 N	2022-03-21	< 0.50*	0.0010	0.007	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.00010	< 0.00030	< 0.000010	< 0.000010	< 0.0030		
EV GC2	EV GC2 WS 2022-03-24 N 0634	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-24 N 1115	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-24 N 1251	2022-03-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-25 N 0645	2022-03-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-26 N 1401	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-26 N 1557	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-26 N 0752	2022-03-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-27 N	2022-03-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03 WEK14 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-28 N 0707	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-29 N 1543	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-29 N 0750	2022-03-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-30 N 1602	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-30 N 0728	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-31 N 1357	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-31 N 0754	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03-31 N 1210	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-01 N 1457	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-01 N 1556	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-01 N 0743	2022-04-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-02 N 1554	2022-04-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-02 N 0807	2022-04-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04 WEK15 N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-02 N	2022-04-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04 WEK17 N	2022-04-18	461	0.025	54.6	<b>0.0106</b>	0.00146	2	<b>51.1</b>	< 0.000010	9.33	0.5	< 0.000010	< 0.00010	0.00054	0.00245	< 0.0030			
EV GC2	EV GC2 WS 2022-04 WEK18 N	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-04-25 N 0757	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-05 MON N	2022-05-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness	Aluminum	Antimony	Arsenic	Barium <sup>a</sup>	Beryllium <sup>b</sup>	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead		
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		
						Acute	Chronic	Chronic		Chronic				Acute	Chronic		Acute	Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>c</sup>	3.3-3.5 <sup>d</sup>
Elkview Operation																			
EV GC2	EV MC6 WS 2022-05 MON N	2022-05-05	435	0.0994	0.00039	0.00025	0.14	< 0.020	< 0.000050	0.024	0.0000488	107	0.00016	0.00011	0.00071	0.08	0.000109		
EV GC2	EV MC8 WS 2022-05 MON N	2022-05-05	432	0.108	0.00039	0.00031	0.144	< 0.020	< 0.000050	0.025	0.0000551	108	0.00016	0.00013	0.00084	0.081	0.000107		
EV GC2	EV GC2 WS 2022-05-07 N 1832	2022-05-07	< 0.50	< 0.00030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV GC2	EV GC2 WS 2022-05-07 N 0655	2022-05-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-05-08 N 1837	2022-05-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-05-08 N 0700	2022-05-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-05-09 N 0655	2022-05-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-05 WEK20 N	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-05-10 N 1846	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-05-10 N 0650	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-05-11 N 0800	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-05 WEK21 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-05 WEK22 N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-05 WEK23 N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-06 MON N	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-06-13 N 1742	2022-06-13	561	0.0508	0.00039	0.00027	0.117	< 0.020	< 0.000050	0.024	0.0000231	112	< 0.00010	0.00011	< 0.00050	0.028	< 0.000050		
EV GC2	EV GC2 WS 2022-06 WEK25 N	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-06-14 N 0740	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-06-14 N 2106	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-06-15 N 1553	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-06-15 N 0840	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-06-16 N 0800	2022-06-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-06-18 N 0810	2022-06-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-06-19 N 1825	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-06-19 N 0735	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-06-20 N 1550	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-06-20 N 0730	2022-06-20	464	0.18	0.00041	0.00039	0.162	< 0.020	< 0.000050	0.029	0.0000584	104	0.00041	0.00023	0.00099	0.164	0.000166		
EV GC2	EV GC2 WS 2022-06-21 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-06 NP	2022-06-22	487	0.114	0.00045	0.00038	0.166	< 0.020	< 0.000050	0.025	0.0000457	111	0.00031	0.00019	0.00092	0.076	0.000107		
EV GC2	EV GC2 WS 2022-06 WEK27 N	2022-06-27	-	0.0547	0.00037	0.00034	0.144	< 0.000020	< 0.000050	0.025	0.0000415	109	< 0.00050	0.00016	0.00067	0.042	0.000075		
EV GC2	EV GC2 WS 2022-07-05 N	2022-07-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-03 N	2022-07-06	497	0.179	0.00045	0.0004	0.163	< 0.020	< 0.000050	0.027	0.0000759	104	0.00026	0.00031	0.00088	0.203	0.000259		
EV GC2	EV GC2 WS 2022-07 WEK29 N	2022-07-11	548	0.0529	0.00041	0.00035	0.142	< 0.020	< 0.000050	0.024	0.0000469	116	< 0.00010	0.00016	< 0.00050	0.026	0.000056		
EV GC2	EV GC2 WS 2022-08 MON N	2022-08-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV GC2	EV GC2 WS 2022-09 MON N	2022-09-07	620	0.0553	0.00039	0.00024	0.0933	< 0.020	< 0.000050	0.023	0.0000137	122	0.0001	0.00012	< 0.00050	0.018	< 0.000050		
EV GC2	EV GC2 WS 2022-04 N	2022-10-05	625	0.0342	0.00034	0.00024	0.112	< 0.020	< 0.000050	0.022	0.000006	120	0.0001	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV GC2	EV GC2 WS 2022-11 MON N	2022-11-09	653	0.0254	0.00037	0.00018	0.096	< 0.020	< 0.000050	0.028	0.0000077	139	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV GC2	EV GC2 WS 2022-11-15 N	2022-11-15	629	0.0401	0.00027	0.00021	0.0895	< 0.020	< 0.000050	0.027	0.0000371	134	0.00011	0.00014	< 0.00050	0.049	0.000064		
EV GC2	EV GC2 WS 2022-11-17 N	2022-11-17	647	0.0352	0.00031	0.00019	0.0827	< 0.020	< 0.000050	0.028	0.0000418	145	0.00012	0.00012	< 0.00050	0.035	0.000059		
EV GC2	EV GC2 WS 2022-11-19 N	2022-11-19	662	0.0378	0.00024	0.00015	0.0778	< 0.020	< 0.000050	0.024	0.0000391	130	0.00011	0.00011	0.00059	0.042	0.000063		
EV LC1	EV LC1 WS 2022-Q1 N	2022-01-14	649	0.0275	0.00025	0.00018	0.0737	< 0.020	< 0.000050	0.028	0.0000286	136	< 0.00010	0.00011	< 0.00050	0.031	< 0.000050		
EV LC1	EV LC1 WS 2022-Q2 MON N	2022-02-07	449	0.387	0.00024	0.00024	0.162	0.00002	< 0.000050	0.04	0.000181	82.3	0.00052	0.00057	0.00108	0.172	0.000268		
EV LC1	EV LC1 WS 2022-Q3 MON N	2022-03-16	486	0.115	0.00023	0.00021	0.164	< 0.020	< 0.000050	0.041	0.0000749	89.3	0.00018	0.00027	0.00084	0.215	0.000218		
EV LC1	EV LC1 WS 2022-Q2 N	2022-04-11	490	0.227	0.00028	0.00031	0.182	0.000023	< 0.000050	0.037	0.000132	94.9	0.0003	0.00038	0.00129	0.227	0.000316		
EV LC1	EV LC1 WS 2022-04-15 N	2022-04-15	546	0.0171	0.00024	0.00023	0.163	< 0.020	< 0.000050	0.043	0.0000207	96.1	< 0.00010	< 0.10	0.00054	0.181	0.000054		
EV LC1	EV LC1 WS 2022-05 MON N	2022-05-05	548	0.0137	0.00022	0.00024	0.161	< 0.020	< 0.000050	0.042	0.000017	97.1	< 0.00010	< 0.10	< 0.00050	0.127	< 0.000050		
EV LC1	EV LC1 WS 2022-06 MON N	2022-06-08	521	0.015	0.00024	0.00022	0.175	< 0.020	< 0.000050	0.049	0.0000296	104	< 0.00010	< 0.10	0.00058	0.15	< 0.000050		
EV LC1	EV LC1 WS 2022-Q3 N	2022-07-06	624	0.006	0.0002	0.00022	0.173	< 0.020	< 0.000050	0.045	0.0000122	106	< 0.00010	< 0.10	< 0.00050	0.094	< 0.000050		
EV LC1	EV LC1 WS 2022-08 MON N	2022-08-08	648	0.0334	0.00022	0.00022	0.199	< 0.020	< 0.000050	0.044	0.0000563	117	< 0.00010	0.00011	0.00051	0.048	< 0.000050		
EV LC1	EV LC1 WS SESMP 2022 08 N	2022-08-12	636	0.0064	0.00015	0.00027	0.182	< 0.020	< 0.000050	0.045	0.0000221	115	< 0.00010	< 0.10	< 0.00050	0.073	< 0.000050		

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short-term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness	Lithium	Magnesium	Manganese		Nickel*	Potassium	Selenium	Silver		Sodium	Strontium	Thallium	Tin	Titanium	Uranium*	Zinc	
						mg/L	mg/L				mg/L	mg/L							mg/L	mg/L
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Elkview Operation																				
EV GC2	EV MC6 WS 2022-05 MON N	2022-05-05	435	0.021	52	<b>0.00857</b>	0.00126	1.77	<b>48.5</b>	< 0.000010	7.55	0.41	< 0.000010	< 0.000010	0.00148	0.00233	< 0.0030			
EV GC2	EV MC8 WS 2022-05 MON N	2022-05-05	432	0.022	52.9	<b>0.0089</b>	0.00124	1.8	<b>49.2</b>	0.000014	7.63	0.41	< 0.000010	< 0.000010	0.00154	0.00233	< 0.0030			
EV GC2	EV GC2 WS 2022-05-07 N 1832	2022-05-07	< 0.50	0.0010	0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.000010	< 0.00030	< 0.000010	< 0.0030			
EV GC2	EV GC2 WS 2022-05-07 N 0655	2022-05-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05-08 N 1837	2022-05-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05-08 N 0700	2022-05-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05-09 N 0655	2022-05-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05 WEK20 N	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05-10 N 1846	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05-10 N 0650	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05-11 N 0800	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05 WEK21 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05 WEK22 N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-05 WEK23 N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06 MON N	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-13 N 1742	2022-06-13	561	0.025	61.1	<b>0.00892</b>	0.00113	1.9	<b>67.4</b>	< 0.000010	7.17	0.39	< 0.000010	< 0.000010	< 0.00030	0.00298	< 0.0030			
EV GC2	EV GC2 WS 2022-06 WEK25 N	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-14 N 0740	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-14 N 2106	2022-06-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-15 N 1553	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-15 N 0840	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-16 N 0800	2022-06-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-18 N 0810	2022-06-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-19 N 1825	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-19 N 0735	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-20 N 1550	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06-20 N 0730	2022-06-20	464	0.023	54.2	<b>0.0148</b>	0.00169	2.22	<b>48.5</b>	< 0.000010	7.86	0.39	0.000014	< 0.000010	< 0.00450	0.00258	< 0.0030			
EV GC2	EV GC2 WS 2022-06-21 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-06 NP	2022-06-22	487	0.023	52.1	<b>0.0134</b>	0.00157	1.99	<b>48.6</b>	< 0.000010	7.34	0.43	0.000011	< 0.000010	0.00375	0.00261	< 0.0030			
EV GC2	EV GC2 WS 2022-06 WEK27 N	2022-06-27	-	0.023	54.2	0.0131	0.00124	1.95	<b>53.5</b>	< 0.000010	7.56	0.4	< 0.000010	< 0.000010	0.0006	0.00258	< 0.0030			
EV GC2	EV GC2 WS 2022-07-05 N	2022-07-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-07-06 N	2022-07-06	497	0.026	56.9	<b>0.0169</b>	0.00173	2.32	<b>66.3</b>	0.000011	7.31	0.39	0.000014	< 0.000010	< 0.00210	0.00313	< 0.0030			
EV GC2	EV GC2 WS 2022-07 WEK29 N	2022-07-11	548	0.025	58.5	<b>0.0107</b>	0.0012	2.04	<b>73.6</b>	< 0.000010	6.9	0.4	< 0.000010	< 0.000010	< 0.00060	0.00329	< 0.0030			
EV GC2	EV GC2 WS 2022-08 MON N	2022-08-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV GC2	EV GC2 WS 2022-08 MON N	2022-08-07	620	0.029	82.2	<b>0.00449</b>	0.0013	2.1	<b>97.6</b>	< 0.000010	7.21	0.36	0.000013	< 0.000010	0.00046	0.00439	< 0.0030			
EV GC2	EV GC2 WS 2022-04 N	2022-10-05	625	0.028	88.8	<b>0.00386</b>	0.00134	1.97	<b>90.4</b>	< 0.000010	7.74	0.39	0.000011	< 0.000010	< 0.00030	0.00358	< 0.0030			
EV GC2	EV GC2 WS 2022-11 MON N	2022-11-09	653	0.029	86.4	<b>0.00735</b>	0.00143	2.06	<b>84</b>	< 0.000010	8.72	0.43	< 0.000010	< 0.000010	0.00039	0.00368	< 0.0030			
EV GC2	EV GC2 WS 2022-11-15 N	2022-11-15	629	0.028	71.8	<b>0.0102</b>	0.00145	2.07	<b>71.4</b>	< 0.000010	9.01	0.47	< 0.000010	< 0.000010	0.00057	0.00309	0.0034			
EV GC2	EV GC2 WS 2022-11-17 N	2022-11-17	647	0.033	78.4	<b>0.00977</b>	0.00145	2.09	<b>70.5</b>	< 0.000010	9.07	0.49	0.000014	< 0.000010	0.00054	0.00372	< 0.0030			
EV GC2	EV GC2 WS 2022-11-19 N	2022-11-19	662	0.028	69.4	<b>0.00945</b>	0.00147	2.02	<b>73.7</b>	< 0.000010	8.62	0.45	< 0.000010	< 0.000010	0.00047	0.00316	< 0.0030			
EV LC1	EV LC1 WS 2022-Q1 N	2022-01-14	649	0.029	77.1	<b>0.00881</b>	0.00131	1.97	<b>74.2</b>	< 0.000010	8.96	0.46	< 0.000010	< 0.000010	0.00082	0.00344	< 0.0030			
EV LC1	EV LC1 WS 2022-Q2 MON N	2022-02-07	449	0.053	58.1	<b>0.0269</b>	0.00271	3.93	<b>3.34</b>	0.000014	8.07	0.41	0.000015	< 0.000010	0.0108	0.00273	0.0081			
EV LC1	EV LC1 WS 2022-Q3 MON N	2022-03-16	486	0.062	69	<b>0.0272</b>	0.00199	4.55	<b>3.33</b>	< 0.000010	8.81	0.45	0.00001	< 0.000010	< 0.00150	0.00298	0.0035			
EV LC1	EV LC1 WS 2022-Q2 N	2022-04-11	490	0.052	53.6	<b>0.0207</b>	0.0021	3.78	<b>4.42</b>	0.000011	6.32	0.45	0.000016	< 0.000010	0.00337	0.00296	0.0061			
EV LC1	EV LC1 WS 2022-04-15 N	2022-04-15	546	0.062	73	<b>0.012</b>	0.00148	4.6	<b>5.48</b>	< 0.000010	8.63	0.51	< 0.000010	< 0.000010	< 0.00030	0.0035	< 0.0030			
EV LC1	EV LC1 WS 2022-05 MON N	2022-05-05	548	0.063	69.8	<b>0.0123</b>	0.00168	4.22	<b>5.31</b>	< 0.000010	8.23	0.5	< 0.000010	< 0.000010	< 0.00030	0.00361	< 0.0030			
EV LC1	EV LC1 WS 2022-06 MON N	2022-06-08	521	0.076	82.3	<b>0.0121</b>	0.00182	4.9	<b>4.87</b>	< 0.000010	9.04	0.55	0.00001	< 0.000010	< 0.00030	0.00354	< 0.0030			
EV LC1	EV LC1 WS 2022-Q3 N	2022-07-06	624	0.066	79	<b>0.00719</b>	0.00152	4.5	<b>4.02</b>	< 0.000010	8.39	0.53	< 0.000010	< 0.000010	< 0.00030	0.00319	< 0.0030			
EV LC1	EV LC1 WS 2022-08 MON N	2022-08-08	648	0.061	69.9	<b>0.00919</b>	0.00196	4.33	<b>4.02</b>	< 0.000010	7.33	0.53	0.00001	< 0.000010	0.00081	0.00287	< 0.0030			
EV LC1	EV LC1 WS SESMP 2022_08_N	2022-08-12	636	0.064	72.5	0.00294	0.00181	4.02	1.51	< 0.000010	7.36	0.51	< 0.000010	< 0.000010	< 0.00030	0.00284	< 0.0030			

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt		Copper mg/L	Iron mg/L	Lead	
														Acute mg/L	Chronic mg/L			Acute mg/L	Chronic mg/L
			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	Acute 0.11	Chronic 0.004	n/a	1	Acute 0.003-5.5 <sup>a</sup>	Chronic 3.3-3.5 <sup>a</sup>
<b>BC WQG FWAL</b>			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	Acute 0.11	Chronic 0.004	n/a	1	Acute 0.003-5.5 <sup>a</sup>	Chronic 3.3-3.5 <sup>a</sup>
<b>Elkview Operation</b>																			
EV LC1	EV LC1 WS 2022-09 MON N	2022-09-07	634	0.0055	0.00016	0.00014	0.173	< 0.020	< 0.000050	0.038	0.0000277	121	< 0.00010	< 0.10	< 0.00050	0.076	< 0.000050		< 0.000050
EV LC1	EV LC1 WS 2022-Q4 N	2022-10-03	627	0.0052	0.00012	0.00019	0.209	< 0.020	< 0.000050	0.044	0.000027	141	< 0.00010	< 0.10	< 0.00050	0.048	< 0.000050		< 0.000050
EV LC1	EV ER5 WS 2022-Q4 N	2022-10-03	636	0.005	0.00014	0.00015	0.195	< 0.020	< 0.000050	0.043	0.0000232	136	< 0.00010	< 0.10	< 0.00050	0.059	< 0.000050		< 0.000050
EV LC1	EV ER7 WS 2022-Q4 N	2022-10-03	636	0.0055	0.00013	0.00014	0.187	< 0.020	< 0.000050	0.042	0.0000319	140	< 0.00010	< 0.10	< 0.00050	0.06	< 0.000050		< 0.000050
EV LC1	EV LC1 WS 2022-11 MON N	2022-11-09	< 0.50	< 0.0030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022-01-06 N-SRF	2022-01-06	540	0.0115	0.00016	0.00013	0.163	< 0.020	< 0.000050	0.041	0.00002	108	0.0003	< 0.10	< 0.00050	0.081	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022-01-17 N-SRF	2022-01-17	296	0.0125	0.0001	0.00016	0.104	< 0.020	< 0.000050	0.013	0.0000278	75.7	0.00025	0.00014	< 0.00050	0.018	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022 Q1 N	2022-01-18	273	0.0248	< 0.00010	0.00021	0.0958	< 0.020	< 0.000050	0.012	0.0000366	66.9	0.00016	0.00016	< 0.00050	0.046	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022-01-31 N-SRF	2022-01-31	292	0.0211	< 0.00010	0.0002	0.107	< 0.020	< 0.000050	0.013	0.0000333	76.2	0.00016	0.00016	< 0.00050	0.027	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022 Q1 WK0 N	2022-02-01	278	0.0262	< 0.00010	0.00017	0.099	< 0.020	< 0.000050	0.012	0.0000358	74	0.00018	0.00018	< 0.00050	0.037	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022-02 MON N	2022-02-08	325	0.01	0.0001	0.00015	0.103	< 0.020	< 0.000050	0.014	0.0000304	80.2	0.0002	0.0002	< 0.00050	0.016	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022-02-14 N-SRF	2022-02-14	326	0.0157	0.00011	0.0002	0.112	< 0.020	< 0.000050	0.012	0.0000278	72.3	0.00021	0.00014	< 0.00050	0.025	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022 Q1 WK1 N	2022-02-15	299	0.0077	0.00013	0.00017	0.114	< 0.020	< 0.000050	0.014	0.0000284	76.6	0.00014	0.00013	< 0.00050	0.012	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022 Q1 WK2 N	2022-02-22	347	0.0101	0.00014	0.00016	0.105	< 0.020	< 0.000050	0.014	0.0000357	85.2	0.00019	0.00011	< 0.00050	0.016	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022-02-28 N-SRF	2022-03-01	434	0.0058	0.00013	0.0002	0.131	< 0.020	< 0.000050	0.019	0.0000434	107	0.00027	0.00024	< 0.00050	0.017	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022 Q1 WK3 N	2022-03-01	332	0.0084	0.00012	0.00021	0.116	< 0.020	< 0.000050	0.013	0.0000295	72.1	0.00017	0.00015	< 0.00050	0.013	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022 Q1 WK4 N	2022-03-08	307	0.0428	0.00011	0.00017	0.104	< 0.020	< 0.000050	0.014	0.0000278	80.2	0.00036	0.00017	< 0.00050	0.036	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022-03-14 N-SRF	2022-03-14	321	0.0079	0.00011	0.00015	0.102	< 0.020	< 0.000050	0.012	0.0000322	72.9	0.00015	0.00012	< 0.00050	< 0.010	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022 Q1 WK5 N	2022-03-15	286	0.0094	0.00011	0.00016	0.115	< 0.020	< 0.000050	0.012	0.0000264	78.5	0.00016	0.00012	< 0.00050	0.012	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022-03 MON N	2022-03-16	316	0.0143	0.00011	0.00017	0.1	< 0.020	< 0.000050	0.01	0.0000274	63.6	0.00016	0.00011	< 0.00050	0.018	< 0.000050		< 0.000050
EV MC2	EV MC5 WS 2022-03 MON N	2022-03-16	331	0.0132	0.00011	0.00017	0.106	< 0.020	< 0.000050	0.013	0.0000336	81.9	0.00012	0.00012	< 0.00050	0.015	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022-03-21 N-SRF	2022-03-21	324	0.0171	0.00011	0.0002	0.11	< 0.020	< 0.000050	0.013	0.0000313	76.2	0.00019	0.00011	< 0.00050	0.018	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022-03 WEK13 N	2022-03-22	321	0.0184	0.0001	0.00017	0.108	< 0.020	< 0.000050	0.014	0.0000378	75.9	0.00015	0.00012	< 0.00050	0.019	0.000056		0.000243
EV MC2	EV MC5 WS 2022-03 WEK13 N	2022-03-22	320	0.0602	0.00015	0.00019	0.11	< 0.020	< 0.000050	0.014	0.0000467	77.5	0.00031	0.00018	0.001	0.108	0.00023		< 0.000050
EV MC2	EV MC2 WS 2022-03-28 N-SRF	2022-03-28	315	0.0269	0.00011	0.00015	0.11	< 0.020	< 0.000050	0.014	0.0000318	77.8	0.00022	0.00013	< 0.00050	0.024	< 0.000050		0.000074
EV MC2	EV MC2 WS 2022-03-28 N-SRF 1	2022-03-28	268	0.0871	0.00011	0.00022	0.118	< 0.020	< 0.000050	0.012	0.0000406	68.2	0.00036	< 0.10	< 0.00050	0.08	< 0.000050		0.000074
EV MC2	EV MC2 WS 2022-03 WEK14 N	2022-03-29	308	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
EV MC2	EV MC5 WS 2022-03 WEK14 N	2022-03-29	265	0.206	0.00014	0.00025	0.102	< 0.020	< 0.000050	0.012	0.0000583	66	0.00055	0.00014	0.00091	0.178	0.00019		0.000145
EV MC2	EV MC2 WS 2022-04-04 N-SRF	2022-04-04	275	0.234	0.00012	0.00024	0.104	< 0.020	< 0.000050	0.012	0.000056	64.6	0.00046	0.00011	0.00062	0.183	0.000145		0.000352
EV MC2	EV MC2 WS 2022-04 WEK15 N	2022-04-05	262	0.0665	0.00011	0.00019	0.113	< 0.020	< 0.000050	0.011	0.0000393	61.6	0.00025	< 0.10	< 0.00050	0.055	< 0.000050		0.000121
EV MC2	EV MC5 WS 2022-04 WEK15 N	2022-04-05	284	0.0803	0.00011	0.00021	0.106	< 0.020	< 0.000050	0.014	0.000051	73.9	0.00026	< 0.10	< 0.00050	0.133	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022-04-10 N-SRF	2022-04-10	300	0.0476	0.00011	0.00018	0.108	< 0.020	< 0.000050	0.014	0.0000371	73.6	0.00018	< 0.10	< 0.00050	0.053	< 0.000050		-
EV MC2	EV MC2 WS 2022-04-11 N-SRF	2022-04-11	272	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
EV MC2	EV MC2 WS 2022-04-11 N-SRF 1	2022-04-11	272	0.0341	0.00011	0.0002	0.11	< 0.020	< 0.000050	0.012	0.0000294	65.9	< 0.00030	< 0.10	< 0.00050	0.038	< 0.000050		-
EV MC2	EV MC2 WS 2022-Q2 N	2022-04-12	273	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
EV MC2	EV MC2 WS 2022-04-12 N-SRF	2022-04-12	278	0.0208	0.00012	0.00017	0.117	< 0.020	< 0.000050	0.013	0.0000327	73.4	0.00016	< 0.10	< 0.00050	0.026	< 0.000050		-
EV MC2	EV MC2 WS 2022-04-13 N-SRF	2022-04-13	292	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
EV MC2	EV MC2 WS 2022-04-14 N-SRF	2022-04-14	296	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
EV MC2	EV MC2 WS 2022-04-15 N-SRF	2022-04-15	292	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
EV MC2	EV MC2 WS 2022-04-16 N-SRF	2022-04-16	292	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
EV MC2	EV MC2 WS 2022-04-17 N-SRF	2022-04-17	287	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
EV MC2	EV MC2 WS 2022-04-18 N-SRF	2022-04-18	276	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
EV MC2	EV MC2 WS 2022-04-18 N-SRF 1	2022-04-18	302	0.0277	0.00011	0.00017	0.114	< 0.020	< 0.000050	0.012	0.0000326	71.4	0.00018	< 0.10	< 0.00050	0.028	< 0.000050		-
EV MC2	EV MC2 WS 2022-04 WEK17 N	2022-04-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
EV MC2	EV MC5 WS 2022-04 WEK17 N	2022-04-19	288	0.0322	0.00012	0.0002	0.121	< 0.020	< 0.000050	0.012	0.0000372	71.8	0.00022	< 0.10	< 0.00050	0.039	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022-04-19 N-SRF	2022-04-19	294	0.0366	0.00011	0.00019	0.12	< 0.020	< 0.000050	0.013	0.0000389	72	0.00023	< 0.10	< 0.00050	0.039	< 0.000050		< 0.000050
EV MC2	EV MC2 WS 2022-04-20 N-SRF	2022-04-20	306	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
EV MC2	EV MC2 WS 2022-04-21 N-SRF	2022-04-21																	

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

		Total Metals																			
Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L		
						Acute	Chronic				Acute	Chronic							Acute	Chronic	
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*	
Elkview Operation																					
EV LC1	EV LC1 WS 2022-09 MON N	2022-09-07	634	0.058	75.1	<b>0.00421</b>		0.00203	4.3	1.5	< 0.000010	7.91	0.48	0.00001	< 0.00010	< 0.00030	0.00274		< 0.0030		
EV LC1	EV LC1 WS 2022-04 N	2022-10-03	627	0.074	85.3	0.00197		0.00199	4.13	1.21	< 0.000010	8.21	0.6	< 0.000010	< 0.00010	< 0.00030	0.00285		< 0.0030		
EV LC1	EV ER5 WS 2022-04 N	2022-10-03	636	0.067	79.8	<b>0.00708</b>		0.00211	4.48	1.55	< 0.000010	8.68	0.52	0.000011	< 0.00010	< 0.00030	0.00291		< 0.0030		
EV LC1	EV ER7 WS 2022-04 N	2022-10-03	636	0.065	79.9	<b>0.00731</b>		0.00212	4.48	<b>1.57</b>	< 0.000010	8.57	0.54	< 0.000010	< 0.00010	< 0.00030	0.0029		< 0.0030		
EV LC1	EV LC1 WS 2022-11 MON N	2022-11-09	< 0.50	< 0.0010	0.0050	< 0.00010		< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.00010	< 0.00030	< 0.00010		< 0.0030		
EV MC2	EV MC2 WS 2022-01-06 N-SRF	2022-01-06	540	0.06	68.4	<b>0.0042</b>		0.00183	4.45	<b>2.51</b>	< 0.000010	8.22	0.46	< 0.000010	< 0.00010	< 0.00030	0.00273		< 0.0030		
EV MC2	EV MC2 WS 2022-01-17 N-SRF	2022-01-17	296	0.011	29	<b>0.00411</b>		0.00192	0.909	<b>8.32</b>	< 0.000010	5.25	0.19	< 0.000010	< 0.00010	< 0.00030	0.00124		< 0.0030		
EV MC2	EV MC2 WS 2022 Q1 N	2022-01-18	273	0.011	25.1	<b>0.00579</b>		0.00188	0.848	<b>7.47</b>	< 0.000010	4.71	0.18	< 0.000010	< 0.00010	0.0004	0.00137		< 0.0030		
EV MC2	EV MC2 WS 2022-01-31 N-SRF	2022-01-31	292	0.013	29.2	<b>0.0043</b>		0.00196	0.953	<b>9.58</b>	< 0.000010	5.22	0.2	< 0.000010	< 0.00010	< 0.00030	0.0015		< 0.0030		
EV MC2	EV MC2 WS 2022 Q1 WK0 N	2022-02-01	278	0.012	27.8	<b>0.00432</b>		0.00194	0.93	<b>8.54</b>	< 0.000010	5.12	0.2	< 0.000010	< 0.00010	0.00033	0.00139		< 0.0030		
EV MC2	EV MC2 WS 2022-02 MON N	2022-02-08	325	0.015	30.6	<b>0.00396</b>		0.00207	1	<b>15.4</b>	< 0.000010	5.41	0.21	< 0.000010	< 0.00010	< 0.00030	0.00149		< 0.0030		
EV MC2	EV MC2 WS 2022-02-14 N-SRF	2022-02-14	326	0.013	29.7	<b>0.00366</b>		0.00214	1.01	<b>9.3</b>	< 0.000010	4.76	0.19	< 0.000010	0.00012	< 0.00030	0.00151		< 0.0030		
EV MC2	EV MC2 WS 2022 Q1 WK1 N	2022-02-15	299	0.014	33.6	<b>0.00268</b>		0.00246	1.04	<b>11.3</b>	< 0.000010	4.87	0.2	< 0.000010	< 0.00010	< 0.00030	0.00178		< 0.0030		
EV MC2	EV MC2 WS 2022 Q1 WK2 N	2022-02-22	347	0.016	35.9	<b>0.00303</b>		0.00254	1.11	<b>15.7</b>	< 0.000010	5.53	0.21	< 0.000010	0.00017	< 0.00030	0.00163		0.0061		
EV MC2	EV MC2 WS 2022-02-28 N-SRF	2022-03-01	434	0.025	46.7	<b>0.00613</b>		0.0035	1.5	<b>18.6</b>	< 0.000010	7.06	0.25	0.00001	0.00032	< 0.00030	0.00231		< 0.0030		
EV MC2	EV MC2 WS 2022 Q1 WK3 N	2022-03-01	332	0.014	32.3	<b>0.00304</b>		0.00225	1.11	<b>9.14</b>	< 0.000010	5.15	0.19	< 0.000010	< 0.00010	< 0.00030	0.0016		< 0.0030		
EV MC2	EV MC2 WS 2022 Q1 WK4 N	2022-03-08	307	0.015	32.2	<b>0.00368</b>		0.00241	1.11	<b>10.6</b>	< 0.000010	6.17	0.19	< 0.000010	< 0.00010	< 0.00090	0.00164		< 0.0030		
EV MC2	EV MC2 WS 2022-03-14 N-SRF	2022-03-14	321	0.014	29.4	<b>0.00253</b>		0.00222	0.965	<b>8.49</b>	< 0.000010	4.76	0.19	< 0.000010	< 0.00010	< 0.00030	0.00154		< 0.0030		
EV MC2	EV MC2 WS 2022 Q1 WK5 N	2022-03-15	286	0.014	34.6	<b>0.00264</b>		0.00236	1.11	<b>15</b>	< 0.000010	5.16	0.2	< 0.000010	< 0.00010	< 0.00030	0.0017		< 0.0030		
EV MC2	EV MC2 WS 2022-03 MON N	2022-03-16	316	0.012	27.2	<b>0.00279</b>		0.00231	0.963	<b>10.2</b>	< 0.000010	4.85	0.18	0.000012	< 0.00010	< 0.00030	0.00145		< 0.0030		
EV MC2	EV MC5 WS 2022-03 MON N	2022-03-16	331	0.015	30	<b>0.00285</b>		0.00192	1.04	<b>10.1</b>	< 0.000010	5	0.2	< 0.000010	< 0.00010	0.00032	0.00154		< 0.0030		
EV MC2	EV MC2 WS 2022-03-21 N-SRF	2022-03-21	324	0.016	31.8	<b>0.00303</b>		0.00216	1.08	<b>10.1</b>	< 0.000010	5.28	0.19	< 0.000010	< 0.00010	< 0.00030	0.00156		< 0.0030		
EV MC2	EV MC2 WS 2022-03 WEK13 N	2022-03-22	321	0.015	31	<b>0.00298</b>		0.00207	1.07	<b>11.3</b>	< 0.000010	5.46	0.19	< 0.000010	< 0.00010	< 0.00030	0.00159		< 0.0030		
EV MC2	EV MC5 WS 2022-03 WEK13 N	2022-03-22	320	0.016	32.7	<b>0.00609</b>		0.00228	1.19	<b>11.6</b>	< 0.000010	5.57	0.2	< 0.000010	< 0.00010	0.00122	0.00168		0.0049		
EV MC2	EV MC2 WS 2022-03-28 N-SRF	2022-03-28	315	0.016	32.4	<b>0.00303</b>		0.00202	1.14	<b>11.1</b>	< 0.000010	5.57	0.2	< 0.000010	< 0.00010	0.00067	0.00165		< 0.0030		
EV MC2	EV MC2 WS 2022-03-28 N-SRF 1	2022-03-28	268	0.011	26.2	<b>0.00331</b>		0.00151	1	<b>13.1</b>	< 0.000010	4.57	0.17	< 0.000010	< 0.00010	< 0.00150	0.00119		0.005		
EV MC2	EV MC2 WS 2022-03 WEK14 N	2022-03-29	308	-	-	-		-	-	<b>13.6</b>	-	-	-	-	-	-	-		-		
EV MC2	EV MC5 WS 2022-03 WEK14 N	2022-03-29	265	0.011	24.8	<b>0.00682</b>		0.00166	1.07	<b>12.1</b>	< 0.000010	5.05	0.18	0.000014	< 0.00010	0.00373	0.00114		0.0682		
EV MC2	EV MC2 WS 2022-04 N-SRF	2022-04-04	275	0.011	24.8	<b>0.00477</b>		0.00152	1.01	<b>12.2</b>	< 0.000010	4.77	0.18	0.000014	< 0.00010	0.00458	0.00112		< 0.0030		
EV MC2	EV MC2 WS 2022-04 WEK15 N	2022-04-05	262	0.009	27.9	<b>0.00293</b>		0.00166	0.932	<b>10.6</b>	< 0.000010	4.63	0.18	< 0.000010	< 0.00010	0.0011	0.00132		< 0.0030		
EV MC2	EV MC5 WS 2022-04 WEK15 N	2022-04-05	284	0.016	29.2	<b>0.00413</b>		0.00159	1.07	<b>15.2</b>	< 0.000010	5.81	0.19	0.00001	< 0.00010	0.00098	0.00125		0.0041		
EV MC2	EV MC2 WS 2022-04-10 N-SRF	2022-04-10	300	0.014	28.6	<b>0.00277</b>		0.00152	1.02	<b>13.9</b>	< 0.000010	5.47	0.2	< 0.000010	< 0.00010	0.0005	0.00126		< 0.0030		
EV MC2	EV MC2 WS 2022-04-11 N-SRF	2022-04-11	272	-	-	-		-	-	<b>13.2</b>	-	-	-	-	-	-	-		-		
EV MC2	EV MC2 WS 2022-04-11 N-SRF 1	2022-04-11	272	0.01	26	<b>0.00224</b>		0.00158	0.952	<b>14.3</b>	< 0.000010	4.39	0.18	< 0.000010	< 0.00010	0.00054	0.00124		< 0.0030		
EV MC2	EV MC2 WS 2022-02 N	2022-04-12	273	-	-	-		-	-	<b>13.7</b>	-	-	-	-	-	-	-		-		
EV MC2	EV MC2 WS 2022-04-12 N-SRF	2022-04-12	278	0.013	29.8	<b>0.00225</b>		0.00146	1.04	<b>17.3</b>	< 0.000010	5.18	0.2	< 0.000010	< 0.00010	< 0.00030	0.00143		< 0.0030		
EV MC2	EV MC2 WS 2022-04-13 N-SRF	2022-04-13	292	-	-	-		-	-	<b>14.7</b>	-	-	-	-	-	-	-		-		
EV MC2	EV MC2 WS 2022-04-14 N-SRF	2022-04-14	296	-	-	-		-	-	<b>15.5</b>	-	-	-	-	-	-	-		-		
EV MC2	EV MC2 WS 2022-04-15 N-SRF	2022-04-15	292	-	-	-		-	-	<b>14.4</b>	-	-	-	-	-	-	-		-		
EV MC2	EV MC2 WS 2022-04-16 N-SRF	2022-04-16	292	-	-	-		-	-	<b>13.4</b>	-	-	-	-	-	-	-		-		
EV MC2	EV MC2 WS 2022-04-17 N-SRF	2022-04-17	287	-	-	-		-	-	<b>14.8</b>	-	-	-	-	-	-	-		-		
EV MC2	EV MC2 WS 2022-04-18 N-SRF	2022-04-18	276	-	-	-		-	-	<b>13</b>	-	-	-	-	-	-	-		-		
EV MC2	EV MC2 WS 2022-04-18 N-SRF 1	2022-04-18	302	0.012	30.7	<b>0.00216</b>		0.00146	0.956	<b>16.6</b>	< 0.000010	4.62	0.18	< 0.000010	< 0.00010	0.00036	0.0014		< 0.0030		
EV MC2	EV MC2 WS 2022-04 WEK17 N	2022-04-19	-	-	-	-		-	-	<b>15.2</b>	-	-	-	-	-	-	-		-		
EV MC2	EV MC5 WS 2022-04 WEK17 N	2022-04-19	288	0.012	31.8	<b>0.0024</b>		0.00137	1.06	<b>17.8</b>	< 0.000010	5.09	0.21	< 0.000010	< 0.00010	0.00046	0.00151		< 0.0030		
EV MC2	EV MC2 WS 2022-04-19 N-SRF	2022-04-19	294	0.012	30.2	<b>0.00245</b>		0.00129	1.01	<b>16.7</b>	< 0.000010	5.02	0.2	< 0.000010	< 0.00010	0.00048	0.00148		< 0.0030		
EV MC2	EV MC2 WS 2022-04-20 N-SRF	2022-04-20	306	-	-	-		-	-	<b>18.2</b>	-	-	-	-	-	-	-		-		
EV MC2	EV MC2 WS 2022-04-21 N-SRF	2022-04-21	327	-	-	-		-	-	<b>17.2</b>	-	-	-	-	-	-	-		-		
EV MC2	EV MC2 WS 2022-04-22 N-SRF	2022-04-22	291	-	-	-		-	-	<b>14.1</b>	-	-	-	-	-	-	-		-		
EV MC2	EV MC2 WS 2022-04-23 N-SRF	2022-04-23	289	-	-	-		-	-	<b>13.6</b>	-	-	-	-	-	-	-		-		

< Denotes concentration less than indicated detection limit

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium <sup>a</sup> mg/L	Beryllium <sup>b</sup> mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L		Copper mg/L	Iron mg/L	Lead mg/L	
														Acute	Chronic			Acute	Chronic
						Acute	Chronic	Chronic		Chronic					Acute	Chronic		Acute	Chronic
<b>BC WQG FWAL</b>			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>c</sup>	3.3-3.5 <sup>d</sup>
<b>Elkview Operation</b>																			
EV MC2	EV MC2 WS 2022-04-24 N-SRF	2022-04-24	311	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-04-25 N-SRF 1	2022-04-25	350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-04-25 N-SRF	2022-04-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-04-26 N-SRF	2022-04-26	272	0.0612	0.00012	0.00019	0.104	< 0.020	< 0.000050	0.012	0.000037	68.8	0.00017	< 0.10	< 0.00050	0.058	< 0.000050	-	-
EV MC2	EV MC2 WS 2022-04-26 N-SRF P	2022-04-26	260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-04-26 N-SRF UP	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-04 WEK18 N	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC5 WS 2022-04 WEK18 N	2022-04-26	259	0.0821	0.00013	0.00019	0.104	< 0.020	< 0.000050	0.012	0.0000298	59.2	0.0002	< 0.10	< 0.00050	0.061	< 0.000050	-	-
EV MC2	EV MC2 WS 2022-04-27 N-SRF	2022-04-27	245	0.145	0.00012	0.00024	0.103	< 0.020	< 0.000050	0.012	0.0000437	59	0.0003	0.0001	< 0.00050	0.138	0.000108	-	-
EV MC2	EV MC2 WS 2022-04-27 N-SRF P	2022-04-27	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-04-27 N-SRF UP	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-04-28 N-SRF	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-04-29 N-SRF	2022-04-29	228	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-04-30 N-SRF	2022-04-30	257	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-01 N-SRF	2022-05-01	261	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-01 N-SRF P	2022-05-01	268	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-01 N-SRF UP	2022-05-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-02 N-SRF	2022-05-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-02 N-SRF 1	2022-05-02	205	0.146	0.0001	0.00026	0.101	< 0.020	< 0.000050	0.011	0.0000392	53.7	0.00031	< 0.10	0.00051	0.134	0.000098	-	-
EV MC2	EV MC2 WS 2022-05-03 N-SRF	2022-05-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05 MON N	2022-05-03	214	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-04 N-SRF	2022-05-04	198	0.307	0.00011	0.00029	0.0945	0.000022	< 0.000050	0.011	0.0000696	51	0.00052	0.0002	0.00072	0.264	0.000228	-	-
EV MC2	EV MC2 WS 2022-05-05 N-SRF	2022-05-05	171	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-06 N-SRF	2022-05-06	184	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-07 N-SRF	2022-05-07	113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-08 N-SRF	2022-05-08	149	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-09 N-SRF	2022-05-09	166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-10 N-SRF	2022-05-10	162	0.31	0.00012	0.00031	0.0758	< 0.020	< 0.000050	< 0.010	0.0000556	42.7	0.00057	0.0002	0.00075	0.29	0.000208	-	-
EV MC2	EV MC2 WS 2022-05-11 N-SRF	2022-05-11	194	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05 WEK20 N	2022-05-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC5 WS 2022-05 WEK20 N	2022-05-11	179	0.212	0.00011	0.00025	0.0791	< 0.020	< 0.000050	0.01	0.0000423	45	0.00041	0.00015	0.00057	0.188	0.000125	-	-
EV MC2	EV MC2 WS 2022-05-12 N-SRF	2022-05-12	179	0.214	0.00012	0.00027	0.0788	< 0.020	< 0.000050	0.011	0.0000452	44.1	0.00042	0.00014	0.00057	0.186	0.000132	-	-
EV MC2	EV MC10 WS 2022-05-12 N-SRF	2022-05-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-13 N-SRF	2022-05-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-13 N-SRF	2022-05-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-14 N-SRF	2022-05-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC10 WS 2022-05-14 N-SRF	2022-05-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-15 N-SRF	2022-05-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC10 WS 2022-05-15 N-SRF	2022-05-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-16 N-SRF	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-16 N-SRF 1	2022-05-16	171	0.195	< 0.00010	0.00023	0.0821	< 0.020	< 0.000050	0.01	0.0000423	42.9	0.00028	0.00012	< 0.00050	0.101	0.000088	-	-
EV MC2	EV MC10 WS 2022-05-16 N-SRF	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05 WEK21 N	2022-05-17	175	0.124	0.0001	0.00024	0.0803	< 0.020	< 0.000050	0.011	0.0000397	45.3	0.00037	0.00013	< 0.00050	0.114	0.000097	-	-
EV MC2	EV MC5 WS 2022-05 WEK21 N	2022-05-17	151	0.233	< 0.00010	0.00031	0.082	0.000024	< 0.000050	< 0.010	0.00011	44.3	0.00041	0.00035	0.00092	0.226	0.000335	-	-
EV MC2	EV MC2 WS 2022-05-17 N-SRF	2022-05-17	149	0.511	0.00012	0.00041	0.0734	0.000027	< 0.000050	< 0.010	0.000108	42.6	0.00092	0.00042	0.00117	0.52	0.000447	-	-
EV MC2	EV MC10 WS 2022-05-17 N-SRF	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-18 N-SRF	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC10 WS 2022-05-18 N-SRF	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-19 N-SRF	2022-05-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-05-20 N-SRF	2022-05-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Elkview Operation																				
EV MC2	EV MC2 WS 2022-04-24 N-SRF	2022-04-24	311	-	-	-	-	-	-	16.8	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-25 N-SRF 1	2022-04-25	350	-	-	-	-	-	-	22.2	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-25 N-SRF	2022-04-25	-	-	-	-	-	-	-	12.4	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-26 N-SRF	2022-04-26	272	0.011	27.2	0.00229	0.00113	0.891	12.1	< 0.000010	4.45	0.18	< 0.000010	< 0.00010	0.00104	0.00117	-	< 0.0030		
EV MC2	EV MC2 WS 2022-04-26 N-SRF P	2022-04-26	260	-	-	-	-	-	-	11.5	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-26 N-SRF UP	2022-04-26	-	-	-	-	-	-	-	14.2	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04 WEK18 N	2022-04-26	-	-	-	-	-	-	-	14.9	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC6 WS 2022-04 WEK18 N	2022-04-26	259	0.01	23.2	0.00132	0.00114	0.898	11.5	< 0.000010	4.39	0.17	< 0.000010	< 0.00010	< 0.00180	0.00112	-	< 0.0030		
EV MC2	EV MC2 WS 2022-04-27 N-SRF	2022-04-27	245	0.009	22.7	0.00463	0.00133	0.876	10.7	< 0.000010	4.23	0.16	< 0.000010	< 0.00010	0.00232	0.00111	-	< 0.0030		
EV MC2	EV MC2 WS 2022-04-27 N-SRF P	2022-04-27	220	-	-	-	-	-	-	8.08	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-27 N-SRF UP	2022-04-27	-	-	-	-	-	-	-	8.08	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-28 N-SRF	2022-04-28	-	-	-	-	-	-	-	8.68	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-28 N-SRF	2022-04-28	-	-	-	-	-	-	-	8.68	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-29 N-SRF	2022-04-29	228	-	-	-	-	-	-	8.69	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-04-30 N-SRF	2022-04-30	257	-	-	-	-	-	-	12.5	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-01 N-SRF	2022-05-01	261	-	-	-	-	-	-	11.4	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-01 N-SRF P	2022-05-01	268	-	-	-	-	-	-	9.12	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-01 N-SRF UP	2022-05-01	-	-	-	-	-	-	-	9.71	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-02 N-SRF	2022-05-02	-	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-02 N-SRF 1	2022-05-02	205	0.008	20.5	0.00423	0.00128	0.793	7.37	< 0.000010	4.01	0.15	< 0.000010	< 0.00010	0.00238	0.000951	-	< 0.0030		
EV MC2	EV MC2 WS 2022-05-03 N-SRF	2022-05-03	-	-	-	-	-	-	-	7.79	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05 MON N	2022-05-03	214	-	-	-	-	-	-	8.79	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-04 N-SRF	2022-05-04	198	0.008	18.4	0.0101	0.00165	0.826	6.76	< 0.000010	3.7	0.15	0.000014	< 0.00010	0.00622	0.000871	-	< 0.0030		
EV MC2	EV MC2 WS 2022-05-05 N-SRF	2022-05-05	171	-	-	-	-	-	-	4.76	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-06 N-SRF	2022-05-06	184	-	-	-	-	-	-	9.03	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-07 N-SRF	2022-05-07	113	-	-	-	-	-	-	2.21	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-08 N-SRF	2022-05-08	149	-	-	-	-	-	-	4.54	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-09 N-SRF	2022-05-09	166	-	-	-	-	-	-	3.8	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-10 N-SRF	2022-05-10	162	0.008	15.1	0.0078	0.00172	0.781	5.69	0.000012	3.84	0.12	0.000016	0.00011	0.0046	0.000627	-	0.0042		
EV MC2	EV MC2 WS 2022-05-11 N-SRF	2022-05-11	194	-	-	-	-	-	-	6.9	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05 WEK20 N	2022-05-11	-	-	-	-	-	-	-	9.97	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC6 WS 2022-05 WEK20 N	2022-05-11	179	0.007	15.1	0.00535	0.00156	0.736	5.44	< 0.000010	3.58	0.12	0.000012	< 0.00010	0.0035	0.000695	-	< 0.0030		
EV MC2	EV MC2 WS 2022-05-12 N-SRF	2022-05-12	179	0.006	15	0.00559	0.00147	0.735	5.21	< 0.000010	3.51	0.13	0.000013	< 0.00010	< 0.00420	0.000702	-	< 0.0030		
EV MC2	EV MC10 WS 2022-05-12 N-SRF	2022-05-12	-	-	-	-	-	-	-	5.22	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-13 N-SRF	2022-05-13	-	-	-	-	-	-	-	5.32	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-13 N-SRF	2022-05-13	-	-	-	-	-	-	-	5.43	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC10 WS 2022-05-13 N-SRF	2022-05-13	-	-	-	-	-	-	-	5.26	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-14 N-SRF	2022-05-14	-	-	-	-	-	-	-	5.5	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC10 WS 2022-05-14 N-SRF	2022-05-14	-	-	-	-	-	-	-	5.5	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-15 N-SRF	2022-05-15	-	-	-	-	-	-	-	5.54	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC10 WS 2022-05-15 N-SRF	2022-05-15	-	-	-	-	-	-	-	5.68	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-16 N-SRF	2022-05-16	-	-	-	-	-	-	-	5.98	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-16 N-SRF 1	2022-05-16	171	0.006	16.8	0.00418	0.00156	0.704	5.87	< 0.000010	3.78	0.13	< 0.000010	< 0.00010	0.00142	0.000677	-	0.0124		
EV MC2	EV MC10 WS 2022-05-16 N-SRF	2022-05-16	-	-	-	-	-	-	-	5.44	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05 WEK21 N	2022-05-17	175	0.007	16.6	0.00403	0.00156	0.725	5.485	< 0.000010	3.74	0.14	< 0.000010	< 0.00010	0.00174	0.000691	-	0.0074		
EV MC2	EV MC5 WS 2022-05 WEK21 N	2022-05-17	151	0.007	15.3	0.0166	0.00206	0.644	4.26	< 0.000010	2.69	0.12	0.000012	< 0.00010	0.00279	0.00056	-	0.0041		
EV MC2	EV MC2 WS 2022-05-17 N-SRF	2022-05-17	149	0.006	13.6	0.0192	0.00246	0.736	4.28	0.000019	2.72	0.13	0.000019	< 0.00010	0.00537	0.000603	-	0.0052		
EV MC2	EV MC10 WS 2022-05-17 N-SRF	2022-05-17	-	-	-	-	-	-	-	3.54	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-18 N-SRF	2022-05-18	-	-	-	-	-	-	-	3.56	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC10 WS 2022-05-18 N-SRF	2022-05-18	-	-	-	-	-	-	-	3.58	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-19 N-SRF	2022-05-19	-	-	-	-	-	-	-	3.62	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2 WS 2022-05-20 N-SRF	2022-05-20	-	-	-	-	-	-	-	4.78	-	-	-	-	-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
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**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium <sup>a</sup> mg/L	Beryllium <sup>b</sup> mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L		Copper mg/L	Iron mg/L	Lead mg/L		
														Acute	Chronic			Acute	Chronic	
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>c</sup>	3.3-3.5 <sup>d</sup>	
Elkview Operation																				
EV MC2	EV MC2_WS_2022-02-21_N-SRF	2022-05-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-05-22_N-SRF	2022-05-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-05-23_N-SRF	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-05_WEK22_N	2022-05-24	184	0.103	0.0001	0.00022	0.0823	< 0.020	< 0.000050	0.011	0.0000356	48.5	0.00026	0.00011	< 0.00050	0.087	0.000052	-	-	
EV MC2	EV MC5_WS_2022-05_WEK22_N	2022-05-24	180	0.126	0.00011	0.00024	0.0748	< 0.020	< 0.000050	< 0.010	0.0000397	45.4	0.00031	0.00012	< 0.00050	0.102	0.000067	-	-	
EV MC2	EV MC2_WS_2022-05-24_N-SRF	2022-05-24	194	0.124	0.00011	0.00027	0.0712	< 0.020	< 0.000050	< 0.010	0.0000466	46.5	0.0003	0.00013	0.00052	0.115	0.000095	-	-	
EV MC2	EV MC2_WS_2022-05-25_N-SRF	2022-05-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-05-26_N-SRF	2022-05-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-05-27_N-SRF	2022-05-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-05-28_N-SRF	2022-05-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-05-29_N-SRF	2022-05-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-05-30_N-SRF	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-05-30_N-SRF_1	2022-05-30	137	0.317	0.0001	0.00029	0.0672	0.000022	< 0.000050	< 0.010	0.0000538	42.3	0.00037	0.00023	0.00078	0.278	0.000242	-	-	
EV MC2	EV MC2_WS_2022-05_WEK23_N	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC5_WS_2022-05_WEK23_N	2022-05-31	153	0.342	0.00011	0.00034	0.0675	0.000025	< 0.000050	< 0.010	0.0000707	39.3	0.00052	0.00024	0.00076	0.354	0.000255	-	-	
EV MC2	EV MC2_WS_2022-05-31_N-SRF	2022-05-31	150	0.364	0.0001	0.00034	0.0658	< 0.020	< 0.000050	< 0.010	0.0000767	39	0.00071	0.00025	0.00077	0.357	0.000242	-	-	
EV MC2	EV MC2_WS_2022-06-01_N-SRF	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-02_N-SRF	2022-06-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-03_N-SRF	2022-06-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-04_N-SRF	2022-06-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-05_N-SRF	2022-06-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-06_N-SRF	2022-06-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06_MON_N	2022-06-06	112	0.956	0.00014	0.00078	0.0693	0.000063	< 0.000050	< 0.010	0.000167	31.9	0.0014	0.00076	0.00232	1.32	0.000884	-	-	
EV MC2	EV MC5_WS_2022-06_MON_N	2022-06-06	122	0.685	0.00011	0.00049	0.0697	0.00005	< 0.000050	< 0.010	0.000147	33.4	0.00128	0.00061	0.00128	0.676	0.000671	-	-	
EV MC2	EV MC2_WS_2022_Q2_WK4_N	2022-06-07	120	0.939	0.00013	0.00064	0.0724	0.000063	< 0.000050	< 0.010	0.000152	31.9	0.00148	0.00071	0.00164	1.02	0.000803	-	-	
EV MC2	EV MC2_WS_2022-06-07_N-SRF	2022-06-07	128	1.03	0.00017	0.00085	0.0751	0.000063	< 0.000050	< 0.010	0.000207	37.5	0.00264	0.00089	0.00219	1.38	0.0011	-	-	
EV MC2	EV MC2_WS_2022-06-08_N-SRF	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-09_N-SRF	2022-06-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-10_N-SRF	2022-06-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-11_N-SRF	2022-06-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-12_N-SRF	2022-06-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-13_N-SRF	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06_WEK25_N	2022-06-13	112	0.499	0.00011	0.00081	0.0754	0.000059	< 0.000050	< 0.010	0.000226	33.9	0.00086	0.00074	0.00161	0.718	0.000983	-	-	
EV MC2	EV MC5_WS_2022-06_WEK25_N	2022-06-13	112	1.2	0.00017	0.00096	0.0779	0.000101	< 0.000050	< 0.010	0.000219	34.8	0.00211	0.00098	0.00274	1.79	0.00131	-	-	
EV MC2	EV MC2_WS_2022_Q2_WK5_N	2022-06-14	109	1.14	0.00017	0.00095	0.077	0.000109	< 0.000050	< 0.010	0.00023	35.7	0.00189	0.00098	0.00267	1.77	0.00129	-	-	
EV MC2	EV MC2_WS_2022-06-14_N-SRF	2022-06-14	120	0.785	0.00016	0.00071	0.069	0.000066	< 0.000050	< 0.010	0.000157	31.4	0.00129	0.00065	0.00165	1.12	0.000757	-	-	
EV MC2	EV MC2_WS_2022-06-15_N-SRF	2022-06-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-16_N-SRF	2022-06-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-17_N-SRF	2022-06-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-18_N-SRF	2022-06-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-19_N-SRF	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-20_N-SRF	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-21_N-SRF	2022-06-21	131	0.567	0.00011	0.00053	0.0622	0.000039	< 0.000050	< 0.010	0.0000867	34.3	0.00098	0.00041	0.00109	0.79	0.000504	-	-	
EV MC2	EV MC2_WS_2022-06_WEK26_N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC5_WS_2022-06_WEK26_N	2022-06-21	133	0.429	< 0.00010	0.00045	0.0611	0.000028	< 0.000050	< 0.010	0.0000675	35.7	0.00074	0.0003	0.00096	0.49	0.000364	-	-	
EV MC2	EV MC2_WS_2022-06-22_N-SRF	2022-06-22	135	0.432	< 0.00010	0.00048	0.0616	0.000027	< 0.000050	< 0.010	0.0000746	36.6	0.00076	0.00029	0.00091	0.487	0.000343	-	-	
EV MC2	EV MC2_WS_2022-06-23_N-SRF	2022-06-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-24_N-SRF	2022-06-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-25_N-SRF	2022-06-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-06-26_N-SRF	2022-06-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
- Denotes analysis not conducted  
n/a denotes no applicable standard

<sup>a</sup>Guideline varies with hardness  
<sup>b</sup>Guideline varies with pH and water temperature  
<sup>c</sup>Guideline varies with chloride  
<sup>d</sup>Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL



APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Chronic	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Elkview Operation																				
EV MC2	EV MC2_WS_2022-02-21_N-SRF	2022-05-21	-	-	-	-	-	-	-	4.92	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-05-22_N-SRF	2022-05-22	-	-	-	-	-	-	-	5.62	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-05-23_N-SRF	2022-05-23	-	-	-	-	-	-	-	5.98	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-05-WEK22_N	2022-05-24	184	0.007	19.4	0.00259	0.00183	0.762	5.59	< 0.000010	3.48	0.13	< 0.000010	< 0.00010	0.0024	0.000797	-	-	0.0048	-
EV MC2	EV MC5_WS_2022-05-WEK22_N	2022-05-24	180	0.007	16.6	0.00336	0.00168	0.68	5.7	< 0.000010	2.91	0.12	< 0.000010	< 0.00010	< 0.00240	0.000709	-	-	< 0.0030	-
EV MC2	EV MC2_WS_2022-05-24_N-SRF	2022-05-24	194	0.007	16.8	0.00456	0.00167	0.677	5.93	< 0.000010	2.94	0.13	0.00001	< 0.00010	< 0.00270	0.000712	-	-	< 0.0030	-
EV MC2	EV MC2_WS_2022-05-25_N-SRF	2022-05-25	-	-	-	-	-	-	5.37	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-05-26_N-SRF	2022-05-26	-	-	-	-	-	-	4.42	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-05-27_N-SRF	2022-05-27	-	-	-	-	-	-	4.47	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-05-28_N-SRF	2022-05-28	-	-	-	-	-	-	3.72	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-05-29_N-SRF	2022-05-29	-	-	-	-	-	-	2.72	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-05-30_N-SRF	2022-05-30	-	-	-	-	-	-	3.09	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-05-30_N-SRF_1	2022-05-30	137	0.005	14.7	0.01	0.00197	0.65	3.4	0.00002	1.92	0.1	0.000018	< 0.00010	0.00428	0.000545	-	-	0.0035	-
EV MC2	EV MC2_WS_2022-05-WEK23_N	2022-05-31	-	-	-	-	-	-	3.52	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC5_WS_2022-05-WEK23_N	2022-05-31	153	0.006	14.5	0.00941	0.00211	0.709	4.31	< 0.000010	2.4	0.1	0.000017	< 0.00010	0.00436	0.000563	-	-	0.0034	-
EV MC2	EV MC2_WS_2022-05-31_N-SRF	2022-05-31	150	0.006	14.4	0.0102	0.00203	0.72	4.25	< 0.000010	2.4	0.1	0.000018	< 0.00010	0.00707	0.000583	-	-	0.0086	-
EV MC2	EV MC2_WS_2022-06-01_N-SRF	2022-06-01	-	-	-	-	-	-	3.38	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-02_N-SRF	2022-06-02	-	-	-	-	-	-	3.75	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-03_N-SRF	2022-06-03	-	-	-	-	-	-	7.99	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-04_N-SRF	2022-06-04	-	-	-	-	-	-	3.4	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-05_N-SRF	2022-06-05	-	-	-	-	-	-	2.95	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-06_N-SRF	2022-06-06	-	-	-	-	-	-	2.97	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-MON_N	2022-06-06	112	0.004	9.82	0.0361	0.00338	0.796	2.3	0.000027	1.48	0.08	0.000049	< 0.00010	0.00759	0.000484	-	-	0.0107	-
EV MC2	EV MC5_WS_2022-06-MON_N	2022-06-06	122	0.005	11.1	0.0332	0.00273	0.708	2.92	0.000013	1.59	0.08	0.000028	< 0.00010	0.0131	0.000496	-	-	0.007	-
EV MC2	EV MC2_WS_2022-Q2-WEK4_N	2022-06-07	120	0.005	10.8	0.035	0.00327	0.822	2.74	0.000022	1.58	0.08	0.00004	< 0.00010	0.0138	0.000526	-	-	0.0092	-
EV MC2	EV MC2_WS_2022-06-07_N-SRF	2022-06-07	128	0.005	12.1	0.0453	0.0038	0.877	3.28	0.000034	1.65	0.09	0.00005	< 0.00010	0.00746	0.000565	-	-	0.0124	-
EV MC2	EV MC2_WS_2022-06-08_N-SRF	2022-06-08	-	-	-	-	-	-	3.77	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-09_N-SRF	2022-06-09	-	-	-	-	-	-	2.72	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-10_N-SRF	2022-06-10	-	-	-	-	-	-	3.33	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-11_N-SRF	2022-06-11	-	-	-	-	-	-	3.44	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-12_N-SRF	2022-06-12	-	-	-	-	-	-	2.35	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-13_N-SRF	2022-06-13	-	-	-	-	-	-	2.16	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-WEK25_N	2022-06-13	112	0.004	10.4	0.0539	0.00294	0.623	2.76	0.000011	2.64	0.08	0.000025	< 0.00010	0.00532	0.000508	-	-	0.19	-
EV MC2	EV MC5_WS_2022-06-WEK25_N	2022-06-13	112	0.005	10.3	0.0497	0.00452	0.968	2.91	0.00004	1.46	0.08	0.000062	< 0.00010	0.00879	0.000524	-	-	0.015	-
EV MC2	EV MC2_WS_2022-Q2-WEK5_N	2022-06-14	109	0.005	10.4	0.0508	0.00442	0.928	2.85	0.000041	1.45	0.08	0.000062	< 0.00010	0.00802	0.000531	-	-	0.0147	-
EV MC2	EV MC2_WS_2022-06-14_N-SRF	2022-06-14	120	0.005	10	0.0353	0.00311	0.753	2.7	0.000026	1.6	0.09	0.00004	< 0.00010	0.00567	0.00046	-	-	0.009	-
EV MC2	EV MC2_WS_2022-06-15_N-SRF	2022-06-15	-	-	-	-	-	-	2.46	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-16_N-SRF	2022-06-16	-	-	-	-	-	-	3.12	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-17_N-SRF	2022-06-17	-	-	-	-	-	-	2.75	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-18_N-SRF	2022-06-18	-	-	-	-	-	-	2.85	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-19_N-SRF	2022-06-19	-	-	-	-	-	-	2.31	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-20_N-SRF	2022-06-20	-	-	-	-	-	-	2.98	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-21_N-SRF	2022-06-21	131	0.005	11.2	0.0217	0.00248	0.766	3.47	0.000016	1.75	0.09	0.000028	< 0.00010	0.0066	0.000493	-	-	0.0064	-
EV MC2	EV MC2_WS_2022-06-WEK26_N	2022-06-21	-	-	-	-	-	-	3.61	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC5_WS_2022-06-WEK26_N	2022-06-21	133	0.005	11.6	0.0151	0.00187	0.69	3.75	< 0.000010	1.8	0.1	0.00002	< 0.00010	< 0.00690	0.000564	-	-	0.0048	-
EV MC2	EV MC2_WS_2022-06-22_N-SRF	2022-06-22	135	0.006	11.9	0.0165	0.00202	0.714	4.03	0.000011	1.85	0.09	0.00002	< 0.00010	0.00613	0.000573	-	-	0.0044	-
EV MC2	EV MC2_WS_2022-06-23_N-SRF	2022-06-23	-	-	-	-	-	-	3.68	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-24_N-SRF	2022-06-24	-	-	-	-	-	-	2.96	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-25_N-SRF	2022-06-25	-	-	-	-	-	-	3.48	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-26_N-SRF	2022-06-26	-	-	-	-	-	-	4.91	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Total Metals															
				Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L		Copper mg/L	Iron mg/L	Lead mg/L	
						Acute	Chronic	Chronic		Chronic					Acute	Chronic		Acute	Acute
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>a</sup>	3.3-3.5 <sup>a</sup>
Elkview Operation																			
EV MC2	EV MC2_WS_2022-06-27_N-SRF	2022-06-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-28_N-SRF	2022-06-28	186	0.115	< 0.00010	0.00029	0.0555	< 0.020	< 0.000050	< 0.010	0.0000423	45.2	0.0003	0.00013	< 0.00050	0.125	0.000108		
EV MC2	EV MC2_WS_2022-06-WEK27_N	2022-06-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC5_WS_2022-06-WEK27_N	2022-06-28	163	0.266	0.00011	0.0004	0.0691	0.000035	< 0.000050	< 0.010	0.000116	47.9	0.00054	0.00034	0.00094	0.427	0.000574		
EV MC2	EV MC2_WS_2022-06-29_N-SRF	2022-06-29	165	0.182	< 0.00010	0.00028	0.0638	< 0.020	< 0.000050	< 0.010	0.0000422	43.5	0.00037	0.00016	< 0.00050	0.191	0.000112		
EV MC2	EV MC2_WS_2022-06-30_N-SRF	2022-06-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-01_N-SRF	2022-07-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-02_N-SRF	2022-07-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-03_N-SRF	2022-07-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-04_N-SRF	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-03-N	2022-07-05	187	0.0487	< 0.00010	0.00021	0.061	< 0.020	< 0.000050	< 0.010	0.0000295	44.8	0.0002	< 0.10	< 0.00050	0.057	0.000084		
EV MC2	EV MC2_WS_2022-07-05_N-SRF	2022-07-05	161	0.0624	< 0.00010	0.00025	0.059	< 0.020	< 0.000050	< 0.010	0.0000302	42	0.00024	0.00011	< 0.00050	0.065	0.000082		
EV MC2	EV MC2_WS_2022-07-06_N-SRF	2022-07-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-07_N-SRF	2022-07-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-08_N-SRF	2022-07-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-09_N-SRF	2022-07-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-10_N-SRF	2022-07-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-11_N-SRF	2022-07-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-WEK29_N	2022-07-12	225	0.0235	< 0.00010	0.00023	0.0677	< 0.020	< 0.000050	0.011	0.0000391	54.6	0.00017	< 0.10	< 0.00050	0.033	< 0.000050		
EV MC2	EV MC5_WS_2022-07-WEK29_N	2022-07-12	202	0.0282	< 0.00010	0.00022	0.0698	< 0.020	< 0.000050	< 0.010	0.0000251	47.4	0.0002	< 0.10	< 0.00050	0.035	0.000056		
EV MC2	EV MC2_WS_2022-07-12_N-SRF	2022-07-12	197	0.0262	< 0.00010	0.00021	0.07	< 0.020	< 0.000050	0.011	0.0000245	44.7	0.00023	< 0.10	< 0.00050	0.033	< 0.000050		
EV MC2	EV MC2_WS_2022-07-13_N-SRF	2022-07-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-14_N-SRF	2022-07-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-15_N-SRF	2022-07-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-16_N-SRF	2022-07-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-17_N-SRF	2022-07-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-18_N-SRF	2022-07-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-19_N-SRF	2022-07-19	233	0.0149	< 0.00010	0.00021	0.0806	< 0.020	< 0.000050	0.011	0.0000242	61	0.00019	< 0.10	< 0.00050	0.018	< 0.000050		
EV MC2	EV MC2_WS_2022-07-20_N-SRF	2022-07-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-21_N-SRF	2022-07-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-22_N-SRF	2022-07-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-23_N-SRF	2022-07-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-24_N-SRF	2022-07-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-25_N-SRF	2022-07-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-26_N-SRF	2022-07-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-27_N-SRF	2022-07-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-28_N-SRF	2022-07-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-29_N-SRF	2022-07-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-30_N-SRF	2022-07-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-07-31_N-SRF	2022-07-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-08-01_N-SRF	2022-08-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-08-02_N-SRF	2022-08-02	237	0.0066	< 0.00010	0.00016	0.0863	< 0.020	< 0.000050	0.012	0.0000233	62.3	0.00018	< 0.10	< 0.00050	0.012	< 0.000050		
EV MC2	EV MC2_WS_2022-08-03_N-SRF	2022-08-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-08-04_N-SRF	2022-08-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-08-05_N-SRF	2022-08-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-08-06_N-SRF	2022-08-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-08-07_N-SRF	2022-08-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-08-08_N-SRF	2022-08-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-08-09_N-SRF	2022-08-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-08-10_N-SRF	2022-08-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Elkview Operation																				
EV MC2	EV MC2_WS_2022-06-27_N-SRF	2022-06-27	-	-	-	-	-	-	-	5.39	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-06-28_N-SRF	2022-06-28	186	0.007	15.8	<b>0.00586</b>	0.00138	0.66	<b>6.41</b>	< 0.000010	2.75	0.11	< 0.000010	< 0.000010	0.00157	0.000664	-	< 0.0030	-	
EV MC2	EV MC2_WS_2022-06-WEK27_N	2022-06-28	-	-	-	-	-	-	<b>4.53</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC5_WS_2022-06-WEK27_N	2022-06-28	163	0.008	16.4	<b>0.0205</b>	0.00211	0.703	<b>6.48</b>	< 0.000010	2.73	0.12	0.000015	< 0.000010	0.00806	0.000723	-	0.0056	-	
EV MC2	EV MC2_WS_2022-06-29_N-SRF	2022-06-29	165	0.007	15.8	<b>0.00639</b>	0.00154	0.677	<b>5.82</b>	< 0.000010	2.6	0.12	0.000011	< 0.000010	0.00296	0.000666	-	< 0.0030	-	
EV MC2	EV MC2_WS_2022-06-30_N-SRF	2022-06-30	-	-	-	-	-	-	<b>4.91</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-01_N-SRF	2022-07-01	-	-	-	-	-	-	<b>5.26</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-02_N-SRF	2022-07-02	-	-	-	-	-	-	<b>5.6</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-03_N-SRF	2022-07-03	-	-	-	-	-	-	<b>5.54</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-04_N-SRF	2022-07-04	-	-	-	-	-	-	<b>5.17</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-05_N	2022-07-05	187	0.007	15.1	<b>0.00328</b>	0.00133	0.644	<b>6.22</b>	< 0.000010	2.45	0.11	< 0.000010	< 0.000010	0.00075	0.000737	-	< 0.0030	-	
EV MC2	EV MC2_WS_2022-07-05_N-SRF	2022-07-05	161	0.006	14.6	<b>0.00412</b>	0.00137	0.63	<b>5.33</b>	< 0.000010	2.24	0.11	< 0.000010	< 0.000010	0.00098	0.000701	-	< 0.0030	-	
EV MC2	EV MC2_WS_2022-07-06_N-SRF	2022-07-06	-	-	-	-	-	-	<b>4.73</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-07_N-SRF	2022-07-07	-	-	-	-	-	-	<b>5.54</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-08_N-SRF	2022-07-08	-	-	-	-	-	-	<b>5.83</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-09_N-SRF	2022-07-09	-	-	-	-	-	-	<b>6.33</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-10_N-SRF	2022-07-10	-	-	-	-	-	-	<b>7.04</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-11_N-SRF	2022-07-11	-	-	-	-	-	-	<b>7.7</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-WEK29_N	2022-07-12	225	0.01	19.8	<b>0.0025</b>	0.00144	0.733	<b>9.39</b>	< 0.000010	3.35	0.14	< 0.000010	< 0.000010	0.00036	0.000842	-	0.0037	-	
EV MC2	EV MC5_WS_2022-07-WEK29_N	2022-07-12	202	0.01	17.6	<b>0.00249</b>	0.00144	0.7	<b>7.87</b>	< 0.000010	2.54	0.12	< 0.000010	0.0003	0.00052	0.000852	-	< 0.0030	-	
EV MC2	EV MC2_WS_2022-07-12_N-SRF	2022-07-12	197	0.01	17.6	<b>0.00235</b>	0.00133	0.692	<b>7.42</b>	< 0.000010	2.54	0.12	< 0.000010	< 0.000010	0.00039	0.000864	-	< 0.0030	-	
EV MC2	EV MC2_WS_2022-07-13_N-SRF	2022-07-13	-	-	-	-	-	-	<b>8.11</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-14_N-SRF	2022-07-14	-	-	-	-	-	-	<b>7.22</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-15_N-SRF	2022-07-15	-	-	-	-	-	-	<b>7.59</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-16_N-SRF	2022-07-16	-	-	-	-	-	-	<b>10.3</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-17_N-SRF	2022-07-17	-	-	-	-	-	-	<b>8.52</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-18_N-SRF	2022-07-18	-	-	-	-	-	-	<b>10.8</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-19_N-SRF	2022-07-19	233	0.01	23.5	<b>0.00209</b>	0.00166	0.832	<b>9.61</b>	< 0.000010	3.46	0.15	< 0.000010	< 0.000010	0.00048	0.00102	-	0.0064	-	
EV MC2	EV MC2_WS_2022-07-20_N-SRF	2022-07-20	-	-	-	-	-	-	<b>9.13</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-21_N-SRF	2022-07-21	-	-	-	-	-	-	<b>9.71</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-22_N-SRF	2022-07-22	-	-	-	-	-	-	<b>8.87</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-23_N-SRF	2022-07-23	-	-	-	-	-	-	<b>10.3</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-24_N-SRF	2022-07-24	-	-	-	-	-	-	<b>10.2</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-25_N-SRF	2022-07-25	-	-	-	-	-	-	<b>10.6</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-26_N-SRF	2022-07-26	-	-	-	-	-	-	<b>15.4</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-27_N-SRF	2022-07-27	-	-	-	-	-	-	<b>12.2</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-28_N-SRF	2022-07-28	-	-	-	-	-	-	<b>15</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-29_N-SRF	2022-07-29	-	-	-	-	-	-	<b>11.8</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-30_N-SRF	2022-07-30	-	-	-	-	-	-	<b>11.4</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-07-31_N-SRF	2022-07-31	-	-	-	-	-	-	<b>11.8</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-01_N-SRF	2022-08-01	-	-	-	-	-	-	<b>12.6</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-02_N-SRF	2022-08-02	237	0.009	23.8	<b>0.00209</b>	0.00107	0.774	<b>11.1</b>	< 0.000010	3.21	0.15	< 0.000010	< 0.000010	< 0.00030	0.0011	-	0.0044	-	
EV MC2	EV MC2_WS_2022-08-03_N-SRF	2022-08-03	-	-	-	-	-	-	<b>12</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-04_N-SRF	2022-08-04	-	-	-	-	-	-	<b>12.6</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-05_N-SRF	2022-08-05	-	-	-	-	-	-	<b>16.4</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-06_N-SRF	2022-08-06	-	-	-	-	-	-	<b>15.7</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-07_N-SRF	2022-08-07	-	-	-	-	-	-	<b>17.4</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-08_N-SRF	2022-08-08	-	-	-	-	-	-	<b>15</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-09_N-SRF	2022-08-09	-	-	-	-	-	-	<b>15.2</b>	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-10_N-SRF	2022-08-10	-	-	-	-	-	-	<b>14.4</b>	-	-	-	-	-	-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium <sup>a</sup> mg/L	Beryllium <sup>b</sup> mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L		Copper mg/L	Iron mg/L	Lead mg/L	
														Acute	Chronic			Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>c</sup>	3.3-3.5 <sup>d</sup>
Elkview Operation																			
EV MC2	EV MC2_WS_2022-08_MON_N	2022-08-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-08-11_N-SRF	2022-08-11	361	0.0065	< 0.00010	0.00022	0.0905	< 0.020	< 0.000050	0.014	0.0000341	77.4	0.00018	< 0.10	< 0.00050	0.011	< 0.000050		
EV MC2	EV MC2_WS_2022-08-12_N-SRF	2022-08-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-13_N-SRF	2022-08-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-14_N-SRF	2022-08-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-15_N-SRF	2022-08-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-16_N-SRF	2022-08-16	311	0.0081	0.00012	0.00019	0.104	< 0.020	< 0.000050	0.014	0.0000292	74.3	0.00019	< 0.10	< 0.00050	0.013	< 0.000050		
EV MC2	EV MC2_WS_2022_Q3_WK1_N	2022-08-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-17_N-SRF	2022-08-17	358	0.0071	< 0.00010	0.00019	0.104	< 0.020	< 0.000050	0.015	0.0000311	85.2	0.0002	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV MC2	EV MC2_WS_2022-08-18_N-SRF	2022-08-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-19_N-SRF	2022-08-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-20_N-SRF	2022-08-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-21_N-SRF	2022-08-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-22_N-SRF	2022-08-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-23_N-SRF	2022-08-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022_Q3_WK2_N	2022-08-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-24_N-SRF	2022-08-24	363	0.004	0.00013	0.00018	0.106	< 0.020	< 0.000050	0.016	0.0000313	87.1	0.00018	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV MC2	EV MC2_WS_2022-08-25_N-SRF	2022-08-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-26_N-SRF	2022-08-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-27_N-SRF	2022-08-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-28_N-SRF	2022-08-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-29_N-SRF	2022-08-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-30_N-SRF	2022-08-30	348	0.0066	0.00012	0.00024	0.133	< 0.020	< 0.000050	0.015	0.0000296	83.3	0.00017	< 0.10	< 0.00050	0.01	< 0.000050		
EV MC2	EV MC2_WS_2022_Q3_WK3_N	2022-08-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-31_N-SRF	2022-08-31	331	0.0048	0.00011	0.00023	0.123	< 0.020	< 0.000050	0.015	0.0000298	80.1	0.00017	< 0.10	< 0.00050	0.011	< 0.000050		
EV MC2	EV MC2_WS_2022-09-01_N-SRF	2022-09-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-02_N-SRF	2022-09-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-03_N-SRF	2022-09-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-04_N-SRF	2022-09-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-05_N-SRF	2022-09-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-06_N-SRF	2022-09-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09_MON_N	2022-09-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC5_WS_2022-09_MON_N	2022-09-06	366	0.0119	0.00011	0.00022	0.126	< 0.020	< 0.000050	0.018	0.0000244	83.3	0.00014	< 0.10	< 0.00050	0.011	< 0.000050		
EV MC2	EV MC2_WS_2022-09-07_N-SRF	2022-09-07	360	0.0061	0.00011	0.00024	0.127	< 0.020	< 0.000050	0.017	0.000022	86.1	0.00018	< 0.10	< 0.00050	0.01	< 0.000050		
EV MC2	EV MC2_WS_SEPT-2022_N	2022-09-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-08_N-SRF	2022-09-08	328	0.0062	0.00014	0.00032	0.123	< 0.020	< 0.000050	0.015	0.0000239	74.9	0.00016	< 0.10	< 0.00050	0.011	< 0.000050		
EV MC2	EV MC2_WS_2022-09-09_N-SRF	2022-09-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-09_N	2022-09-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-10_N-SRF	2022-09-10	363	0.0038	0.00011	0.00025	0.108	< 0.020	< 0.000050	0.017	0.0000223	78.2	0.00016	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV MC2	EV MC2_WS_2022-09-11_N-SRF	2022-09-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-12_N-SRF	2022-09-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-13_N-SRF	2022-09-13	290	0.0038	0.00011	0.00026	0.134	< 0.020	< 0.000050	0.015	0.0000254	82.5	0.00018	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV MC2	EV MC2_WS_2022_Q3_WK5_N	2022-09-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-14_N-SRF	2022-09-14	412	0.0054	0.00011	0.00016	0.122	< 0.020	< 0.000050	0.016	0.0000036	89.3	0.00017	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV MC2	EV MC2_WS_2022-09-15_N-SRF	2022-09-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-16_N-SRF	2022-09-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-17_N-SRF	2022-09-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-18_N-SRF	2022-09-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-19_N-SRF	2022-09-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-20_N-SRF	2022-09-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Elkview Operation																				
EV MC2	EV MC2_WS_2022-08_MON_N	2022-08-10	-	-	-	-	-	-	-	14.3	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2_WS_2022-08-11_N-SRF	2022-08-11	361	0.017	34.1	0.00215	0.00236	1.13	17.6	< 0.000010	5.18	0.19	< 0.000010	< 0.00010	< 0.00030	0.00141	< 0.0030	-	-	
EV MC2	EV MC2_WS_2022-08-12_N-SRF	2022-08-12	-	-	-	-	-	-	14.7	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-13_N-SRF	2022-08-13	-	-	-	-	-	-	14.8	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-14_N-SRF	2022-08-14	-	-	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-15_N-SRF	2022-08-15	-	-	-	-	-	-	15.7	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-16_N-SRF	2022-08-16	311	0.014	31.2	0.00208	0.00163	0.984	15.7	< 0.000010	3.84	0.18	< 0.000010	< 0.00010	< 0.00030	0.0016	< 0.0030	-	-	
EV MC2	EV MC2_WS_2022_Q3_WK1_N	2022-08-16	-	-	-	-	-	-	15.8	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-17_N-SRF	2022-08-17	358	0.016	40.1	0.00212	0.00142	1.09	17.7	< 0.000010	4.83	0.2	< 0.000010	< 0.00010	< 0.00030	0.00144	< 0.0030	-	-	
EV MC2	EV MC2_WS_2022-08-18_N-SRF	2022-08-18	-	-	-	-	-	-	14.4	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-19_N-SRF	2022-08-19	-	-	-	-	-	-	15.2	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-20_N-SRF	2022-08-20	-	-	-	-	-	-	17.4	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-21_N-SRF	2022-08-21	-	-	-	-	-	-	16.8	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-22_N-SRF	2022-08-22	-	-	-	-	-	-	17.2	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-23_N-SRF	2022-08-23	-	-	-	-	-	-	17.3	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022_Q3_WK2_N	2022-08-23	-	-	-	-	-	-	17.3	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-24_N-SRF	2022-08-24	363	0.018	37.6	0.00209	0.00124	1.14	18.8	< 0.000010	4.8	0.2	< 0.000010	< 0.00010	< 0.00030	0.00151	< 0.0030	-	-	
EV MC2	EV MC2_WS_2022-08-25_N-SRF	2022-08-25	-	-	-	-	-	-	16.7	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-26_N-SRF	2022-08-26	-	-	-	-	-	-	16.6	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-27_N-SRF	2022-08-27	-	-	-	-	-	-	17.4	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-28_N-SRF	2022-08-28	-	-	-	-	-	-	15.4	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-29_N-SRF	2022-08-29	-	-	-	-	-	-	16.9	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-30_N-SRF	2022-08-30	348	0.016	33.6	0.00191	0.00138	0.931	14.9	< 0.000010	4.17	0.2	< 0.000010	< 0.00010	< 0.00030	0.00136	< 0.0030	-	-	
EV MC2	EV MC2_WS_2022_Q3_WK3_N	2022-08-30	-	-	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-08-31_N-SRF	2022-08-31	331	0.014	35.8	0.00214	0.0014	1.07	16	< 0.000010	4.72	0.19	< 0.000010	< 0.00010	< 0.00030	0.00149	< 0.0030	-	-	
EV MC2	EV MC2_WS_2022-09-01_N-SRF	2022-09-01	-	-	-	-	-	-	17.4	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-02_N-SRF	2022-09-02	-	-	-	-	-	-	17.5	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-03_N-SRF	2022-09-03	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-04_N-SRF	2022-09-04	-	-	-	-	-	-	18.8	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-05_N-SRF	2022-09-05	-	-	-	-	-	-	18.2	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-06_N-SRF	2022-09-06	-	-	-	-	-	-	20.1	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09_MON_N	2022-09-06	-	-	-	-	-	-	23.3	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC5_WS_2022-09_MON_N	2022-09-06	366	0.017	34.7	0.00215	0.00133	1.01	17.5	< 0.000010	4.23	0.18	< 0.000010	< 0.00010	< 0.00030	0.00165	< 0.0030	-	-	
EV MC2	EV MC2_WS_2022-09-07_N-SRF	2022-09-07	360	0.016	34.2	0.00195	0.00129	0.996	17.3	< 0.000010	4.2	0.19	< 0.000010	< 0.00010	< 0.00030	0.00173	< 0.0030	-	-	
EV MC2	EV MC2_WS_SEPT-2022_N	2022-09-08	-	-	-	-	-	-	19.9	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-08_N-SRF	2022-09-08	328	0.015	34.9	0.00216	0.00128	1.1	17.1	< 0.000010	4.18	0.19	< 0.000010	< 0.00010	< 0.00030	0.00156	< 0.0030	-	-	
EV MC2	EV MC2_WS_2022-09-09_N-SRF	2022-09-09	-	-	-	-	-	-	21.5	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-09_N	2022-09-09	-	-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-10_N-SRF	2022-09-10	363	0.015	34	0.00121	0.00135	1.06	18.7	< 0.000010	4.11	0.19	< 0.000010	< 0.00010	< 0.00030	0.00156	< 0.0030	-	-	
EV MC2	EV MC2_WS_2022-09-11_N-SRF	2022-09-11	-	-	-	-	-	-	18.6	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-12_N-SRF	2022-09-12	-	-	-	-	-	-	18.8	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-13_N-SRF	2022-09-13	290	0.016	36.8	0.00185	0.00131	1.12	19.3	< 0.000010	4.98	0.21	< 0.000010	< 0.00010	< 0.00030	0.00155	< 0.0030	-	-	
EV MC2	EV MC2_WS_2022_Q3_WK5_N	2022-09-13	-	-	-	-	-	-	20.5	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-14_N-SRF	2022-09-14	412	0.016	39.6	0.00234	0.00154	1.14	20.1	< 0.000010	4.72	0.21	< 0.000010	< 0.00010	< 0.00030	0.00173	< 0.0030	-	-	
EV MC2	EV MC2_WS_2022-09-15_N-SRF	2022-09-15	-	-	-	-	-	-	21	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-16_N-SRF	2022-09-16	-	-	-	-	-	-	19	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-17_N-SRF	2022-09-17	-	-	-	-	-	-	18.6	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-18_N-SRF	2022-09-18	-	-	-	-	-	-	17.1	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-19_N-SRF	2022-09-19	-	-	-	-	-	-	19.2	-	-	-	-	-	-	-	-	-	-	
EV MC2	EV MC2_WS_2022-09-20_N-SRF	2022-09-20	-	-	-	-	-	-	18.5	-	-	-	-	-	-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L		Copper mg/L	Iron mg/L	Lead mg/L	
														Acute	Chronic			Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>a</sup>	3.3-3.5 <sup>a</sup>
Elkview Operation																			
EV MC2	EV MC2 WS 2022-09-21 N SRF	2022-09-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-22 N-SRF	2022-09-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-23 N-SRF	2022-09-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-24 N-SRF	2022-09-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-25 N-SRF	2022-09-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-26 N-SRF	2022-09-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-27 N-SRF	2022-09-27	364	0.0066	0.00013	0.0002	0.125	< 0.020	< 0.000050	0.015	0.0002258	84.5	0.00016	< 0.10	< 0.00050	0.011	< 0.00050		
EV MC2	EV MC2 WS 2022-09-28 N-SRF	2022-09-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-29 N-SRF	2022-09-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-30 N-SRF	2022-09-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-10-01 N-SRF	2022-10-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-10-02 N-SRF	2022-10-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-10-03 N-SRF	2022-10-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-10-04 N-SRF	2022-10-04	387	0.0051	0.00011	0.00016	0.115	< 0.020	< 0.000050	0.013	0.0002215	90.1	0.00016	< 0.10	< 0.00050	< 0.010	< 0.00050		
EV MC2	EV MC2 WS 2022-10-06 N-SRF	2022-10-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-Q4 N	2022-10-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC5 WS 2022-Q4 N	2022-10-06	377	0.0058	0.00011	0.00019	0.122	< 0.020	< 0.000050	0.014	0.0002294	92.5	0.00014	< 0.10	< 0.00050	0.011	< 0.00050		
EV MC2	EV MC2 WS 2022 Q4 WK1 N	2022-10-11	383	0.0054	0.00011	0.00021	0.12	< 0.020	< 0.000050	0.014	0.0003344	94.9	0.00016	< 0.10	< 0.00050	0.01	< 0.00050		
EV MC2	EV MC2 WS 2022-10-12 N-SRF	2022-10-12	375	0.0036	0.00012	0.00016	0.125	< 0.020	< 0.000050	0.014	0.0002254	81	0.00015	< 0.10	< 0.00050	0.014	< 0.00050		
EV MC2	EV MC2 WS 2022-10-14 N-SRF	2022-10-14	-	0.0072	< 0.00010	0.00018	0.107	< 0.020	< 0.000050	0.013	0.0001184	81.2	0.00017	< 0.10	< 0.00050	0.027	< 0.00050		
EV MC2	EV MC2 WS 2022-10-17 N-SRF	2022-10-17	-	0.012	< 0.00010	0.0002	0.127	< 0.020	< 0.000050	0.016	0.0003314	99.2	0.0002	< 0.10	< 0.00050	0.033	< 0.00050		
EV MC2	EV MC2 WS 2022 Q4 WK2 N	2022-10-18	342	0.0034	0.00011	0.00013	0.113	< 0.020	< 0.000050	0.014	0.00033	86.5	0.00015	< 0.10	< 0.00050	0.01	< 0.00050		
EV MC2	EV MC2 WS 2022-10-19 N-SRF	2022-10-19	392	< 0.0030	< 0.00010	0.00011	0.105	< 0.020	< 0.000050	0.014	0.000017	83.1	0.00017	< 0.10	< 0.00050	< 0.010	< 0.00050		
EV MC2	EV MC2 WS 2022-10-24 N-SRF	2022-10-24	-	0.0034	< 0.00010	0.00021	0.111	< 0.020	< 0.000050	0.014	0.0003373	86.6	0.00011	< 0.10	0.0007	0.012	0.00104		
EV MC2	EV MC2 WS 2022 Q4 WK3 N	2022-10-25	-	0.0055	< 0.00010	0.0002	0.106	< 0.020	< 0.000050	0.014	0.0002202	84.1	0.00016	< 0.10	< 0.00050	0.019	< 0.00050		
EV MC2	EV MC2 WS 2022-10-26 N-SRF	2022-10-26	330	0.0041	< 0.00010	0.00015	0.12	< 0.020	< 0.000050	0.013	0.0001149	83	0.00019	< 0.10	< 0.00050	< 0.010	< 0.00050		
EV MC2	EV MC2 WS 2022-10-28 N SRF	2022-10-28	-	0.0053	< 0.00010	0.00012	0.137	< 0.020	< 0.000050	0.013	0.0002225	73.4	0.00015	< 0.10	< 0.00050	0.017	< 0.00050		
EV MC2	EV MC2 WS 2022-10-31 N-SRF	2022-10-31	-	0.0058	< 0.00010	0.00015	0.107	< 0.020	< 0.000050	0.014	0.0002258	90.2	0.00019	< 0.10	< 0.00050	0.021	0.00064		
EV MC2	EV MC2 WS 2022 Q4 WK4 N	2022-11-01	316	0.0269	< 0.00010	0.0002	0.102	< 0.020	< 0.000050	0.013	0.0002259	76.3	0.00017	< 0.10	< 0.00050	0.022	< 0.00050		
EV MC2	EV MC2 WS 2022 Q4 WK5 N	2022-11-08	242	0.16	0.00012	0.00023	0.109	< 0.020	< 0.000050	0.012	0.000421	59.9	0.00032	0.00012	0.00058	0.14	< 0.00012		
EV MC2	EV MC2 WS 2022-11-14 N-SRF	2022-11-14	355	0.0041	0.00011	0.00016	0.118	< 0.020	< 0.000050	0.015	0.00022	86	0.00017	< 0.10	< 0.00050	0.012	< 0.00050		
EV MC2	EV MC2 WS 2022-11 MON N	2022-11-14	352	0.0067	0.00011	0.00016	0.117	< 0.020	< 0.000050	0.014	0.0002282	83	0.00016	< 0.10	< 0.00050	< 0.010	< 0.00050		
EV MC2	EV MC5 WS 2022-11 MON N	2022-11-14	369	0.0042	0.00011	0.00017	0.112	< 0.020	< 0.000050	0.015	0.0003312	86	0.0002	< 0.10	< 0.00050	< 0.010	< 0.00050		
EV MC2	EV MC2 WS 2022-11-28 N-SRF	2022-11-28	368	0.0044	0.0001	0.00014	0.114	< 0.020	< 0.000050	0.014	0.0002249	88	0.00014	< 0.10	< 0.00050	< 0.010	< 0.00050		
EV MC2	EV MC2 WS 2022-12 MON N	2022-12-06	371	0.0036	< 0.00010	0.00019	0.106	< 0.020	< 0.000050	0.014	0.0002263	86	0.00017	< 0.10	< 0.00050	0.011	< 0.00050		
EV MC2	EV MC2 WS 2022-12-12 N-SRF	2022-12-12	398	0.007	< 0.00010	0.00015	0.112	< 0.020	< 0.000050	0.015	0.000228	88.2	0.00014	< 0.10	< 0.00050	0.01	< 0.00050		
EV MC2	EV MC2 WS 2022-12-27 N-SRF	2022-12-27	363	0.0068	0.0001	0.00016	0.12	< 0.020	< 0.000050	0.014	0.0002258	91.3	0.00017	< 0.10	< 0.00050	< 0.010	< 0.00050		
EV OC1	EV OC1 WS 2022-Q1 N	2022-01-05	365	0.0088	0.0001	0.00019	0.114	< 0.020	< 0.000050	0.014	0.000336	80.4	0.00019	< 0.10	< 0.00050	0.011	< 0.00050		
EV OC1	EV OC1 WS 2022-02 MON N	2022-02-07	406	0.0284	0.00011	0.00058	0.42	< 0.020	< 0.000050	0.066	0.0001114	98.3	0.0001	0.00021	0.00064	0.351	0.00051		
EV OC1	EV OC1 WS 2022-03 MON N	2022-03-16	417	0.0099	< 0.00010	0.00048	0.464	< 0.020	< 0.000050	0.075	0.0000076	105	0.00028	0.00018	< 0.00050	0.211	< 0.00050		
EV OC1	EV OC1 WS 2022-03 WEK13 N	2022-03-21	328	0.12	0.00014	0.00059	0.24	< 0.020	< 0.000050	0.06	0.0000414	76.3	0.00017	0.00027	0.00056	0.494	0.000119		
EV OC1	EV OC1 WS 2022-04 WEK14 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV OC1	EV OC1 WS 2022-04 WEK15 N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV OC1	EV OC1 WS 2022-Q2 N	2022-04-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV OC1	EV OC1 WS 2022-04 WEK17 N	2022-04-18	382	0.0135	0.00018	0.00055	0.295	< 0.020	< 0.000050	0.073	0.0000166	107	< 0.00010	0.00018	< 0.00050	0.405	< 0.00050		
EV OC1	EV OC1 WS 2022-04 WEK18 N	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV OC1	EV OC1 WS 2022-05 MON N	2022-05-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV OC1	EV OC1 WS 2022-05 WEK20 N	2022-05-11	385	0.0538	0.00017	0.00072	0.364	< 0.020	< 0.000050	0.072	0.000014	97	< 0.00010	0.00017	< 0.00050	0.543	0.000052		
EV OC1	EV OC1 WS 2022-05 WEK21 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV OC1	EV OC1 WS 2022-05 WEK22 N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

<sup>a</sup> Guideline varies with hardness  
<sup>b</sup> Guideline varies with pH and water temperature  
<sup>c</sup> Guideline varies with chloride  
<sup>d</sup> Guideline varies with pH

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Elkview Operation																				
EV MC2	EV MC2 WS 2022-09-21 N SRF	2022-09-21	-	-	-	-	-	-	-	18.5	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-22 N-SRF	2022-09-22	-	-	-	-	-	-	-	20.1	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-23 N-SRF	2022-09-23	-	-	-	-	-	-	-	19.5	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-24 N-SRF	2022-09-24	-	-	-	-	-	-	-	14.7	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-25 N-SRF	2022-09-25	-	-	-	-	-	-	-	17.8	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-26 N-SRF	2022-09-26	-	-	-	-	-	-	-	17.8	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-27 N-SRF	2022-09-27	364	0.016	40.9	0.00186	0.00181	1.16	19.9	< 0.000010	4.69	0.2	< 0.000010	< 0.000010	< 0.000030	0.0018		< 0.0030		
EV MC2	EV MC2 WS 2022-09-28 N-SRF	2022-09-28	-	-	-	-	-	-	20.6	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-29 N-SRF	2022-09-29	-	-	-	-	-	-	20.4	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-09-30 N-SRF	2022-09-30	-	-	-	-	-	-	20.1	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-10-01 N-SRF	2022-10-01	-	-	-	-	-	-	17.5	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-10-02 N-SRF	2022-10-02	-	-	-	-	-	-	19.4	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-10-03 N-SRF	2022-10-03	-	-	-	-	-	-	21.7	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-10-04 N-SRF	2022-10-04	387	0.015	39	0.00164	0.00099	1.11	21.3	< 0.000010	4.46	0.2	< 0.000010	< 0.000010	< 0.000030	0.00172		< 0.0030		
EV MC2	EV MC2 WS 2022-10-06 N-SRF	2022-10-06	-	-	-	-	-	-	23.4	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC2 WS 2022-Q4 N	2022-10-06	-	-	-	-	-	-	24.9	-	-	-	-	-	-	-	-	-	-	-
EV MC2	EV MC5 WS 2022-Q4 N	2022-10-06	377	0.016	42.6	0.00224	0.00164	1.22	23	< 0.000010	4.4	0.22	< 0.000010	< 0.000010	< 0.000030	0.00198		< 0.0030		
EV MC2	EV MC2 WS 2022 Q4 WK1 N	2022-10-11	383	0.016	42.6	0.00217	0.00173	1.22	22.1	< 0.000010	4.23	0.22	< 0.000010	< 0.000010	< 0.000030	0.0019		< 0.0030		
EV MC2	EV MC2 WS 2022-10-12 N-SRF	2022-10-12	375	0.018	39.8	<b>0.00238</b>	0.00149	1.21	18.4	< 0.000010	4.66	0.19	< 0.000010	< 0.000010	< 0.000030	0.00169		< 0.0030		
EV MC2	EV MC2 WS 2022-10-14 N-SRF	2022-10-14	-	0.014	33.9	0.00211	0.00116	1.02	13.9	< 0.000010	3.81	0.19	< 0.000010	< 0.000010	< 0.000030	0.0017		< 0.0030		
EV MC2	EV MC2 WS 2022-10-17 N-SRF	2022-10-17	-	0.017	41.2	0.00401	0.00204	1.2	17	< 0.000010	4.7	0.22	< 0.000010	< 0.000010	< 0.000030	0.00192		< 0.0030		
EV MC2	EV MC2 WS 2022 Q4 WK2 N	2022-10-18	342	0.019	38.7	0.0021	0.00149	1.18	17.7	< 0.000010	4.83	0.22	< 0.000010	< 0.000010	< 0.000030	0.00163		< 0.0030		
EV MC2	EV MC2 WS 2022-10-19 N-SRF	2022-10-19	392	0.017	34.6	0.0019	0.0013	0.966	16.5	< 0.000010	3.97	0.2	< 0.000010	< 0.000010	< 0.000030	0.00169		< 0.0030		
EV MC2	EV MC2 WS 2022-10-24 N-SRF	2022-10-24	-	0.017	39.4	0.00185	0.00146	1.07	14.8	< 0.000010	4.64	0.2	0.000013	< 0.000010	< 0.000030	0.00166		< 0.0030		
EV MC2	EV MC2 WS 2022 Q4 WK3 N	2022-10-25	-	0.015	34.4	0.00224	0.00133	1.02	14.7	< 0.000010	4.62	0.2	< 0.000010	< 0.000010	< 0.000030	0.00153		< 0.0030		
EV MC2	EV MC2 WS 2022-10-26 N-SRF	2022-10-26	330	0.014	35.9	<b>0.00216</b>	0.00138	1.06	13.6	< 0.000010	4.53	0.19	< 0.000010	< 0.000010	< 0.000030	0.00155		< 0.0030		
EV MC2	EV MC2 WS 2022-10-28 N SRF	2022-10-28	-	0.014	30	0.00203	0.00115	0.901	12.4	< 0.000010	3.88	0.17	< 0.000010	< 0.000010	< 0.000030	0.00137		< 0.0030		
EV MC2	EV MC2 WS 2022-10-31 N-SRF	2022-10-31	-	0.015	36.2	0.00238	0.00144	1.07	14.4	< 0.000010	4.73	0.21	< 0.000010	< 0.000010	< 0.000030	0.0017		< 0.0030		
EV MC2	EV MC2 WS 2022 Q4 WK4 N	2022-11-01	316	0.013	31.1	<b>0.00211</b>	0.00138	0.96	11.1	< 0.000010	3.72	0.18	< 0.000010	< 0.000010	0.00042	0.00146		0.0033		
EV MC2	EV MC2 WS 2022 Q4 WK5 N	2022-11-08	242	0.009	26.4	<b>0.0055</b>	0.00158	0.976	6.4	< 0.000010	3.95	0.16	< 0.000010	< 0.000010	0.00299	0.00112		< 0.0030		
EV MC2	EV MC2 WS 2022-11-14 N-SRF	2022-11-14	355	0.018	38.2	<b>0.0031</b>	0.00168	1.04	7	< 0.000010	4.49	0.21	< 0.000010	< 0.000010	< 0.000030	0.00176		< 0.0030		
EV MC2	EV MC2 WS 2022-11 MON N	2022-11-14	352	0.021	40.2	<b>0.00221</b>	0.00209	1.16	16.4	< 0.000010	4.72	0.21	< 0.000010	< 0.000010	< 0.000030	0.00191		0.0039		
EV MC2	EV MC5 WS 2022-11 MON N	2022-11-14	369	0.02	38.8	<b>0.00227</b>	0.00212	1.13	16.8	< 0.000010	5.02	0.21	< 0.000010	< 0.000010	< 0.000030	0.00182		< 0.0030		
EV MC2	EV MC2 WS 2022-11-28 N-SRF	2022-11-28	368	0.02	39.4	0.00212	0.00223	1.14	15.7	< 0.000010	4.98	0.21	< 0.000010	< 0.000010	< 0.000030	0.00183		< 0.0030		
EV MC2	EV MC2 WS 2022-12 MON N	2022-12-06	371	0.019	42	0.00214	0.0027	1.17	14.9	< 0.000010	4.99	0.2	< 0.000010	< 0.000010	< 0.000030	0.0019		< 0.0030		
EV MC2	EV MC2 WS 2022-12-12 N-SRF	2022-12-12	398	0.021	37.9	0.00183	0.00238	1.14	14.4	< 0.000010	4.81	0.2	< 0.000010	< 0.000010	< 0.000030	0.00198		< 0.0030		
EV MC2	EV MC2 WS 2022-12-27 N-SRF	2022-12-27	363	0.019	41.6	<b>0.00221</b>	0.00286	1.2	14	< 0.000010	5.04	0.21	< 0.000010	< 0.000010	< 0.000030	0.00209		< 0.0030		
EV OC1	EV OC1 WS 2022-Q1 N	2022-01-05	365	0.016	35.1	0.00211	0.00245	1.19	11.2	< 0.000010	6.16	0.19	< 0.000010	< 0.000010	< 0.000030	0.00181		0.0438		
EV OC1	EV OC1 WS 2022-02 MON N	2022-02-07	406	0.049	39.9	<b>0.148</b>	0.00165	2.62	0.884	< 0.000010	24.2	0.81	< 0.000010	< 0.000010	0.00059	0.0006		< 0.0030		
EV OC1	EV OC1 WS 2022-03 MON N	2022-03-16	417	0.06	41	<b>0.116</b>	0.00159	2.75	0.716	< 0.000010	30.9	0.98	< 0.000010	< 0.000010	< 0.000030	0.000541		< 0.0030		
EV OC1	EV OC1 WS 2022-03 WEK13 N	2022-03-21	328	0.041	30.6	<b>0.0908</b>	0.00128	2.14	1.97	< 0.000010	23.2	0.71	< 0.000010	< 0.000010	0.00234	0.000566		< 0.0030		
EV OC1	EV OC1 WS 2022-03 WEK14 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV OC1	EV OC1 WS 2022-04 WEK15 N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV OC1	EV OC1 WS 2022-Q2 N	2022-04-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV OC1	EV OC1 WS 2022-04 WEK17 N	2022-04-18	382	0.049	41.1	<b>0.0684</b>	0.00163	2.64	2.06	< 0.000010	25.7	0.84	< 0.000010	< 0.000010	< 0.000030	0.000877		< 0.0030		
EV OC1	EV OC1 WS 2022-04 WEK18 N	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV OC1	EV OC1 WS 2022-05 MON N	2022-05-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV OC1	EV OC1 WS 2022-05 WEK20 N	2022-05-11	385	0.047	38.2	<b>0.0941</b>	0.0014	2.48	1.31	< 0.000010	24.4	0.81	< 0.000010	< 0.000010	< 0.00150	0.000738		< 0.0030		
EV OC1	EV OC1 WS 2022-05 WEK21 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV OC1	EV OC1 WS 2022-05 WEK22 N	2022-05-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L		Copper mg/L	Iron mg/L	Lead mg/L	
														Acute	Chronic			Acute	Chronic
<b>BC WQG FWAL</b>			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5*	3.3-3.5*
<b>Elkview Operation</b>																			
EV OC1	EV OC1 WS 2022-05 WEK23 N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-06 MON N	2022-06-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-06 WEK25 N	2022-06-13	360	0.0252	0.00013	0.00061	0.362	< 0.020	< 0.000050	0.072	0.0000073	93.2	< 0.00010	0.00011	0.00052	0.488	< 0.000050		
EV OC1	EV OC1 WS 2022-06 WEK26 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-06 WEK27 N	2022-06-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-Q3 N	2022-07-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-07 WEK29 N	2022-07-11	354	0.0223	0.00011	0.0007	0.314	< 0.020	< 0.000050	0.063	0.0000053	84.2	< 0.00010	0.00011	< 0.00050	0.362	< 0.000050		
EV OC1	EV OC1 WS 2022-08 MON N	2022-08-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-09 MON N	2022-09-07	306	0.0851	< 0.00010	0.00122	0.34	0.000026	< 0.000050	0.063	0.0000285	59.5	0.0002	0.00026	< 0.00050	<b>1.1</b>	0.000214		
EV OC1	EV OC1 WS 2022-Q4 N	2022-10-07	295	0.0232	< 0.00010	0.00089	0.414	< 0.020	< 0.000050	0.059	0.0000086	67.4	< 0.00010	< 0.10	< 0.00050	0.592	< 0.000050		
EV OC1	EV OC1 WS 2022-11 MON N	2022-11-09	316	0.0094	< 0.00010	0.00062	0.41	< 0.020	< 0.000050	0.057	< 0.00050	69.9	< 0.00010	< 0.10	< 0.00050	0.56	< 0.000050		
EV SP1	EV SP1 WS 2022-Q1 N	2022-01-17	364	0.0047	< 0.00010	0.00041	0.486	< 0.020	< 0.000050	0.056	0.000006	87.7	< 0.00010	< 0.10	< 0.00050	0.378	< 0.000050		
EV SP1	EV SP1 WS 2022-02 MON N	2022-02-16	956	< 0.0030	0.00063	0.00012	0.0108	< 0.020	< 0.000050	0.041	0.001	178	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV SP1	EV SP1 WS 2022-03 MON N	2022-03-17	978	< 0.0030	0.00069	0.00023	0.0112	< 0.020	< 0.000050	0.046	0.000965	198	0.00011	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV SP1	EV SP1 WS 2022-03 WEK13 N	2022-03-22	983	0.0045	0.00065	< 0.00010	0.0107	< 0.020	< 0.000050	0.043	0.000904	186	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV SP1	EV SP1 WS 2022-03 WEK14 N	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-04 WEK15 N	2022-04-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-Q2 N	2022-04-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-04 WEK17 N	2022-04-20	823	0.0048	0.00067	0.00012	0.0122	< 0.020	< 0.000050	0.045	0.00078	173	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV SP1	EV SP1 WS 2022-04 WEK18 N	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-05 MON N	2022-05-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-05 WEK20 N	2022-05-10	948	< 0.0030	0.00064	< 0.00010	0.0114	< 0.020	< 0.000050	0.043	0.00102	192	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV SP1	EV SP1 WS 2022-05 WEK21 N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-05 WEK22 N	2022-05-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-05 WEK23 N	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-06 MON N	2022-06-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-06 WEK25 N	2022-06-15	983	< 0.0030	0.00062	< 0.00010	0.0103	< 0.020	< 0.000050	0.045	0.00103	179	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV SP1	EV SP1 WS 2022-06 WEK26 N	2022-06-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-06 WEK27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-Q3 N	2022-07-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-07 WEK29 N	2022-07-13	904	0.0072	0.00064	0.00013	0.0105	< 0.020	< 0.000050	0.048	0.000969	170	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV SP1	EV SP1 WS 2022-08 MON N	2022-08-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV SP1	EV SP1 WS 2022-08 MON N	2022-08-09	974	0.0036	0.00074	0.00019	0.0117	< 0.020	< 0.000050	0.086	0.00116	187	0.00014	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV SP1	EV SP1 WS SESIMP 2022_08 N	2022-08-15	974	0.0036	0.00074	0.00019	0.0117	< 0.020	< 0.000050	0.086	0.00116	187	0.00014	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV SP1	EV SP1 WS 2022-09 MON NP	2022-09-08	984	0.0059	0.00068	0.00011	0.0114	< 0.020	< 0.000050	0.057	0.00118	192	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV SP1	EV SP1 WS 2022-Q4 N	2022-10-04	1080	0.0156	0.00069	0.00012	0.014	< 0.020	< 0.000050	0.064	0.00128	206	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV SP1	EV SP1 WS 2022-11 MON N	2022-11-15	1020	0.0043	0.00077	< 0.00010	0.0125	< 0.020	< 0.000050	0.077	0.00102	214	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
EV TC1	EV TC1 WS 2022-03 MON N	2022-03-29	1120	< 0.0060	0.00073	< 0.00020	0.0129	< 0.040	< 0.000100	0.063	0.00142	214	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
EV TC1	EV TC1 WS 2022-Q2 N	2022-04-13	232	0.0195	0.00039	0.00028	0.062	< 0.020	< 0.000050	< 0.010	0.0000946	56	< 0.00010	< 0.10	0.00072	0.013	< 0.000050		
EV TC1	EV TC1 WS 2022-05 MON N	2022-05-03	218	0.007	0.00033	0.00028	0.0638	< 0.020	< 0.000050	< 0.010	0.0000883	56.6	< 0.00010	< 0.10	0.00056	< 0.010	< 0.000050		
EV TC1	EV TC1 WS 2022-06 MON N	2022-06-06	192	0.0212	0.00028	0.00025	0.0487	< 0.020	< 0.000050	< 0.010	0.000126	48	< 0.00010	< 0.10	0.00066	0.016	< 0.000050		
EV TC1	EV TC1 WS 2022_Q3 N	2022-07-05	227	0.0078	0.00033	0.00023	0.0639	< 0.020	< 0.000050	< 0.010	0.000118	48.4	< 0.00010	< 0.10	0.0005	< 0.010	< 0.000050		

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**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL



APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Elkview Operation																				
EV OC1	EV OC1 WS 2022-05 WEK23 N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-06 MON N	2022-06-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-06 WEK25 N	2022-06-13	360	0.044	39.7	<b>0.0607</b>	0.00096	2.29	<b>0.804</b>	< 0.000010	19.8	0.72	0.00001	< 0.00010	0.00032	0.000586		< 0.0030		
EV OC1	EV OC1 WS 2022-06 WEK26 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-06 WEK27 N	2022-06-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-Q3 N	2022-07-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-07 WEK29 N	2022-07-11	354	0.037	34.5	<b>0.053</b>	0.00118	1.72	<b>0.749</b>	< 0.000010	17.5	0.81	< 0.000010	< 0.00010	0.00041	0.000499		< 0.0030		
EV OC1	EV OC1 WS 2022-08 MON N	2022-08-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EV OC1	EV OC1 WS 2022-09 MON N	2022-09-07	306	0.034	37	<b>0.18</b>	0.00221	1.92	0.441	< 0.000010	17.1	0.5	0.000024	< 0.00010	0.00107	0.000418		0.0035		
EV OC1	EV OC1 WS 2022-Q4 N	2022-10-07	295	0.037	40.6	<b>0.0576</b>	0.00115	2.17	0.368	< 0.000010	15.7	0.58	< 0.000010	< 0.00010	< 0.00030	0.000352		< 0.0030		
EV OC1	EV OC1 WS 2022-11 MON N	2022-11-09	316	0.029	34.1	<b>0.0338</b>	0.00093	2.77	0.296	< 0.000010	14	0.51	< 0.000010	< 0.00010	< 0.00030	0.000343		< 0.0030		
EV SP1	EV SP1 WS 2022-Q1 N	2022-01-17	364	0.036	38	<b>0.0512</b>	0.00118	3.35	<b>0.626</b>	< 0.000010	16.6	0.8	< 0.000010	< 0.00010	< 0.00030	0.000442		< 0.0030		
EV SP1	EV SP1 WS 2022-02 MON N	2022-02-16	956	0.04	125	0.00036	0.0192	3.94	<b>139</b>	< 0.000010	1.12	0.12	0.000129	< 0.00010	< 0.00030	<b>0.0097</b>		0.0285		
EV SP1	EV SP1 WS 2022-03 MON N	2022-03-17	978	0.042	140	0.00024	0.0207	4.21	<b>156</b>	< 0.000010	1.22	0.12	0.000137	< 0.00010	< 0.00030	<b>0.0104</b>		0.0288		
EV SP1	EV SP1 WS 2022-03 WEK13 N	2022-03-22	983	0.041	132	0.00062	0.018	3.98	<b>146</b>	< 0.000010	1.24	0.12	0.000134	< 0.00010	< 0.00030	<b>0.00991</b>		0.0269		
EV SP1	EV SP1 WS 2022-03 WEK14 N	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV SP1	EV SP1 WS 2022-04 WEK15 N	2022-04-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV SP1	EV SP1 WS 2022-Q2 N	2022-04-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV SP1	EV SP1 WS 2022-04 WEK17 N	2022-04-20	823	0.041	115	0.00051	0.0172	3.59	<b>179</b>	< 0.000010	1.13	0.12	0.000117	< 0.00010	< 0.00030	0.00825		0.029		
EV SP1	EV SP1 WS 2022-04 WEK18 N	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV SP1	EV SP1 WS 2022-05-MON N	2022-05-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV SP1	EV SP1 WS 2022-05 WEK20 N	2022-05-10	948	0.042	135	0.00036	0.0216	4.06	<b>174</b>	< 0.000010	1.29	0.12	0.000126	< 0.00010	< 0.00030	<b>0.00981</b>		0.0354		
EV SP1	EV SP1 WS 2022-05 WEK21 N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV SP1	EV SP1 WS 2022-05 WEK22 N	2022-05-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV SP1	EV SP1 WS 2022-05 WEK23 N	2022-05-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV SP1	EV SP1 WS 2022-06 MON N	2022-06-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV SP1	EV SP1 WS 2022-06 WEK25 N	2022-06-15	983	0.041	130	0.00031	0.0221	3.8	<b>143</b>	< 0.000010	1.16	0.12	0.000122	< 0.00010	< 0.00030	<b>0.00981</b>		0.0365		
EV SP1	EV SP1 WS 2022-06 WEK26 N	2022-06-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV SP1	EV SP1 WS 2022-06 WEK27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV SP1	EV SP1 WS 2022-Q3 N	2022-07-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV SP1	EV SP1 WS 2022-07 WEK29 N	2022-07-13	904	0.039	110	0.00052	0.0208	3.82	<b>140</b>	< 0.000010	1.11	0.11	0.000127	< 0.00010	< 0.00030	0.0083		0.0328		
EV SP1	EV SP1 WS 2022-08 MON N	2022-08-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EV SP1	EV SP1 WS SESMP 2022_08 N	2022-08-15	974	0.044	131	0.00069	0.0261	4.6	<b>138</b>	< 0.000010	1.26	0.12	0.000188	< 0.00010	< 0.00030	<b>0.00978</b>		0.0383		
EV SP1	EV SP1 WS 2022-09 MON NP	2022-09-08	984	0.04	132	0.00089	0.0252	4.51	<b>128</b>	< 0.000010	1.28	0.12	0.000163	< 0.00010	< 0.00030	<b>0.00919</b>		0.0335		
EV SP1	EV SP1 WS 2022-Q4 N	2022-10-04	1080	0.043	149	0.00051	0.0264	4.54	<b>142</b>	< 0.000010	1.31	0.13	0.000171	< 0.00010	< 0.00030	<b>0.0104</b>		0.0308		
EV SP1	EV SP1 WS 2022-11 MON N	2022-11-15	1020	0.046	149	0.00079	0.0258	4.83	<b>157</b>	< 0.000010	1.39	0.14	0.000172	< 0.00010	< 0.00030	<b>0.0101</b>		0.0282		
EV TC1	EV TC1 WS 2022-Q3 MON N	2022-03-29	1120	0.047	150	0.00075	0.0246	4.84	<b>138</b>	< 0.000020	1.42	0.13	0.0002	< 0.00020	< 0.00060	<b>0.0107</b>		0.0377		
EV TC1	EV TC1 WS 2022-Q2 N	2022-04-13	232	0.001	26.4	0.00037	0.0031	0.84	<b>9.7</b>	< 0.000010	0.81	0.05	0.000012	< 0.00010	0.00044	0.000818		< 0.0030		
EV TC1	EV TC1 WS 2022-05 MON N	2022-05-03	218	0.002	24.5	0.00019	0.00286	0.791	<b>11.2</b>	< 0.000010	0.81	0.05	< 0.000010	< 0.00010	< 0.00030	0.00088		< 0.0030		
EV TC1	EV TC1 WS 2022-06 MON N	2022-06-06	192	0.001	21	0.00058	0.00344	0.688	<b>9.16</b>	< 0.000010	0.61	0.04	0.000012	< 0.00010	0.00054	0.000833		< 0.0030		
EV TC1	EV TC1 WS 2022_Q3 N	2022-07-05	227	0.001	24.1	0.00026	0.00327	0.876	8.11	< 0.000010	0.72	0.05	< 0.000010	< 0.00010	< 0.00030	0.000826		< 0.0030		

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**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Total Metals																
				Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	Iron mg/L	Lead mg/L			
						Acute	Chronic	Chronic		Chronic				Acute	Chronic		Acute	Chronic		
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013		n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>1</sup>	3.3-3.5 <sup>2</sup>
Fording River Operation																				
FR CC1	FR CC1 2022-01-04 N	2022-01-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR CC1	FR CC1 2022-01-06 N	2022-01-06	1560	< 0.0060	0.00079	< 0.00020	0.0305	< 0.040	< 0.000100	0.034	0.000698	325	< 0.00020	0.00021	< 0.00100	< 0.020	< 0.000100	< 0.020	< 0.000100	< 0.000100
FR CC1	FR CC1 2022-01-12 N	2022-01-12	1510	< 0.0060	0.00081	< 0.00020	0.0308	< 0.040	< 0.000100	0.035	0.000709	324	< 0.00020	0.0002	< 0.00100	< 0.020	< 0.000100	< 0.020	< 0.000100	< 0.000100
FR CC1	FR CC1 2022-01-17 N	2022-01-17	1450	< 0.0060	0.00079	< 0.00020	0.0308	< 0.040	< 0.000100	0.032	0.000659	355	< 0.00020	0.00028	< 0.00100	< 0.020	< 0.000100	< 0.020	< 0.000100	< 0.000100
FR CC1	FR CC1 2022-01-24 N	2022-01-24	1500	< 0.0060	0.00077	< 0.00020	0.0308	< 0.040	< 0.000100	0.032	0.00067	330	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100	< 0.020	< 0.000100	< 0.000100
FR CC1	FR CC1 2022-01-31 N	2022-01-31	1480	< 0.0060	0.00079	< 0.00020	0.0292	< 0.040	< 0.000100	0.034	0.000673	313	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100	< 0.020	< 0.000100	< 0.000100
FR CC1	FR CC1 2022-02-07 N	2022-02-07	1470	< 0.0060	0.00076	< 0.00020	0.0329	< 0.040	< 0.000100	0.034	0.00072	339	< 0.00020	0.00022	< 0.00100	< 0.020	< 0.000100	< 0.020	< 0.000100	< 0.000100
FR CC1	FR CC1 2022-02-14 N	2022-02-14	1450	< 0.0060	0.00075	< 0.00020	0.0303	< 0.040	< 0.000100	0.033	0.0003636	322	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100	< 0.020	< 0.000100	< 0.000100
FR CC1	FR CC1 2022-02-21 N	2022-02-21	1460	0.0094	0.00071	< 0.00020	0.0295	< 0.040	< 0.000100	0.031	0.000653	310	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100	< 0.020	< 0.000100	< 0.000100
FR CC1	FR CC1 2022-03-01 N	2022-03-01	1520	0.008	0.00074	0.00013	0.0301	< 0.020	< 0.000050	0.036	0.000687	333	< 0.00010	0.00019	< 0.00100	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.000100
FR CC1	FR CC1 2022-03-07 N	2022-03-07	1600	< 0.0060	0.00083	< 0.00020	0.0353	< 0.040	< 0.000100	0.034	0.00066	346	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100	< 0.020	< 0.000100	< 0.000100
FR CC1	FR CC1 2022-03-14 N	2022-03-14	1510	0.0043	0.00072	< 0.00010	0.0296	< 0.020	< 0.000050	0.033	0.000624	320	0.00014	0.00018	< 0.00050	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.000100
FR CC1	FR CC1 2022-03-21 N	2022-03-21	1320	0.0063	0.00085	< 0.00020	0.0324	< 0.040	< 0.000100	0.036	0.000716	356	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100	< 0.020	< 0.000100	< 0.000100
FR CC1	FR CC1 2022-03-28 N	2022-03-28	1440	0.0276	0.00074	< 0.00020	0.0312	< 0.040	< 0.000100	0.033	0.000728	307	< 0.00020	0.00021	< 0.00100	0.026	0.000102	< 0.000100	< 0.000100	< 0.000100
FR CC1	FR CC1 2022-04-06 N	2022-04-06	1460	0.0363	0.00073	0.00015	0.0288	< 0.020	< 0.000050	0.033	0.000604	334	< 0.00010	0.00023	< 0.00050	0.03	0.00006	< 0.00050	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-04-11 N	2022-04-11	750	0.0066	0.00046	0.00011	0.013	< 0.020	< 0.000050	0.021	0.0003675	156.525	< 0.00010	0.000185	< 0.00050	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-04-13 N	2022-04-13	1460	0.009	0.0008	0.0002	0.0227	< 0.020	< 0.000050	0.034	0.000812	302	0.0001	0.00036	< 0.00050	0.016	< 0.00050	< 0.00050	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-04-18 N	2022-04-18	1460	0.009	0.0008	0.0002	0.0227	< 0.020	< 0.000050	0.034	0.000812	302	0.0001	0.00036	< 0.00050	0.016	< 0.00050	< 0.00050	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-04-25 N	2022-04-25	1310	0.0057	0.00085	0.00013	0.021	< 0.020	< 0.000050	0.034	0.000772	302	< 0.00010	0.00034	< 0.00050	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-05-02 N	2022-05-02	1260	0.0058	0.00085	0.00012	0.0207	< 0.020	< 0.000050	0.032	0.000671	268	0.00012	0.00027	< 0.00050	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-05-06 N	2022-05-06	1270	0.0074	0.00089	0.00021	0.0199	< 0.020	< 0.000050	0.034	0.000611	268	0.00011	0.00025	< 0.00050	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-05-07 N	2022-05-07	1240	0.0092	0.00087	0.00015	0.0206	< 0.020	< 0.000050	0.035	0.00064	254	< 0.00010	0.00033	0.00058	0.013	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-05-08 N	2022-05-08	1140	0.0056	0.0008	< 0.00010	0.0198	< 0.020	< 0.000050	0.034	0.000597	241	0.00029	0.00033	< 0.00050	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-05-09 N	2022-05-09	1150	0.007	0.00079	0.00011	0.0183	< 0.020	< 0.000050	0.033	0.000561	234	< 0.00010	0.0003	< 0.00050	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-05-10 N	2022-05-10	1280	0.0078	0.00082	0.00017	0.0194	< 0.020	< 0.000050	0.032	0.000641	240	< 0.00010	0.00035	< 0.00050	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-05-11 N	2022-05-11	1160	0.0045	0.00084	0.0001	0.0192	< 0.020	< 0.000050	0.031	0.000685	242	< 0.00010	0.00034	0.00051	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-05-12 N	2022-05-12	1150	0.0044	0.00088	0.0001	0.0194	< 0.020	< 0.000050	0.035	0.000652	243	< 0.00010	0.00037	0.00052	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-05-13 N	2022-05-13	1140	0.0043	0.00089	0.00013	0.0185	< 0.020	< 0.000050	0.035	0.000655	244	< 0.00020	0.00036	0.00054	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-05-14 N	2022-05-14	1210	0.0047	0.00082	0.00014	0.0217	< 0.020	< 0.000050	0.034	0.00065	268	< 0.00010	0.00034	< 0.00050	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-05-16 N	2022-05-16	1180	0.0058	0.00085	0.00012	0.0192	< 0.020	< 0.000050	0.034	0.000675	273	< 0.00010	0.00035	0.00059	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-05-25 N	2022-05-25	1060	0.0123	0.00086	0.00013	0.0208	< 0.020	< 0.000050	0.031	0.000665	270	< 0.00010	0.00032	< 0.00050	0.012	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-05-30 N	2022-05-30	994	0.0057	0.00094	0.00017	0.0182	< 0.020	< 0.000050	0.033	0.000534	214	< 0.00010	0.00026	< 0.00050	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-06-13 N	2022-06-13	1000	0.0164	0.00085	0.00011	0.0216	< 0.020	< 0.000050	0.03	0.000449	182	< 0.00010	0.00023	< 0.00050	0.024	< 0.00050	< 0.00050	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-06-27 N	2022-06-27	912	0.0258	0.00071	0.00012	0.0288	< 0.020	< 0.000050	0.026	0.000482	193	< 0.00010	0.00026	< 0.00050	0.023	< 0.00050	< 0.00050	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-07-18 N	2022-07-18	870	0.0054	0.00072	< 0.00010	0.0295	< 0.020	< 0.000050	0.024	0.000567	177	< 0.00010	0.00027	< 0.00050	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-07-25 N	2022-07-25	824	0.0066	0.00073	0.0001	0.0333	< 0.020	< 0.000050	0.026	0.000497	153	< 0.00010	0.00026	< 0.00050	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-08-02 N	2022-08-02	868	0.0085	0.00071	0.00013	0.036	< 0.020	< 0.000050	0.026	0.000499	186	< 0.00010	0.00019	< 0.00050	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-08-08 N	2022-08-08	918	0.0101	0.00074	0.00013	0.0432	< 0.020	< 0.000050	0.027	0.000561	186	< 0.00010	0.0002	< 0.00050	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 2022-08-15 N	2022-08-15	961	0.005	0.00065	0.00011	0.0377	< 0.020	< 0.000050	0.028	0.000469	210	< 0.00010	0.00018	0.00051	< 0.010	< 0.00050	< 0.010	< 0.00050	< 0.00050
FR CC1	FR CC1 WS SESMP 2022-08 N	2022-08-19	979	0.008	0.00064	0.00012	0.0413	< 0.020	< 0.000050	0.025	0.000497	199	< 0.00010	0.00017	&lt					

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Fording River Operation																				
FR CC1	FR CC1 2022-01-04 N	2022-01-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR CC1	FR CC1 2022-01-06 N	2022-01-06	1560	0.497	171	0.00234	0.0637	7.75	<b>186</b>	< 0.000020	15	0.53	0.000053	< 0.00020	< 0.00060	<b>0.0172</b>	0.0309			
FR CC1	FR CC1 2022-01-12 N	2022-01-12	1510	0.527	176	0.00221	0.0624	7.92	<b>174</b>	< 0.000020	15.3	0.55	0.000057	< 0.00020	< 0.00060	<b>0.0171</b>	0.0336			
FR CC1	FR CC1 2022-01-17 N	2022-01-17	1450	0.5	176	0.00262	0.0616	7.42	<b>188</b>	< 0.000020	13.7	0.57	0.000055	< 0.00020	< 0.00060	<b>0.0162</b>	0.0301			
FR CC1	FR CC1 2022-01-24 N	2022-01-24	1500	0.46	174	0.00236	0.0605	7.16	<b>188</b>	< 0.000020	13.4	0.54	0.000052	< 0.00020	< 0.00060	<b>0.0166</b>	0.0328			
FR CC1	FR CC1 2022-01-31 N	2022-01-31	1480	0.479	170	0.00212	0.0594	7.16	<b>182</b>	< 0.000020	13	0.53	0.000053	< 0.00020	0.00063	<b>0.0176</b>	0.0316			
FR CC1	FR CC1 2022-02-07 N	2022-02-07	1470	0.474	182	0.00232	0.0637	7.72	<b>195</b>	< 0.000020	13.8	0.54	0.00005	< 0.00020	< 0.00060	<b>0.0149</b>	0.0341			
FR CC1	FR CC1 2022-02-14 N	2022-02-14	1450	0.46	173	0.0021	0.0585	7.5	<b>189</b>	< 0.000020	12	0.52	0.000055	< 0.00020	< 0.00060	<b>0.0162</b>	0.0301			
FR CC1	FR CC1 2022-02-21 N	2022-02-21	1460	0.423	167	0.00228	0.0594	7.26	<b>187</b>	< 0.000020	12.1	0.52	0.00005	< 0.00020	< 0.00060	<b>0.0155</b>	0.0301			
FR CC1	FR CC1 2022-03-01 N	2022-03-01	1520	0.46	180	0.00238	0.061	7.18	<b>209</b>	< 0.000010	12.5	0.53	0.00005	< 0.00010	< 0.00030	<b>0.0152</b>	0.0332			
FR CC1	FR CC1 2022-03-07 N	2022-03-07	1600	0.533	173	0.00202	0.0647	8.59	<b>211</b>	< 0.000020	12.5	0.63	0.000056	< 0.00020	< 0.00060	<b>0.0166</b>	0.0311			
FR CC1	FR CC1 2022-03-14 N	2022-03-14	1510	0.449	168	0.00212	0.0577	7.33	<b>208</b>	< 0.000010	11.6	0.54	0.000052	< 0.00010	< 0.00030	<b>0.0158</b>	0.0315			
FR CC1	FR CC1 2022-03-21 N	2022-03-21	1320	0.469	182	0.00219	0.0637	8.04	<b>216</b>	< 0.000020	12.7	0.64	0.000064	< 0.00020	< 0.00060	<b>0.0176</b>	0.0322			
FR CC1	FR CC1 2022-03-28 N	2022-03-28	1440	0.432	164	0.00313	0.0576	7.48	<b>195</b>	< 0.000020	11.9	0.51	0.000054	< 0.00020	< 0.00120	<b>0.0155</b>	0.0345			
FR CC1	FR CC1 2022-04-06 N	2022-04-06	1460	0.484	174	0.00378	0.0573	7.31	<b>186</b>	< 0.000010	11.6	0.53	0.000049	< 0.00010	< 0.00120	<b>0.0162</b>	0.03			
FR CC1	FR CC1 2022-04-11 N	2022-04-11	750	0.228	89	0.00125	0.02755	4.125	<b>105.025</b>	< 0.000010	6.18	0.28	0.0000295	< 0.00010	< 0.00030	<b>0.007805</b>	0.0188			
FR CC1	FR CC1 2022-04-13 N	2022-04-13	1460	0.374	159	0.00227	0.052	6.93	<b>235</b>	< 0.000010	10.5	0.48	0.00005	< 0.00010	0.0003	<b>0.0164</b>	0.037			
FR CC1	FR CC1 2022-04-18 N	2022-04-18	1460	0.374	159	0.00227	0.052	6.93	<b>235</b>	< 0.000010	10.5	0.48	0.00005	< 0.00010	0.0003	<b>0.0164</b>	0.037			
FR CC1	FR CC1 2022-04-25 N	2022-04-25	1310	0.413	173	0.00145	0.0488	7.31	<b>251</b>	< 0.000010	10.8	0.48	0.000049	< 0.00010	< 0.00030	<b>0.0148</b>	0.0374			
FR CC1	FR CC1 2022-05-02 N	2022-05-02	1260	0.363	154	0.00134	0.0453	6.83	<b>207</b>	< 0.000010	10	0.42	0.000044	< 0.00010	< 0.00030	<b>0.0141</b>	0.0324			
FR CC1	FR CC1 2022-05-06 N	2022-05-06	1270	0.361	153	0.00149	0.0439	7	<b>206</b>	< 0.000010	9.96	0.43	0.000047	< 0.00010	0.00048	<b>0.0135</b>	0.0284			
FR CC1	FR CC1 2022-05-07 N	2022-05-07	1240	0.354	150	0.00188	0.0435	7.25	<b>224</b>	< 0.000010	9.87	0.4	0.000048	< 0.00010	< 0.00030	<b>0.0134</b>	0.0363			
FR CC1	FR CC1 2022-05-08 N	2022-05-08	1140	0.32	142	0.00176	0.0426	7.26	<b>213</b>	< 0.000010	10.3	0.38	0.00004	< 0.00010	< 0.00030	<b>0.0135</b>	0.0318			
FR CC1	FR CC1 2022-05-09 N	2022-05-09	1150	0.308	133	0.00176	0.0396	6.87	<b>204</b>	< 0.000010	9.57	0.36	0.000041	< 0.00010	< 0.00030	<b>0.0129</b>	0.0319			
FR CC1	FR CC1 2022-05-10 N	2022-05-10	1280	0.291	138	0.00163	0.041	7.01	<b>208</b>	< 0.000010	9.36	0.38	0.000043	< 0.00010	< 0.00030	<b>0.0137</b>	0.0313			
FR CC1	FR CC1 2022-05-11 N	2022-05-11	1160	0.306	153	0.00147	0.0438	6.63	<b>192</b>	< 0.000010	9.68	0.38	0.000046	< 0.00010	< 0.00030	<b>0.0119</b>	0.0335			
FR CC1	FR CC1 2022-05-12 N	2022-05-12	1150	0.347	137	0.0015	0.0401	6.89	<b>204</b>	< 0.000010	9.5	0.37	0.000047	< 0.00010	< 0.00030	<b>0.0144</b>	0.0358			
FR CC1	FR CC1 2022-05-13 N	2022-05-13	1140	0.323	142	0.00142	0.0396	6.91	<b>202</b>	< 0.000010	9.1	0.36	0.000046	< 0.00010	< 0.00030	<b>0.0142</b>	0.0339			
FR CC1	FR CC1 2022-05-14 N	2022-05-14	1210	0.347	141	0.00122	0.0382	6.98	<b>195</b>	< 0.000010	9.72	0.37	0.000042	< 0.00010	< 0.00030	<b>0.0121</b>	0.0328			
FR CC1	FR CC1 2022-05-16 N	2022-05-16	1180	0.349	145	0.0013	0.0392	7.13	<b>193</b>	< 0.000010	9.96	0.38	0.000046	0.00019	< 0.00030	<b>0.0122</b>	0.0345			
FR CC1	FR CC1 2022-05-25 N	2022-05-25	1060	0.347	151	0.00134	0.0363	7.18	<b>178</b>	< 0.000010	10	0.39	0.000044	< 0.00010	< 0.00030	<b>0.0118</b>	0.0315			
FR CC1	FR CC1 2022-05-30 N	2022-05-30	994	0.271	123	0.00131	0.0347	6.14	<b>171</b>	< 0.000010	8.78	0.34	0.000043	< 0.00010	< 0.00030	<b>0.0113</b>	0.026			
FR CC1	FR CC1 2022-06-13 N	2022-06-13	1000	0.253	106	0.00262	0.0309	5.62	<b>154</b>	< 0.000010	8.2	0.33	0.000038	< 0.00010	0.00041	<b>0.011</b>	0.0216			
FR CC1	FR CC1 2022-06-27 N	2022-06-27	912	0.243	112	0.00277	0.0313	5.89	<b>133</b>	< 0.000010	8.52	0.31	0.000035	< 0.00010	0.00064	<b>0.00934</b>	0.0243			
FR CC1	FR CC1 2022-07-18 N	2022-07-18	870	0.222	99.7	0.00117	0.0287	4.88	<b>128</b>	< 0.000010	8.11	0.29	0.000036	< 0.00010	< 0.00030	<b>0.0102</b>	0.0282			
FR CC1	FR CC1 2022-07-25 N	2022-07-25	824	0.248	94.7	0.00117	0.0288	5.52	<b>130</b>	< 0.000010	9.41	0.26	0.000035	< 0.00010	< 0.00030	<b>0.00866</b>	0.0258			
FR CC1	FR CC1 2022-08-02 N	2022-08-02	868	0.269	106	0.0009	0.0302	5.31	<b>128</b>	< 0.000010	9.24	0.28	0.000034	< 0.00010	< 0.00030	<b>0.00929</b>	0.0292			
FR CC1	FR CC1 2022-08-08 N	2022-08-08	918	0.269	105	0.00112	0.0327	5.32	<b>129</b>	< 0.000010	9.93	0.3	0.000036	< 0.00010	0.00036	<b>0.0103</b>	0.0272			
FR CC1	FR CC1 2022-08-15 N	2022-08-15	961	0.311	112	0.00084	0.033	5.46	<b>123</b>	< 0.000010	9.95	0.33	0.000033	< 0.00010	< 0.00030	<b>0.00984</b>	0.0225			
FR CC1	FR CC1 WS SESMP 2022-08 N	2022-08-19	979	0.305	125	0.00096	0.0381	5.4	<b>126</b>	< 0.000010	10.2	0.31	0.000034	< 0.00010	< 0.00030	<b>0.0109</b>	0.0254			
FR CC1	FR CC1 2022-08-22 N	2022-08-22	1050	0.312	111	0.00086	0.0361	5.22	<b>127</b>	< 0.000010	9.71	0.33	0.000036	< 0.00010	< 0.00030	<b>0.011</b>	0.0232			
FR CC1	FR CC1 2022-08-29 N	2022-08-29	969	0.305	124	0.00092	0.0373	5.26	<b>122</b>	< 0.000010	9.99	0.34	0.000038	< 0.00010	< 0.00030	<b>0.0108</b>	0.0238			
FR CC1	FR CC1 RD WS 2022-08-30 NP	2022-08-30	1130	0.246	141	0.00127	0.0447	5.35	<b>140</b>	< 0.000010	12	0.42	0.000033	< 0.00010	< 0.00030	<b>0.0148</b>	0.0272			
FR CC1	FR CC1 WS SEPT-2022 N	2022-09-07	1190	0.374	136	0.00118	0.0392	5.5	<b>138</b>	< 0.000010	11	0.39	0.000037	< 0.00010	< 0.00030	<b>0.0119</b>	0.0259			
FR CC1	FR CC1 2022-09-07 N	2022-09-07	1080	0.273	137	0.0005	0.05	5.8	<b>172</b>	< 0.000010	10.8	0.39	0.000032	< 0.00010	< 0.00030	<b>0.0132</b>	0.0231			
FR CC1	FR CC1 CC1A 2022-09-12 N	2022-09-12	1100	0.343	131	0.00101	0.0476	5.61	<b>143</b>	< 0.000010	10.4	0.38	0.000036	< 0.00010	< 0.00030	<b>0.0119</b>	0.0236			
FR CC1	FR CC1 CC1A 2022-09-17 N	2022-09-17	1240	0.386	134	0.00118	0.0487	5.65	<b>148</b>	< 0.000010	10.5	0.41	0.000038	0.00013	0.00031	<b>0.0131</b>	0.0248			
FR CC1	FR CC1 CC1A 2022-09-18 N	2022-09-18	1260	0.42	153	0.00112	0.0576	6.49	<b>160</b>	< 0.000020	11.9	0.44	0.000051	< 0.00020	< 0.00060	<b>0.0153</b>	0.0424			
FR CC1	FR CC1 CC1A 2022-09-19 N	2022-09-19	1220	0.369	152	0.0022	0.0538	6.88	<b>134</b>	< 0.000010	11.9	0.43	0.000042	< 0.00010	0.00048	<b>0.015</b>	0.024			

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt		Copper mg/L	Iron mg/L	Lead	
														Acute mg/L	Chronic mg/L			Acute mg/L	Chronic mg/L
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5*	3.3-3.5**
Fording River Operation																			
FR CC1	FR FLD1 2022-09-19 N	2022-09-19	1340	0.0116	0.00072	0.00014	0.0296	< 0.020	< 0.000050	0.037	0.000456	292	< 0.00010	0.00023	0.00053	0.01	< 0.000050		
FR CC1	FR CC1 CC1A 2022-09-20 N	2022-09-20	< 0.50	< 0.0030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
FR CC1	FR CC1 CC1A 2022-09-21 N	2022-09-21	1400	0.0125	0.00081	< 0.00010	0.0321	< 0.020	< 0.000050	0.043	0.00034	316	< 0.00010	0.00024	0.00058	0.019	< 0.000050		
FR CC1	FR CC1 CC1A 2022-09-22 N	2022-09-22	1400	0.0192	0.00073	< 0.00020	0.0345	< 0.040	< 0.000100	0.036	0.000262	290	< 0.00020	0.00024	< 0.00100	< 0.020	0.000152		
FR CC1	FR CC1 RD-WS 2022-09-01 NP	2022-09-22	1330	0.0194	0.00073	0.00018	0.0336	< 0.020	< 0.000050	0.035	0.000217	266	0.00011	0.00021	< 0.00050	0.015	< 0.000050		
FR CC1	FR CC1 CC1A 2022-09-23 N	2022-09-23	1340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR CC1	FR CC1 CC1A 2022-09-24 N	2022-09-24	1300	0.0151	0.00076	0.00099	0.0367	<b>0.000776</b>	< 0.000100	0.039	0.00106	286	0.00099	0.00103	0.00165	< 0.020	0.000776		
FR CC1	FR CC1 CC1A 2022-09-25 N	2022-09-25	1170	0.0135	0.00068	0.00018	0.0555	< 0.020	< 0.000050	0.033	0.00038	259	< 0.00010	0.0002	0.00078	0.017	0.000191		
FR CC1	FR CC1 CC1A 2022-09-26 N	2022-09-26	1260	0.0121	0.00064	0.00015	0.0362	< 0.020	< 0.000050	0.016	0.000368	287	< 0.00010	0.0002	< 0.00050	< 0.010	< 0.000050		
FR CC1	FR CC1 CC1A 2022-10-03 N	2022-10-03	1360	0.0134	0.00068	0.00013	0.045	< 0.020	< 0.000050	0.034	0.000444	258	< 0.00010	0.00025	0.00059	0.015	< 0.000050		
FR CC1	FR CC1 CC1A 2022-10-11 N	2022-10-11	1310	0.0225	0.00063	0.00019	0.0443	< 0.020	< 0.000050	0.038	0.000721	245	0.00017	0.00016	< 0.00050	0.02	< 0.000050		
FR CC1	FR CC1 CC1A 2022-10-17 N	2022-10-17	1050	0.0246	0.00056	0.00017	0.0545	< 0.020	< 0.000050	0.026	0.000594	204	0.00011	0.00022	< 0.00050	0.024	< 0.000050		
FR CC1	FR CC1 2022-10-24 N	2022-10-24	1090	0.0356	0.00056	0.00015	0.0553	< 0.020	< 0.000050	0.031	0.000586	258	< 0.00010	0.0002	< 0.00050	0.025	< 0.000050		
FR CC1	FR CC1A 2022-10-31 N	2022-10-31	1170	0.0345	0.00058	0.00022	0.0541	< 0.040	< 0.000100	0.03	0.000655	252	< 0.00020	< 0.20	< 0.00100	0.03	< 0.000100		
FR CC1	FR CC1 2022-11-07 N	2022-11-07	1060	0.037	0.0005	0.00012	0.0564	< 0.020	< 0.000050	0.021	0.000476	239	0.00016	0.00021	0.00051	0.056	0.000052		
FR CC1	FR CC1 2022-11-14 N	2022-11-14	1080	0.014	0.00056	< 0.00020	0.056	< 0.040	< 0.000100	0.028	0.00051	257	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
FR CC1	FR CC1 2022-11-21 N	2022-11-21	1250	0.0084	0.00064	< 0.00010	0.0384	< 0.020	< 0.000050	0.037	0.000555	270	< 0.00010	0.00019	< 0.00050	< 0.010	< 0.000050		
FR EC1	FR EC1 MON 2022-01-01 N	2022-03-23	1460	0.0054	0.00069	0.0001	0.0328	< 0.020	< 0.000050	0.028	0.000602	306	< 0.00010	0.00017	< 0.00050	< 0.010	< 0.000050		
FR EC1	FR EC1 MON 2022-03-01 N	2022-03-28	706	0.129	0.00115	0.00046	0.101	< 0.020	< 0.000050	0.025	0.000161	128	0.00026	0.00108	0.00089	0.037	0.000318		
FR EC1	FR EC1 MON 2022-04-01 N	2022-04-04	455	1.25	0.00091	0.00081	0.121	0.000076	< 0.000050	0.028	0.000174	94.6	0.00178	0.00138	0.00258	<b>1.08</b>	0.000979		
FR EC1	FR EC1 WEK 2022-04-11 N	2022-04-14	1210	0.102	0.00091	0.00036	0.0644	< 0.020	< 0.000050	0.032	0.000222	229	0.00019	0.00083	0.00074	0.158	0.000199		
FR EC1	FR EC1 WEK 2022-04-18 N	2022-04-19	1280	0.0225	0.00079	0.00024	0.047	< 0.040	< 0.000100	0.029	0.000212	255	< 0.00020	0.00052	< 0.00100	0.04	< 0.000100		
FR EC1	FR EC1 WEK 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR EC1	FR EC1 MON 2022-05-01 N	2022-05-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR EC1	FR EC1 WEK 2022-05-09 N	2022-05-12	1690	0.0098	0.00064	0.00031	0.0292	< 0.040	< 0.000100	0.038	0.0000211	293	< 0.00020	0.00037	< 0.00100	< 0.020	< 0.000100		
FR EC1	FR EC1 WEK 2022-05-16 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR EC1	FR EC1 WEK 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR EC1	FR EC1 WEK 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR EC1	FR EC1 MON 2022-06-01 N	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR EC1	FR EC1 WEK 2022-06-13 N	2022-06-13	2030	0.0091	0.0006	0.00024	0.0182	< 0.040	< 0.000100	0.037	0.0000134	334	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
FR EC1	FR EC1 WEK 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR EC1	FR EC1 WEK 2022-06-27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR EC1	FR EC1 MON 2022-07-01 N	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR EC1	FR EC1 WEK 2022-07-11 N	2022-07-12	1730	0.0823	0.00082	0.00033	0.036	< 0.040	< 0.000100	0.039	0.000104	256	< 0.00020	0.00046	0.00105	0.052	< 0.000100		
FR FR1	FR FR1 WEK 2022-03-28 N	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR FR1	FR FR1 MON 2022-04-01 N	2022-04-04	217	0.704	0.00014	0.00023	0.0558	< 0.020	< 0.000050	< 0.010	0.0000508	59	0.00213	0.00012	0.00068	0.214	0.000162		
FR FR1	FR FR1 WEK 2022-04-11 N	2022-04-11	317	0.0701	< 0.00010	0.00014	0.058	< 0.020	< 0.000050	< 0.010	0.0000306	82.2	0.00022	< 0.10	< 0.00050	0.06	< 0.000050		
FR FR1	FR FR1 WEK 2022-04-18 NP	2022-04-20	329	0.104	< 0.00010	0.00017	0.051	< 0.020	< 0.000050	< 0.010	0.0000345	74.9	0.00029	< 0.10	< 0.00050	0.069	0.000059		
FR FR1	FR FR1 WS 2022-04-25 NP	2022-04-25	259	0.118	< 0.00010	0.00016	0.0518	< 0.020	< 0.000050	< 0.010	0.0000285	67.2	0.0003	< 0.10	< 0.00050	0.075	< 0.000050		
FR FR1	FR FR1 WS 2022-04-26 NP	2022-04-26	154	1.05	0.00016	0.00064	0.0601	0.000085	< 0.000050	< 0.010	0.000276	37.8	0.00183	0.00088	0.00247	<b>1.03</b>	0.000995		
FR FR1	FR FR1 WEK 2022-04-25 NP	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR FR1	FR FR1 MON 2022-05-02 NP	2022-05-03	198	0.199	< 0.00010	0.00019	0.047	< 0.020	< 0.000050	< 0.010	0.0000746	52	0.00044	0.00021	0.00076	0.138	0.00012		
FR FR1	FR FR1 WEK 2022-05-09 NP	2022-05-10	232	0.0563	< 0.00010	0.00014	0.0428	< 0.020	< 0.000050	< 0.010	0.0000312	58.9	0.00028	< 0.10	< 0.00050	0.041	< 0.000050		
FR FR1	FR FR1 WEK 2022-05-16 NP	2022-05-17	221	0.0478	< 0.00010	0.00016	0.0382	< 0.020	< 0.000050	< 0.010	0.0000272	52.3	0.00015	< 0.10	< 0.00050	0.038	< 0.000050		
FR FR1	FR FR1 WEK 2022-05-23 NP	2022-05-25	223	0.0306	< 0.00010	0.00014	0.0377	< 0.020	< 0.000050	< 0.010	0.0000226	54.6	< 0.00010	< 0.10	< 0.00050	0.03	< 0.000050		
FR FR1	FR FR1 WEK 2022-05-30 NP	2022-05-31	197	0.0185	< 0.00010	< 0.00010	0.0362	< 0.020	< 0.000050	< 0.010	0.0000187	50.4	0.00011	< 0.10	< 0.00050	0.016	< 0.000050		
FR FR1	FR FR1 MON 2022-06-06 NP	2022-06-07	158	0.0355	< 0.00010	0.00014	0.0343	< 0.020	< 0.000050	< 0.010	0.0000169	42.3	0.00024	< 0.10	< 0.00050	0.03	< 0.000050		
FR FR1	FR FR1 WEK 2022-06-13 NP	2022-06-14	250	0.0574	0.00015	0.00018	0.0406	< 0.020	< 0.000050	< 0.010	0.000068	61.1	0.00015	0.00014	< 0.00050	0.087	0.000084		
FR FR1	FR DC1 WEK 2022-06-20 NP	2022-06-21	136	0.0488	< 0.00010	0.00013	0.0273	< 0.020	< 0.000050	< 0.010	0.0000243	34.8	0.00016	< 0.10	< 0.00050	0.043	0.000054		
FR FR1	FR FR1 WEK 2022-06-27 NP	2022-06-28	97.2	0.04343333	< 0.00010	0.000127	0.0173	< 0.020	< 0.000050	< 0.010	1.43333E-05	24.15	0.00018	< 0.10	< 0.00050	0.051333	5.93333E-05		

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Fording River Operation																				
FR CC1	FR FLD1 2022-09-19 N	2022-09-19	1340	0.429	167	0.00119	0.0616	6.77	<b>181</b>	< 0.000010	13.1	0.43	0.000041	< 0.00010	< 0.00030	<b>0.014</b>	0.0298			
FR CC1	FR CC1 CC1A 2022-09-20 N	2022-09-20	< 0.50*	0.0010	0.0050	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.00010	< 0.00030	< 0.000010	< 0.0030			
FR CC1	FR CC1 CC1A 2022-09-21 N	2022-09-21	1400	0.466	169	0.00212	0.0689	7.06	<b>185</b>	< 0.000010	13.6	0.48	0.000048	< 0.00010	< 0.00030	<b>0.0169</b>	0.0221			
FR CC1	FR CC1 CC1A 2022-09-22 N	2022-09-22	1400	0.418	156	0.00176	0.0581	6.14	<b>162</b>	< 0.000020	11.9	0.43	0.000044	< 0.00020	0.00087	<b>0.0158</b>	0.0207			
FR CC1	FR CC1 RD-WS 2022-09-01 NP	2022-09-22	1330	0.298	159	0.0014	0.0564	6.96	<b>166</b>	< 0.000010	12.5	0.47	0.000038	< 0.00010	0.00073	<b>0.0151</b>	0.0151			
FR CC1	FR CC1 CC1A 2022-09-23 N	2022-09-23	1340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR CC1	FR CC1 CC1A 2022-09-24 N	2022-09-24	1300	0.344	158	0.0021	0.0602	6.56	<b>169</b>	< 0.000020	12.2	0.46	0.000806	< 0.00020	< 0.00060	<b>0.0172</b>	0.0191			
FR CC1	FR CC1 CC1A 2022-09-25 N	2022-09-25	1170	0.387	143	0.0014	0.0505	5.85	<b>169</b>	< 0.000010	11.5	0.41	0.000036	< 0.00010	0.00035	<b>0.0126</b>	0.0274			
FR CC1	FR CC1 CC1A 2022-09-26 N	2022-09-26	1260	0.347	150	0.00123	0.0534	5.8	<b>151</b>	< 0.000010	11.8	0.42	0.00004	< 0.00010	< 0.00030	<b>0.0127</b>	0.0183			
FR CC1	FR CC1 CC1A 2022-10-03 N	2022-10-03	1360	0.382	139	0.00146	0.0519	5.79	<b>164</b>	< 0.000010	11.4	0.4	0.000036	< 0.00010	< 0.00030	<b>0.0127</b>	0.0272			
FR CC1	FR CC1 CC1A 2022-10-11 N	2022-10-11	1310	0.303	137	0.00438	0.0449	5.25	<b>154</b>	< 0.000010	9.53	0.39	0.000039	< 0.00010	0.00052	<b>0.0116</b>	0.0396			
FR CC1	FR CC1 CC1A 2022-10-17 N	2022-10-17	1050	0.259	123	0.0028	0.0428	4.92	<b>126</b>	< 0.000010	9.04	0.33	0.000035	< 0.00010	0.00046	<b>0.00935</b>	0.0305			
FR CC1	FR CC1 2022-10-24 N	2022-10-24	1090	0.323	129	0.00317	0.0462	5.5	<b>142</b>	< 0.000010	9.74	0.38	0.000038	< 0.00010	0.00039	<b>0.0114</b>	0.0292			
FR CC1	FR CC1A 2022-10-31 N	2022-10-31	1170	0.31	127	0.00254	0.0431	4.88	<b>138</b>	< 0.000020	8.9	0.38	0.000038	< 0.00020	0.00071	<b>0.0128</b>	0.0318			
FR CC1	FR CC1 2022-11-07 N	2022-11-07	1060	0.222	135	0.00311	0.0413	5.19	<b>138</b>	< 0.000010	9.68	0.37	0.000032	< 0.00010	0.00105	<b>0.0115</b>	0.0219			
FR CC1	FR CC1 2022-11-14 N	2022-11-14	1080	0.296	135	0.00142	0.0433	5.16	<b>136</b>	< 0.000020	9.15	0.38	0.000028	< 0.00020	< 0.00060	<b>0.0115</b>	0.0261			
FR CC1	FR CC1 2022-11-21 N	2022-11-21	1250	0.405	142	0.00122	0.0528	6.03	<b>181</b>	< 0.000010	12	0.43	0.000044	< 0.00010	< 0.00030	<b>0.0136</b>	0.0294			
FR EC1	FR EC1 MON 2022-01-01 N	2022-03-23	1460	0.304	163	0.00116	0.057	6.84	<b>183</b>	< 0.000010	13	0.49	0.000045	< 0.00010	< 0.00030	<b>0.0164</b>	0.0322			
FR EC1	FR EC1 MON 2022-03-01 N	2022-03-28	706	0.043	99.6	<b>0.0252</b>	0.01	4.25	<b>116</b>	< 0.000010	7.28	0.26	0.000028	< 0.00010	0.00088	<b>0.00789</b>	0.0071			
FR EC1	FR EC1 MON 2022-04-01 N	2022-04-04	455	0.03	65.5	<b>0.0437</b>	0.008	3.92	<b>67.4</b>	0.00003	6.01	0.27	0.000052	< 0.00010	< 0.0030	0.00464	0.0121			
FR EC1	FR EC1 WEK 2022-04-11 N	2022-04-14	1210	0.085	198	<b>0.0231</b>	0.0154	5.22	<b>233</b>	< 0.000010	11.2	0.3	0.00003	< 0.00010	0.00107	<b>0.0142</b>	0.0097			
FR EC1	FR EC1 WEK 2022-04-18 N	2022-04-19	1280	0.089	198	<b>0.0167</b>	0.014	4.41	<b>232</b>	< 0.000020	11.2	0.34	0.000025	< 0.00020	< 0.00060	<b>0.0141</b>	0.0087			
FR EC1	FR EC1 WEK 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 MON 2022-05-01 N	2022-05-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 WEK 2022-05-09 N	2022-05-12	1690	0.119	268	0.00446	0.0163	5.15	<b>285</b>	< 0.000020	15.1	0.39	0.000025	< 0.00020	< 0.00060	<b>0.0189</b>	< 0.0060			
FR EC1	FR EC1 WEK 2022-05-16 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 WEK 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 WEK 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 MON 2022-06-01 N	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 WEK 2022-06-13 N	2022-06-13	2030	0.139	297	0.00283	0.0168	5.14	<b>328</b>	< 0.000020	16.7	0.39	0.00003	< 0.00020	< 0.00060	<b>0.0192</b>	< 0.0060			
FR EC1	FR EC1 WEK 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 WEK 2022-06-27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 MON 2022-07-01 N	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR EC1	FR EC1 WEK 2022-07-11 N	2022-07-12	1730	0.122	222	<b>0.00836</b>	0.0153	5.64	<b>285</b>	< 0.000020	13.9	0.39	0.000035	< 0.00020	0.00255	<b>0.0166</b>	0.0074			
FR FR1	FR FR1 WEK 2022-03-28 N	2022-03-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR FR1	FR FR1 MON 2022-04-01 N	2022-04-04	217	0.006	21.3	<b>0.00757</b>	0.00126	0.793	<b>14.5</b>	0.000029	0.69	0.09	0.000028	< 0.00010	0.026	0.000844	0.0039			
FR FR1	FR FR1 WEK 2022-04-11 N	2022-04-11	317	0.012	37	<b>0.00297</b>	0.00111	0.969	<b>34</b>	< 0.000010	0.94	0.14	< 0.000010	< 0.00010	0.00102	0.00142	< 0.0030			
FR FR1	FR FR1 WEK 2022-04-18 NP	2022-04-20	329	0.011	33.9	<b>0.00309</b>	0.00092	0.94	<b>35.2</b>	< 0.000010	0.79	0.13	< 0.000010	< 0.00010	0.00264	0.00139	< 0.0030			
FR FR1	FR FR1 WS 2022-04-25 NP	2022-04-25	259	0.009	27.9	<b>0.00202</b>	0.001	0.773	<b>24.2</b>	< 0.000010	0.8	0.11	< 0.000010	< 0.00010	0.00261	0.00113	0.0036			
FR FR1	FR FR1 WS 2022-04-26 NP	2022-04-26	154	0.005	13.8	<b>0.00444</b>	0.00408	0.851	<b>9.93</b>	0.00008	0.59	0.06	0.000078	< 0.00010	0.0137	0.000748	0.0167			
FR FR1	FR FR1 WEK 2022-04-25 NP	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR FR1	FR FR1 MON 2022-05-02 NP	2022-05-03	198	0.007	18.8	<b>0.0172</b>	0.00113	0.659	<b>13.7</b>	0.000012	0.66	0.09	0.000013	< 0.00010	< 0.00450	0.00076	0.0043			
FR FR1	FR FR1 WEK 2022-05-09 NP	2022-05-10	232	0.007	23.7	<b>0.00387</b>	0.00085	0.651	<b>16.8</b>	< 0.000010	0.71	0.09	< 0.000010	< 0.00010	0.00122	0.000925	< 0.0030			
FR FR1	FR FR1 WEK 2022-05-16 NP	2022-05-17	221	0.007	19.4	<b>0.00305</b>	0.00082	0.592	<b>14.6</b>	< 0.000010	0.63	0.09	< 0.000010	< 0.00010	0.00096	0.000838	< 0.0030			
FR FR1	FR FR1 WEK 2022-05-23 NP	2022-05-25	223	0.006	19.9	<b>0.00291</b>	0.00054	0.569	<b>11.7</b>	< 0.000010	0.69	0.09	< 0.000010	< 0.00010	0.00036	0.000875	< 0.0030			
FR FR1	FR FR1 WEK 2022-05-30 NP	2022-05-31	197	0.006	19.2	<b>0.00168</b>	0.00058	0.542	<b>10.9</b>	< 0.000010	0.64	0.1	< 0.000010	< 0.00010	0.00031	0.000818	< 0.0030			
FR FR1	FR FR1 MON 2022-06-06 NP	2022-06-07	158	0.003	14.1	<b>0.00197</b>	0.00054	0.451	<b>5.68</b>	< 0.000010	0.56	0.08	< 0.000010	< 0.00010	0.00062	0.000614	< 0.0030			
FR FR1	FR FR1 WEK 2022-06-13 NP	2022-06-14	250	0.021	25	<b>0.00944</b>	0.00277	1.02	<b>26.1</b>	< 0.000010	1.39	0.09	< 0.000010	< 0.00010	0.00096	0.00163	0.0034			
FR FR1	FR DC1 WEK 2022-06-20 NP	2022-06-21	136	0.003	11.6	<b>0.00378</b>	< 0.00050	0.449	<b>4.81</b>	< 0.000010	0.59	0.07	< 0.000010	< 0.00010	0.0009	0.00051	< 0.0030			
FR FR1	FR FR1 WEK 2022-06-27 NP	2022-06-28	97.2	0.003	7.402	<b>0.003523333</b>	0.00058666													

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt		Copper mg/L	Iron mg/L	Lead	
														Acute	Chronic			Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5*	3.3-3.5*
Fording River Operation																			
FR FR1	FR FR1 QTR 2022-07-04 NP	2022-07-05	133	0.0233	< 0.00010	0.00011	0.0228	< 0.020	< 0.000050	< 0.010	0.0000137	34.8	0.00014	< 0.10	< 0.00050	0.02	< 0.000050		
FR FR1	FR FR1 WEK 2022-07-11 NP	2022-07-13	135	0.044	< 0.00010	0.00012	0.0232	< 0.020	< 0.000050	< 0.010	0.0000127	36.1	0.00017	< 0.10	< 0.00050	0.03	< 0.000050		
FR FR1	FR FR1 MON 2022-08-01 NP	2022-08-09	132	0.009	< 0.00010	< 0.00010	0.0218	< 0.020	< 0.000050	< 0.010	0.0000112	36.1	0.00011	< 0.10	< 0.00050	< 0.010	< 0.000050		
FR FR1	FR FR1 MON 2022-09-05 NP	2022-09-13	223	0.0067	< 0.00010	0.00012	0.0343	< 0.020	< 0.000050	< 0.010	0.0000176	53.3	0.00042	< 0.10	< 0.00050	< 0.010	< 0.000050		
FR FR1	FR FR1 QTR 2022-10-03 NP	2022-10-12	261	0.0101	< 0.00010	0.00013	0.0416	< 0.020	< 0.000050	< 0.010	0.000021	69.9	0.00017	< 0.10	< 0.00050	< 0.010	< 0.000050		
FR FR1	FR FR1 MON 2022-11-07 NP	2022-11-03	296	0.0047	< 0.00010	0.00012	0.0441	< 0.020	< 0.000050	< 0.010	0.000017	76.6	< 0.00010	< 0.10	0.00219	< 0.010	< 0.000050		
FR FR2	FR FR2 MON 2022-01-04 N	2022-01-08	286	0.0054	< 0.00010	< 0.00010	0.0396	< 0.020	< 0.000050	< 0.010	0.0000174	75.2	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
FR FR2	FR FR2 MON 2022-02-01 N	2022-02-09	660	0.0056	0.00024	< 0.00010	0.0934	< 0.020	< 0.000050	0.012	0.0000956	152	< 0.00010	0.0001	< 0.00050	0.032	< 0.000050		
FR FR2	FR FR2 WS 2022-02-28 N	2022-02-28	727	0.0041	0.00024	0.00012	0.0996	< 0.020	< 0.000050	0.013	0.0000953	154	0.00028	< 0.10	< 0.00050	0.039	< 0.000050		
FR FR2	FR FR2 MON 2022-03-01 N	2022-03-03	714	0.0081	0.00026	0.0001	0.0975	< 0.020	< 0.000050	0.011	0.0000943	153	0.00014	< 0.00050	0.047	< 0.000050			
FR FR2	FR FR2 WEK 2022-03-14 N	2022-03-14	702	0.0112	0.00022	< 0.00010	0.096	< 0.020	< 0.000050	0.013	0.0000764	165	0.00016	< 0.10	< 0.00050	0.053	< 0.000050		
FR FR2	FR FR2 WEK 2022-03-15 NP	2022-03-15	759	0.0327	0.00025	< 0.00010	0.0996	< 0.020	< 0.000050	0.013	0.0000867	162	< 0.00020	0.00013	< 0.00050	0.111	< 0.000050		
FR FR2	FR FR2 WS 2022-03-16 NP	2022-03-16	668	0.0723	0.00025	0.00014	0.102	< 0.020	< 0.000050	0.012	0.0000933	155	0.00021	0.00014	< 0.00050	0.124	< 0.000050		
FR FR2	FR FR2 WEK 2022-03-16 NP	2022-03-16	630	0.0973	0.00026	0.00019	0.0972	< 0.020	< 0.000050	0.012	0.0000996	154	0.0003	0.0002	< 0.00050	0.174	< 0.000050		
FR FR2	FR FR2 2 WS 2022-03-17 NP	2022-03-17	676	0.0609	0.00026	0.00016	0.0992	< 0.020	< 0.000050	0.013	0.0000838	177	0.00023	0.00016	< 0.00050	0.121	< 0.000050		
FR FR2	FR FR2 WEK 2022-03-17 NP	2022-03-17	713	0.256	0.00031	0.00028	0.11	< 0.020	< 0.000050	0.013	0.000138	151	0.00049	0.00037	< 0.00083	0.354	< 0.000381		
FR FR2	FR FR2 2 WS 2022-03-18 NP	2022-03-18	618	0.0782	0.00028	0.00016	0.0996	< 0.020	< 0.000050	0.011	0.000107	137	0.00026	0.00017	< 0.00050	0.194	< 0.000144		
FR FR2	FR FR2 WEK 2022-18 NP	2022-03-18	681	0.0643	0.0003	0.00026	0.104	< 0.020	< 0.000050	0.013	0.000108	177	0.00025	0.00022	< 0.00050	0.144	< 0.000128		
FR FR2	FR FR2 WS 2022-03-19 NP	2022-03-19	680	0.113	0.00031	0.00017	0.103	< 0.020	< 0.000050	0.014	0.000102	162	0.00028	0.00019	< 0.00050	0.17	< 0.000148		
FR FR2	FR FR2 WS 2022-03-20 NP	2022-03-20	666	0.031	0.00028	0.00012	0.0943	< 0.020	< 0.000050	0.013	0.0000942	154	0.00016	0.00014	< 0.00050	0.116	< 0.000069		
FR FR2	FR FR2 2 WS 2022-03-21 NP	2022-03-21	645	0.0447	0.0003	0.00016	0.0948	< 0.020	< 0.000050	0.014	0.000102	153	0.0002	0.00019	< 0.00050	0.162	< 0.000124		
FR FR2	FR FR2 2 WS 2022-03-22 NP	2022-03-22	646	0.0279	0.0003	0.00012	0.0944	< 0.020	< 0.000050	0.013	0.0000904	149	0.00015	0.00016	< 0.00050	0.091	< 0.000056		
FR FR2	FR FR2 2 WS 2022-03-23 NP	2022-03-23	648	0.037	0.00032	0.00015	0.0957	< 0.020	< 0.000050	0.012	0.000101	150	0.00025	0.00017	< 0.00061	0.085	< 0.000073		
FR FR2	FR DC1 WEK 2022-03-28 N	2022-03-30	656	0.0403	0.00035	0.00022	0.0968	< 0.020	< 0.000050	0.014	0.0000952	152	0.00017	0.00021	< 0.00050	0.097	< 0.000050		
FR FR2	FR FR2 MON 2022-04-01 N	2022-04-05	594	0.1205	0.000795	0.00026	0.129	< 0.020	< 0.000050	0.0125	0.000149	142.5	0.000285	0.00062	< 0.00061	0.1275	< 0.0001215		
FR FR2	FR FR2 WEK 2022-04-11 N	2022-04-12	602	0.0313	0.00081	0.00018	0.107	< 0.020	< 0.000050	0.013	0.000147	135	0.00018	0.00088	< 0.00050	0.065	< 0.000050		
FR FR2	FR DC1 WEK 2022-04-18 N	2022-04-18	634	0.0226	0.00069	0.00014	0.0999	< 0.020	< 0.000050	0.014	0.000198	149	0.00013	0.00054	< 0.00050	0.054	< 0.000050		
FR FR2	FR FLD WEK 2022-04-18 N	2022-04-19	635	0.01485	0.00033	0.00013	0.08905	< 0.020	< 0.000050	0.013	0.000175	157.5	< 0.00010	0.00021	< 0.00050	0.0455	< 0.000050		
FR FR2	FR FLD WEK 2022-04-25 N	2022-04-27	< 0.50	< 0.00030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
FR FR2	FR FR2 MON 2022-05-01 N	2022-05-04	< 0.50	< 0.00030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
FR FR2	FR FR2 WEK 2022-05-09 N	2022-05-10	442	0.111	0.00024	0.00016	0.0696	< 0.020	< 0.000050	< 0.010	0.000182	97.3	0.00025	0.00041	0.00061	0.156	< 0.000115		
FR FR2	FR FR2 WEK 2022-05-16 N	2022-05-19	434	0.0751	0.00027	0.00027	0.0795	< 0.020	< 0.000050	< 0.010	0.000281	106	0.00026	0.00082	0.00077	0.298	< 0.00029		
FR FR2	FR FLD WEK 2022-05-23 N	2022-05-26	380	0.039	0.0002	0.00014	0.051	< 0.020	< 0.000050	< 0.010	0.000122	90.3	0.00018	0.00015	< 0.00050	0.084	< 0.000062		
FR FR2	FR FR2 WS 2022-05-27 NP	2022-05-27	< 0.50	< 0.00030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
FR FR2	FR FR2 WEK 2022-05-30 N	2022-06-01	286	0.0426	0.00016	0.00014	0.0494	< 0.020	< 0.000050	< 0.010	0.0000959	67.2	0.00023	0.00016	< 0.00050	0.104	< 0.000101		
FR FR2	FR DC3 MON 2022-06-01 N	2022-06-08	250	0.0249	0.00019	0.00012	0.041	< 0.020	< 0.000050	< 0.010	0.0000528	62.2	0.00014	< 0.10	< 0.00050	0.039	< 0.000050		
FR FR2	FR FR2 MON 2022-06-01 N	2022-06-08	212	0.15045	0.00012	0.00025	0.04325	< 0.020	< 0.000050	< 0.010	0.0001139	56.7	0.000395	0.000325	< 0.00050	0.3105	< 0.000301		
FR FR2	FR DC1 WEK 2022-06-13 N	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR FR2	FR FR2 WEK 2022-06-20 N	2022-06-21	183	0.085	0.000115	0.000155	0.03245	< 0.020	< 0.000050	< 0.010	0.0000549	45.1	0.000245	0.000125	< 0.00050	0.1135	< 0.000104		
FR FR2	FR DC1 WEK 2022-06-20 N	2022-06-21	186	0.194	0.00013	0.00021	0.0362	< 0.020	< 0.000050	< 0.010	0.0000725	49	0.00044	0.00018	0.00096	0.283	< 0.000176		
FR FR2	FR DC1 WEK 2022-06-27 N	2022-06-28	186	0.212	0.00013	0.0002	0.0369	< 0.020	< 0.000050	< 0.010	0.0000756	51.4	0.00043	0.00019	0.0006	0.269	< 0.000168		
FR FR2	FR FR2 MON 2022-07-01 N	2022-07-04	207	0.0385	0.000125	0.000155	0.0323	< 0.020	< 0.000050	< 0.010	0.00006255	53.05	0.00018	< 0.10	< 0.00050	0.062	< 0.0000595		
FR FR2	FR FR2 WEK 2022-07-05 N	2022-07-05	227	0.0147	0.00013	0.00013	0.0341	< 0.020	< 0.000050	< 0.010	0.0000504	56.8	0.00015	< 0.10	< 0.00050	0.02	< 0.000050		
FR FR2	FR FR2 WEK 2022-07-06 N	2022-07-06	223	0.0473	0.00013	0.00014	0.0316	< 0.020	< 0.000050	< 0.010	0.000062	52.4	0.00021	< 0.10	< 0.00050	0.059	< 0.000066		
FR FR2	FR DC1 WEK 2022-07-07 N	2022-07-07	238	0.0235	0.00013	0.00013	0.0322	< 0.020	< 0.000050	< 0.010	0.0000571	54.2	0.00014	< 0.10	< 0.00050	0.028	< 0.000050		

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Fording River Operation																				
FR FR1	FR FR1 QTR 2022-07-04 NP	2022-07-05	133	0.003	10.4	<b>0.00263</b>	< 0.00050	0.386	<b>4.62</b>	< 0.000010	0.42	0.07	< 0.000010	< 0.000010	0.00042	0.000529	< 0.0030			
FR FR1	FR FR1 WEK 2022-07-11 NP	2022-07-13	135	0.003	10.5	<b>0.00279</b>	< 0.00050	0.412	<b>4.63</b>	< 0.000010	0.43	0.07	< 0.000010	< 0.000010	0.00073	0.000552	< 0.0030			
FR FR1	FR FR1 MON 2022-08-01 NP	2022-08-09	132	0.003	11.7	0.00115	< 0.00050	0.403	<b>5.4</b>	< 0.000010	0.38	0.06	< 0.000010	< 0.000010	< 0.00030	0.000572	< 0.0030			
FR FR1	FR FR1 MON 2022-09-05 NP	2022-09-13	223	0.007	20.2	<b>0.0016</b>	< 0.00050	0.684	<b>14.8</b>	< 0.000010	0.55	0.1	< 0.000010	< 0.000010	< 0.00030	0.000888	< 0.0030			
FR FR1	FR FR1 QTR 2022-10-03 NP	2022-10-12	261	0.008	26.7	0.00148	0.00057	0.74	<b>18.3</b>	< 0.000010	0.62	0.12	< 0.000010	< 0.000010	< 0.00030	0.00109	< 0.0030			
FR FR1	FR FR1 MON 2022-11-07 NP	2022-11-03	296	0.011	30	0.00078	0.00228	0.821	<b>23.8</b>	< 0.000010	0.71	0.12	0.000013	< 0.000010	< 0.00030	0.00113	< 0.0030			
FR FR2	FR FR2 MON 2022-01-04 N	2022-01-08	286	0.009	32.1	0.00062	0.00062	0.728	<b>25.4</b>	< 0.000010	0.68	0.13	< 0.000010	< 0.000010	< 0.00030	0.00115	< 0.0030			
FR FR2	FR FR2 MON 2022-02-01 N	2022-02-09	660	0.084	67.4	0.00652	0.0052	2.28	<b>75.5</b>	< 0.000010	3.59	0.23	< 0.000010	< 0.000010	< 0.00030	0.00469	< 0.0030			
FR FR2	FR FR2 WS 2022-02-28 N	2022-02-28	727	0.079	71.9	0.00542	0.00542	2.31	<b>82.5</b>	< 0.000010	3.89	0.23	< 0.000010	< 0.000010	< 0.00030	0.0049	< 0.0030			
FR FR2	FR FR2 MON 2022-03-01 N	2022-03-03	714	0.076	76.8	<b>0.0175</b>	0.00643	2.31	<b>84.4</b>	< 0.000010	3.49	0.23	< 0.000010	< 0.000010	< 0.00030	0.00489	0.0037			
FR FR2	FR FR2 WEK 2022-03-14 N	2022-03-14	702	0.086	73.7	<b>0.0172</b>	0.00531	2.28	<b>77.7</b>	< 0.000010	3.61	0.23	< 0.000010	< 0.000010	< 0.00030	0.00487	0.003			
FR FR2	FR FR2 WEK 2022-03-15 NP	2022-03-15	759	0.094	80	<b>0.0231</b>	0.00574	2.55	<b>86.8</b>	< 0.000010	4.04	0.24	< 0.000010	< 0.000010	0.00057	0.00506	0.0048			
FR FR2	FR FR2 WS 2022-03-16 NP	2022-03-16	668	0.081	74.6	<b>0.0242</b>	0.0059	2.4	<b>79.9</b>	< 0.000010	3.76	0.23	< 0.000010	< 0.000010	0.00188	0.0051	0.0054			
FR FR2	FR FR2 WEK 2022-03-16 NP	2022-03-16	630	0.084	75.9	<b>0.0218</b>	0.00554	2.4	<b>79</b>	< 0.000010	3.66	0.22	0.000012	< 0.000010	< 0.00180	0.00459	0.0042			
FR FR2	FR FR2 2 WS 2022-03-17 NP	2022-03-17	676	0.093	81.1	<b>0.0236</b>	0.00606	2.53	<b>92.5</b>	< 0.000010	3.96	0.24	< 0.000010	< 0.000010	< 0.00060	0.00467	0.0203			
FR FR2	FR FR2 WEK 2022-03-17 NP	2022-03-17	713	0.079	76.1	<b>0.0272</b>	0.00619	2.44	<b>80.7</b>	0.000011	3.94	0.24	0.000018	< 0.000010	0.00545	0.00517	0.0067			
FR FR2	FR FR2 2 WS 2022-03-18 NP	2022-03-18	618	0.074	66.6	<b>0.0217</b>	0.00584	2.34	<b>86.7</b>	< 0.000010	3.86	0.23	0.000011	< 0.000010	0.00152	0.00508	0.0053			
FR FR2	FR FR2 WEK 2022-03-18 NP	2022-03-18	681	0.091	82.6	<b>0.0226</b>	0.00584	2.46	<b>88.4</b>	< 0.000010	4.09	0.26	< 0.000010	< 0.000010	0.00141	0.00492	0.0035			
FR FR2	FR FR2 WS 2022-03-19 NP	2022-03-19	680	0.091	80	<b>0.0237</b>	0.00615	2.6	<b>89.2</b>	< 0.000010	4.12	0.24	0.000012	< 0.000010	< 0.00240	0.00511	0.0053			
FR FR2	FR FR2 WS 2022-03-20 NP	2022-03-20	666	0.087	72.4	<b>0.0204</b>	0.0056	2.43	<b>81.5</b>	< 0.000010	3.94	0.23	< 0.000010	< 0.000010	0.00077	0.00503	0.0035			
FR FR2	FR FR2 2 WS 2022-03-21 NP	2022-03-21	645	0.087	73	<b>0.0212</b>	0.00613	2.5	<b>81</b>	< 0.000010	3.98	0.23	0.000011	< 0.000010	< 0.00060	0.00488	0.0061			
FR FR2	FR FR2 2 WS 2022-03-22 NP	2022-03-22	646	0.079	70.6	<b>0.0192</b>	0.00593	2.46	<b>80.5</b>	< 0.000010	3.64	0.22	< 0.000010	< 0.000010	< 0.00060	0.00481	0.0045			
FR FR2	FR FR2 2 WS 2022-03-23 NP	2022-03-23	648	0.076	74.8	<b>0.0191</b>	0.00638	2.39	<b>81.4</b>	< 0.000010	3.74	0.23	0.000011	< 0.000010	0.00054	0.00508	0.0064			
FR FR2	FR DC1 WEK 2022-03-28 N	2022-03-30	656	0.08	72.5	<b>0.0192</b>	0.00702	2.41	<b>85.8</b>	< 0.000010	3.62	0.22	0.000013	0.000013	0.00084	0.00424	0.0041			
FR FR2	FR FR2 MON 2022-04-01 N	2022-04-05	594	0.06	65.1	<b>0.0157</b>	0.0106	2.555	<b>78.35</b>	< 0.000010	2.62	0.22	0.000018	< 0.000010	0.003185	0.00376	0.0097			
FR FR2	FR FR2 WEK 2022-04-11 N	2022-04-12	602	0.074	68.2	<b>0.0131</b>	0.0139	2.55	<b>90</b>	< 0.000010	2.99	0.25	0.000016	< 0.000010	0.00049	0.00403	0.0079			
FR FR2	FR DC1 WEK 2022-04-18 N	2022-04-18	634	0.082	69.7	<b>0.0127</b>	0.0136	2.66	<b>96.5</b>	< 0.000010	3.01	0.24	0.000016	< 0.000010	0.00037	0.00505	0.0092			
FR FR2	FR FLD WEK 2022-04-18 N	2022-04-19	635	0.086	73.65	<b>0.0117</b>	0.0109	2.5	<b>109.5</b>	< 0.000010	3.33	0.22	0.000012	< 0.000010	< 0.00030	0.004615	0.00795			
FR FR2	FR FLD WEK 2022-04-25 N	2022-04-27	< 0.50*	0.0016	0.0054	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.000010	< 0.00030	< 0.000010	< 0.0030			
FR FR2	FR FR2 MON 2022-05-01 N	2022-05-04	< 0.50*	0.0016	0.0054	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.000010	< 0.00030	< 0.000010	< 0.0030			
FR FR2	FR FR2 WEK 2022-05-09 N	2022-05-10	442	0.032	41.8	<b>0.014</b>	0.00846	1.86	<b>58.7</b>	< 0.000010	1.55	0.14	0.000015	< 0.000010	0.00132	0.00267	0.0089			
FR FR2	FR FR2 WEK 2022-05-16 N	2022-05-19	434	0.039	47.4	<b>0.0408</b>	0.0103	1.82	<b>61.5</b>	< 0.000010	1.67	0.13	0.000017	< 0.000010	0.00111	0.00283	0.0132			
FR FR2	FR FLD WEK 2022-05-23 N	2022-05-26	380	0.034	37.9	<b>0.0176</b>	0.00607	1.55	<b>56</b>	< 0.000010	1.58	0.13	< 0.000010	< 0.000010	0.00047	0.00242	0.0053			
FR FR2	FR FR2 WS 2022-05-27 NP	2022-05-27	< 0.50*	0.0016	0.0054	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.000010	< 0.00030	< 0.000010	< 0.0030			
FR FR2	FR FR2 WEK 2022-05-30 N	2022-06-01	286	0.022	29	<b>0.00795</b>	0.00386	1.12	<b>34.2</b>	< 0.000010	1.18	0.11	< 0.000010	< 0.000010	< 0.00180	0.00168	0.0056			
FR FR2	FR DC3 MON 2022-06-01 N	2022-06-08	250	0.018	25.2	<b>0.00454</b>	0.00285	0.926	<b>24</b>	< 0.000010	1.05	0.09	< 0.000010	< 0.000010	0.0005	0.00138	0.0039			
FR FR2	FR FR2 MON 2022-06-01 N	2022-06-08	212	0.014	20.05	<b>0.02435</b>	0.00331	0.885	<b>16.05</b>	< 0.000010	0.93	0.08	< 0.000010	< 0.000010	0.001525	0.00108	0.0075			
FR FR2	FR DC1 WEK 2022-06-13 N	2022-06-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
FR FR2	FR FR2 WEK 2022-06-20 N	2022-06-21	183	0.013	16.4	<b>0.00991</b>	0.00214	0.7205	<b>13.1</b>	< 0.000010	0.8	0.08	< 0.000010	< 0.000010	0.001065	0.0009655	< 0.0030			
FR FR2	FR DC1 WEK 2022-06-20 N	2022-06-21	186	0.013	18.2	<b>0.0141</b>	0.0032	0.83	<b>16.8</b>	< 0.000010	0.78	0.08	0.000012	< 0.000010	< 0.00300	0.00106	0.0061			
FR FR2	FR DC1 WEK 2022-06-27 N	2022-06-28	186	0.013	18.4	<b>0.0134</b>	0.00305	0.83	<b>16.1</b>	< 0.000010	0.79	0.08	0.000011	< 0.000010	0.00357	0.00107	0.0047			
FR FR2	FR FR2 MON 2022-07-01 N	2022-07-04	207	0.015	20.25	<b>0.006135</b>	0.002605	0.829	<b>17.75</b>	< 0.000010	0.88	0.09	< 0.000010	< 0.000010	0.0006	0.00113	0.00385			
FR FR2	FR FR2 WEK 2022-07-05 N	2022-07-05	227	0.02	21.8	<b>0.0036</b>	0.00254	0.94	<b>23.7</b>	< 0.000010	1.04	0.09	< 0.000010	< 0.000010	< 0.00030	0.00137	< 0.0030			
FR FR2	FR FR2 WEK 2022-07-06 N	2022-07-06	223	0.018	20.1	<b>0.00501</b>	0.00262	0.864	<b>19.6</b>	< 0.000010	0.99	0.08	< 0.000010	< 0.000010	0.00061	0.0012	0.0036			
FR FR2	FR DC1 WEK 2022-07-07 N	2022-07-07	238	0.019	20.8	<b>0.00387</b>	0.00259	0.884	<b>20.5</b>	< 0.000010	1.01	0.08	< 0.000010	< 0.000010						

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt		Copper mg/L	Iron mg/L	Lead	
														Acute mg/L	Chronic mg/L			Acute mg/L	Chronic mg/L
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5*	3.3-3.5*
Fording River Operation																			
FR FR2	FR DC2 MON 2022-08-01 N	2022-08-10	275	0.02295	0.00017	< 0.00010	0.0396	< 0.020	< 0.000050	< 0.010	0.0000781	66.6	< 0.00010	< 0.10	< 0.00050	0.037	< 0.000050		
FR FR2	FR FR2 MON 2022-08-01 N	2022-08-10	453	0.0075	0.000205	0.00016	0.06825	< 0.020	< 0.000050	0.013	0.0000869	103	0.000125	< 0.10	< 0.00050	0.022	< 0.000050		
FR FR2	FR FR2 WS SEPT-2022 N	2022-09-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR FR2	FR DC1 WS SEPT-2022 N	2022-09-06	546	0.0054	0.00024	0.00015	0.0702	< 0.020	< 0.000050	0.013	0.000033	121	0.00013	< 0.10	< 0.00050	0.01	< 0.000050		
FR FR2	FR FLD1 WS SEPT-2022 N	2022-09-06	534	0.005	0.00023	0.00015	0.0704	< 0.020	< 0.000050	0.013	0.0000225	120	0.00011	< 0.10	< 0.00050	0.013	< 0.000050		
FR FR2	FR FR2 MON 2022-09-01 N	2022-09-07	< 0.50	< 0.0030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
FR FR2	FR FR2 MON 2022-10-01 N	2022-10-04	536	0.011	0.00022	0.00016	0.0773	< 0.020	< 0.000050	0.013	0.0000736	130	0.00013	< 0.10	< 0.00050	0.028	< 0.000050		
FR LMP1	FR LMP1 MON 2022-01-04 N	2022-01-07	606	0.0119	0.00025	0.0001	0.0917	< 0.020	< 0.000050	0.014	0.000087	147	< 0.00010	< 0.10	< 0.00050	0.039	< 0.000050		
FR LMP1	FR LMP1 WS 2022-01-15 NP	2022-01-15	1040	0.0095	0.00095	0.0005	0.0962	< 0.020	< 0.000050	0.019	0.000344	223	< 0.00010	0.0011	0.00058	0.044	< 0.000050		
FR LMP1	FR LMP1 WS 2022-01-20 NP	2022-01-20	1010	0.0123	0.00107	0.00064	0.0937	< 0.020	< 0.000050	0.019	0.000361	224	< 0.00010	0.00119	0.00064	0.049	< 0.000050		
FR LMP1	FR LMP1 WS 2022-01-27 NP	2022-01-27	998	0.0221	0.00102	0.00066	0.0987	< 0.020	< 0.000050	0.021	0.000389	235	< 0.00010	0.001	0.00078	0.064	0.000082		
FR LMP1	FR LMP1 WS 2022-02-04 NP	2022-02-04	1020	0.0309	0.0013	0.00072	0.103	< 0.020	< 0.000050	0.02	0.000398	240	0.00018	0.00135	0.00071	0.09	0.000067		
FR LMP1	FR LMP1 WS 2022-02-10 NP	2022-02-10	1090	0.0218	0.00111	0.00072	0.0998	< 0.020	< 0.000050	0.017	0.00037	234	0.00028	0.00099	0.001	0.084	0.000081		
FR LMP1	FR LMP1 WS 2022-02-17 NP	2022-02-17	1090	0.0368	0.00098	0.00072	0.117	< 0.020	< 0.000050	0.022	0.000399	263	0.00012	0.00083	0.00113	0.09	0.000073		
FR LMP1	FR LMP1 WS 2022-02-24 NP	2022-02-24	1020	0.0294	0.00136	0.00081	0.105	< 0.020	< 0.000050	0.025	0.000369	239	0.00011	0.00158	0.00071	0.102	0.000081		
FR LMP1	FR LMP1 WS 2022-03-03 NP	2022-03-03	1050	0.0246	0.00139	0.00056	0.0973	< 0.020	< 0.000050	0.021	0.000339	231	0.00018	0.00168	0.0007	0.089	0.000121		
FR LMP1	FR LMP1 WS 2022-03-09 NP	2022-03-09	1120	0.163	0.00145	0.00068	0.115	< 0.020	< 0.000050	0.019	0.000468	261	0.00078	0.002	0.00113	0.214	0.000172		
FR LMP1	FR LMP1 WS 2022-03-16 NP	2022-03-16	1070	0.0387	0.00145	0.00069	0.0921	< 0.020	< 0.000050	0.02	0.00036	244	0.00012	0.00149	0.00068	0.114	0.000079		
FR LMP1	FR LMP1 WEK 2022-03-21 N	2022-03-22	961	0.0364	0.00099	0.00066	0.0973	< 0.020	< 0.000050	0.02	0.000338	261	0.00019	0.00078	0.00077	0.093	0.000092		
FR LMP1	FR FLD WEK 2022-03-21 N	2022-03-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR LMP1	FR LMP1 WS 2022-03-24 NP	2022-03-24	< 0.50	< 0.0030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050		
FR LMP1	FR LMP1 WS 2022-03-30 NP	2022-03-30	858	0.0396	0.00215	0.00059	0.11	< 0.020	< 0.000050	0.022	0.000324	225	0.0002	0.00257	0.00074	0.144	0.000184		
FR LMP1	FR LMP1 MON 2022-04-01 N	2022-04-01	907	0.0892	0.00509	0.00097	0.364	< 0.020	< 0.000050	0.024	0.000358	217	0.00022	<b>0.00507</b>	0.00105	0.131	0.000138		
FR LMP1	FR LMP1 WS 2022-04-05 NP	2022-04-05	819	0.154	0.00574	0.00086	0.5	< 0.020	< 0.000050	0.024	0.000318	188	0.00029	<b>0.00885</b>	0.00095	0.162	0.000126		
FR LMP1	FR LMP1 WS 2022-04-12 NP	2022-04-12	820	0.193	0.00546	0.00076	0.112	< 0.020	< 0.000050	0.024	0.000315	183	< 0.00010	<b>0.00936</b>	0.00083	0.082	0.000054		
FR LMP1	FR LMP1 WEK 2022-04-18 N	2022-04-20	924	0.03	0.00399	0.00058	0.187	< 0.020	< 0.000050	0.022	0.000332	225	0.00014	0.00355	0.00075	0.088	0.000052		
FR LMP1	FR LMP1 WS 2022-04-28 NP	2022-04-28	978	0.0031	0.00089	0.0003	0.0615	< 0.020	< 0.000050	0.015	0.000342	218	< 0.00010	0.00056	0.00063	< 0.010	< 0.000050		
FR LMP1	FR LMP1 WEK 2022-04-25 N	2022-04-28	748	0.0222	0.00066	0.00028	0.0584	< 0.020	< 0.000050	0.014	0.000369	178	0.0001	0.00046	0.00086	0.051	0.000056		
FR LMP1	FR LMP1 MON 2022-05-01 N	2022-05-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR LMP1	FR LMP1 WS 2022-05-10 NP	2022-05-10	705	0.0228	0.00069	0.0003	0.0529	< 0.020	< 0.000050	0.014	0.000506	169	0.00011	0.00066	0.00113	0.044	0.000052		
FR LMP1	FR LMP1 WEK 2022-05-09 N	2022-05-12	608	0.0264	0.00051	0.00021	0.0382	< 0.020	< 0.000050	0.011	0.000388	127	0.00042	0.0004	0.001	0.029	0.000225		
FR LMP1	FR LMP1 WEK 2022-05-16 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR LMP1	FR LMP1 WS 2022-05-23 NP	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR LMP1	FR LMP1 WEK 2022-05-30 NP	2022-06-01	624	0.014	0.00048	0.0002	0.0402	< 0.020	< 0.000050	0.01	0.000369	136	0.00029	0.00021	0.00099	0.024	< 0.000050		
FR LMP1	FR LMP1 WS 2022-06-08 NP	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR LMP1	FR LMP1 WEK 2022-06-13 N	2022-06-14	440	0.0156	0.00044	0.00022	0.0398	< 0.020	< 0.000050	< 0.010	0.000286	97.3	< 0.00010	0.00016	0.00108	0.024	< 0.000050		
FR LMP1	FR LMP1 WS 2022-06-22 NP	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR LMP1	FR LMP1 WEK 2022-06-27 N	2022-06-30	393	0.0278	0.00063	0.00024	0.0386	< 0.020	< 0.000050	0.01	0.000385	88.8	0.00014	0.00052	0.00141	0.036	< 0.000050		
FR LMP1	FR LMP1 WS 2022-07-05 NP	2022-07-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR LMP1	FR LMP1 WEK 2022-07-11 N	2022-07-13	535	0.0408	0.00043	0.00021	0.0405	< 0.020	< 0.000050	0.01	0.000412	124	0.00015	0.00024	0.00125	0.068	0.000096		
FR LMP1	FR LMP1 WS 2022-07-19 NP	2022-07-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR LMP1	FR LMP1 MON 2022-08-01 N	2022-08-04	668	0.0144	0.0005	0.00019	0.046	< 0.020	< 0.000050	0.01	0.000478	165	0.00013	0.00021	0.00094	0.021	< 0.000050		
FR LMP1	FR LMP1 WS 2022-08-17 NP	2022-08-17	992	0.0134	0.00056	0.00028	0.059	< 0.020	< 0.000050	0.012	0.000575	219	< 0.00010	0.00026	0.00085	0.018	< 0.000050		
FR LMP1	FR LMP1 WS SESMP 2022-08 N	2022-08-22	1120	0.0173	0.00061	0.0002	0.0558	< 0.020	< 0.000050	0.012	0.0005	249	< 0.00010	0.00035	0.00078	0.014	< 0.000050		
FR LMP1	FR LMP1 WS 2022-09-01 NP	2022-09-01	1100	0.0178	0.0006	0.00036	0.065	< 0.020	< 0.000050	0.013	0.000502	239	0.00012	0.00041	0.00088	0.051	0.000065		
FR LMP1	FR LMP1 WS SEPT-2022 N	2022-09-07	1170	0.0073	0.0006	< 0.00050	0.0573	< 0.020	< 0.000050	0.015	0.00029	277	< 0.00010	0.00029	0.0007	< 0.010	< 0.000050		
FR LMP1	FR LMP1 WS 2022-09-13 NP	2022-09-13	1120	< 0.0030	0.00068	0.00019	0.0601	< 0.020	< 0.000050	0.013	0.000431	248	< 0.00010	0.00028	0.00075	< 0.010	< 0.000050		
FR LMP1	FR LMD MON 2022-10-01 N	2022-10-13	1340	0.0149	0.0006	0.00037	0.0597	< 0.020	< 0.000050	0.015	0.000446	271	0.00019	0.00028	0.00074	0.017	< 0.000050		
FR LMP1	FR LMD WS 2022-11-15 NP	2022-11-15	1220	0.0071	0.00059	0.0002	0.0597	< 0.020	< 0.000050	0.014	0.00055	285	< 0.00010	0.00022	0.00072	< 0.010	< 0.000050		
FR LP1	FR LP1 WS 2022-05-22 N																		



APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

			Total Metals																		
Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness	Lithium	Magnesium	Manganese		Nickel*	Potassium	Selenium	Silver		Sodium	Strontium	Thallium	Tin	Titanium	Uranium*	Zinc		
			mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	µg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
						Acute	Chronic	Chronic			Acute	Chronic							Chronic	Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*	
Fording River Operation																					
FR FR2	FR DC2 MON 2022-08-01 N	2022-08-10	275	0.027	29.2	<b>0.00408</b>		0.003165	1.195	<b>35.3</b>	< 0.000010	1.43	0.1	< 0.000010	< 0.000010	< 0.000010	< 0.000010	0.001875	0.0044		
FR FR2	FR FR2 MON 2022-08-01 N	2022-08-10	453	0.051	47.5	<b>0.009235</b>		0.00578	1.85	<b>51.4</b>	< 0.000010	2.48	0.15	< 0.000010	< 0.000010	< 0.000010	< 0.000010	0.002945	0.00415		
FR FR2	FR FR2 WS SEPT-2022 N	2022-09-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR FR2	FR DC1 WS SEPT-2022 N	2022-09-06	546	0.057	55.9	<b>0.0075</b>		0.00693	1.94	<b>67.2</b>	< 0.000010	2.51	0.17	0.000013	< 0.000010	< 0.000010	< 0.000010	0.00324	< 0.0030		
FR FR2	FR FLD1 WS SEPT-2022 N	2022-09-06	534	0.057	55.7	<b>0.0067</b>		0.00697	1.94	<b>66.8</b>	< 0.000010	2.5	0.17	< 0.000010	< 0.000010	< 0.000010	< 0.000010	0.00324	< 0.0030		
FR FR2	FR FR2 MON 2022-09-01 N	2022-09-07	< 0.50*	0.0016*	0.0056*	< 0.00010		< 0.00050	< 0.050	< 0.050	< 0.000010	0.050,000		< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.0030		
FR FR2	FR FR2 MON 2022-10-01 N	2022-10-04	536	0.061	58.7	<b>0.00532</b>		0.0067	1.91	<b>67.4</b>	< 0.000010	2.71	0.2	< 0.000010	< 0.000010	< 0.000010	< 0.000010	0.0034	0.0041		
FR LMP1	FR LMP1 MON 2022-01-04 N	2022-01-07	606	0.078	71.4	<b>0.00948</b>		0.00902	2.39	<b>77.7</b>	< 0.000010	3.78	0.21	< 0.000010	< 0.000010	< 0.000010	< 0.000010	0.00494	0.004		
FR LMP1	FR LMP1 WS 2022-01-15 NP	2022-01-15	1040	0.036	101	<b>0.0146</b>		0.0227	4.48	<b>193</b>	< 0.000010	1.3	0.22	0.000053	< 0.000010	< 0.000010	< 0.000010	0.00574	0.016		
FR LMP1	FR LMP1 WS 2022-01-20 NP	2022-01-20	1010	0.034	109	<b>0.0195</b>		0.0235	4.34	<b>212</b>	< 0.000010	1.37	0.2	0.000058	< 0.000010	< 0.000010	< 0.000010	0.00562	0.019		
FR LMP1	FR LMP1 WS 2022-01-27 NP	2022-01-27	998	0.037	112	<b>0.0188</b>		0.0245	4.64	<b>230</b>	< 0.000010	1.4	0.22	0.000056	0.00011	0.00064	0.0061	0.0194	0.0194		
FR LMP1	FR LMP1 WS 2022-02-04 NP	2022-02-04	1020	0.036	107	<b>0.0176</b>		0.026	4.47	<b>223</b>	< 0.000010	1.52	0.23	0.000068	0.00045	0.0005	0.00561	0.016	0.016		
FR LMP1	FR LMP1 WS 2022-02-10 NP	2022-02-10	1090	0.038	112	<b>0.0133</b>		0.024	4.23	<b>209</b>	0.000017	1.32	0.22	0.000059	< 0.000010	< 0.000010	0.0059	0.02	0.02		
FR LMP1	FR LMP1 WS 2022-02-17 NP	2022-02-17	1090	0.039	121	<b>0.0134</b>		0.0238	4.7	<b>236</b>	< 0.000010	1.4	0.24	0.000058	< 0.000010	< 0.000010	0.00637	0.0171	0.0171		
FR LMP1	FR LMP1 WS 2022-02-24 NP	2022-02-24	1020	0.044	111	<b>0.018</b>		0.0257	5.84	<b>206</b>	< 0.000010	1.35	0.29	0.000076	< 0.000010	< 0.000010	0.00576	0.0158	0.0158		
FR LMP1	FR LMP1 WS 2022-03-03 NP	2022-03-03	1050	0.038	105	<b>0.016</b>		0.0257	4.98	<b>209</b>	< 0.000010	1.4	0.25	0.000077	< 0.000010	< 0.000010	0.00574	0.0174	0.0174		
FR LMP1	FR LMP1 WS 2022-03-09 NP	2022-03-09	1120	0.035	122	<b>0.02</b>		0.0289	5.15	<b>256</b>	0.000011	1.46	0.25	0.000075	< 0.000010	< 0.000010	0.00683	0.0198	0.0198		
FR LMP1	FR LMP1 WS 2022-03-16 NP	2022-03-16	1070	0.038	106	<b>0.0192</b>		0.0275	5.08	<b>222</b>	< 0.000010	1.46	0.24	0.000072	< 0.000010	0.00114	0.00665	0.0153	0.0153		
FR LMP1	FR LMP1 WEK 2022-03-21 N	2022-03-22	961	0.04	127	<b>0.0128</b>		0.0238	4.81	<b>237</b>	< 0.000010	1.45	0.23	0.000052	< 0.000010	0.00076	0.006	0.0317	0.0317		
FR LMP1	FR FLD WEK 2022-03-21 N	2022-03-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 WS 2022-03-24 NP	2022-03-24	< 0.50*	0.0016*	0.0056*	< 0.00010		< 0.00050	< 0.050	< 0.050	< 0.000010	0.050,000		< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.0030		
FR LMP1	FR LMP1 WS 2022-03-30 NP	2022-03-30	858	0.048	110	<b>0.0198</b>		0.0312	5.94	<b>199</b>	< 0.000010	1.48	0.24	0.000064	< 0.000010	0.00062	0.00547	0.0194	0.0194		
FR LMP1	FR LMP1 MON 2022-04-01 N	2022-04-01	907	0.049	107	<b>0.0296</b>		0.0422	6.46	<b>184</b>	< 0.000010	1.69	0.46	0.000085	< 0.000010	0.00217	0.00594	0.0164	0.0164		
FR LMP1	FR LMP1 WS 2022-04-05 NP	2022-04-05	819	0.057	92.7	<b>0.0336</b>		0.0601	6.51	<b>163</b>	< 0.000010	1.74	0.63	0.000092	< 0.000010	< 0.000690	0.0054	0.0145	0.0145		
FR LMP1	FR LMP1 WS 2022-04-12 NP	2022-04-12	820	0.062	92.6	<b>0.0323</b>		0.0615	6.31	<b>162</b>	< 0.000010	1.95	0.66	0.000082	< 0.000010	< 0.000010	0.00514	0.0148	0.0148		
FR LMP1	FR LMP1 WEK 2022-04-18 N	2022-04-20	924	0.053	99	<b>0.0181</b>		0.0344	5.81	<b>180</b>	< 0.000010	1.67	0.48	0.000052	< 0.000010	0.0005	0.00536	0.0152	0.0152		
FR LMP1	FR LMP1 WS 2022-04-28 NP	2022-04-28	978	0.024	109	0.00393		0.0216	3.62	<b>224</b>	< 0.000010	1.15	0.19	0.000033	< 0.000010	< 0.000010	0.00588	0.0157	0.0157		
FR LMP1	FR LMP1 WEK 2022-04-25 N	2022-04-28	748	0.018	85.8	<b>0.00488</b>		0.0184	3.42	<b>188</b>	< 0.000010	0.95	0.14	0.000031	< 0.000010	< 0.00060	0.00471	0.0199	0.0199		
FR LMP1	FR LMP1 MON 2022-05-01 N	2022-05-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 WS 2022-05-10 NP	2022-05-10	705	0.018	79.8	<b>0.00482</b>		0.025	3.49	<b>190</b>	< 0.000010	0.95	0.13	0.000038	< 0.000010	0.00037	0.00432	0.028	0.028		
FR LMP1	FR LMP1 WEK 2022-05-09 N	2022-05-12	608	0.013	63.8	<b>0.00378</b>		0.0194	2.68	<b>134</b>	< 0.000010	0.7	0.1	0.000026	< 0.000010	0.00082	0.00302	0.0226	0.0226		
FR LMP1	FR LMP1 WEK 2022-05-16 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 WS 2022-05-23 NP	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 WEK 2022-05-30 N	2022-06-01	624	0.013	67	0.00232		0.0155	2.63	<b>158</b>	< 0.000010	0.79	0.11	0.000025	0.00082	< 0.000010	0.00331	0.0203	0.0203		
FR LMP1	FR LMP1 WS 2022-06-08 NP	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 WEK 2022-06-13 N	2022-06-14	440	0.009	45.4	0.00225		0.0119	2.18	<b>91.4</b>	< 0.000010	0.61	0.08	0.000019	< 0.000010	0.00043	0.00218	0.0171	0.0171		
FR LMP1	FR LMP1 WS 2022-06-22 NP	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 WEK 2022-06-27 N	2022-06-30	393	0.011	42.6	<b>0.00306</b>		0.0212	2.33	<b>80.1</b>	< 0.000010	0.7	0.09	0.000023	< 0.000010	0.00049	0.00219	0.023	0.023		
FR LMP1	FR LMP1 WS 2022-07-05 NP	2022-07-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 WEK 2022-07-11 N	2022-07-13	535	0.011	54.6	<b>0.00498</b>		0.0167	2.3	<b>115</b>	0.000016	0.68	0.09	0.000027	< 0.000010	0.00059	0.00277	0.0226	0.0226		
FR LMP1	FR LMP1 WS 2022-07-19 NP	2022-07-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR LMP1	FR LMP1 MON 2022-08-01 N	2022-08-04	668	0.012	71	<b>0.00395</b>		0.0221	2.58	<b>173</b>	< 0.000010	0.85	0.13	0.000028	< 0.000010	0.00043	0.00388	0.0279	0.0279		
FR LMP1	FR LMP1 WS 2022-08-17 NP	2022-08-17	992	0.017	106	<b>0.00434</b>		0.0306	3.46	<b>262</b>	< 0.000010	1.08	0.17	0.000035	< 0.000010	0.00032	0.00567	0.0324	0.0324		
FR LMP1	FR LMP1 WS WS SESMP 2022-08 N	2022-08-22	1120	0.019	115	0.00495		0.0377	3.4	<b>264</b>	< 0.000010	1.13	0.18	0.000039	< 0.000010	< 0.000010	0.00672	0.029	0.029		
FR LMP1	FR LMP1 WS 2022-09-01 NP	2022-09-01	1100	0.019	115	<b>0.00605</b>		0.0392	3.37	<b>278</b>	< 0.000010	1.15	0.19	0.000038	< 0.000010	0.00037	0.00679	0.0315	0.0315		
FR LMP1	FR LMP1 WS SEPT-2022 N	2022-09-07	1170	0.02	129	0.00373		0.0386	3.4	<b>300</b>	< 0.000010	1.09	0.2	0.000035	< 0.000010	< 0.000010	0.00664	0.0213	0.0213		
FR LMP1	FR LMP1 WS 2022-09-13 NP	2022-09-13	1120	0.023	126	0.00296		0.0408	3.7	<b>347</b>	< 0.000010	1.19	0.2	0.000031	< 0.000010	< 0.000010	0.00751	0.0231	0.0231		
FR LMP1	FR LMD MON 2022-10-01 N	2022-10-13	1340	0.02	136	0.0056															

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																							
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt		Copper		Iron mg/L	Lead							
														Acute	Chronic	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5*	3.3-3.5*							
Fording River Operation																										
FR LP1	FR LP1 WS 2022-05-23 N	2022-05-23	501	0.0743	0.00063	0.00031	0.0792	< 0.020	< 0.000050	0.016	0.0000898	90.8	0.00021	0.0004	0.00076	0.066	0.000087									
FR LP1	FR LP1 WS 2022-05-24 N	2022-05-24	494	0.105	0.00056	0.00028	0.0708	< 0.020	< 0.000050	0.015	0.0000929	89.7	0.0002	0.0003	0.0008	0.064	0.000086									
FR LP1	FR LP1 WS 2022-05-25 N	2022-05-25	494	0.0818	0.00059	0.00026	0.0704	< 0.020	< 0.000050	0.02	0.0000936	96.1	0.00027	0.00033	0.00082	0.064	0.000082									
FR LP1	FR LP1 WS 2022-05-26 N	2022-05-26	494	0.0829	0.00061	0.00027	0.072	< 0.020	< 0.000050	0.016	0.0000851	92.8	0.0002	0.00036	0.00087	0.055	0.000085									
FR LP1	FR LP1 WS 2022-05-27 N	2022-05-27	480	0.0862	0.00058	0.00028	0.0719	< 0.020	< 0.000050	0.018	0.0000932	91.8	0.00018	0.00032	0.00076	0.053	0.000078									
FR LP1	FR LP1 WS 2022-05-28 N	2022-05-28	456	0.0788	0.00053	0.00031	0.0893	< 0.020	< 0.000050	0.02	0.0000956	88.1	0.00021	0.00034	0.00079	0.05	0.000075									
FR LP1	FR LP1 WS 2022-05-29 N	2022-05-29	443	0.0853	0.0005	0.00028	0.0805	< 0.020	< 0.000050	0.018	0.0000937	85.5	0.00023	0.00029	0.00072	0.053	0.000074									
FR LP1	FR LP1 WS 2022-05-30 N	2022-05-30	441	0.0857	0.00053	0.00026	0.0802	< 0.020	< 0.000050	0.017	0.000101	84.9	0.0002	0.00032	0.00079	0.061	0.000088									
FR LP1	FR LP1 WS 2022-06-07 NP	2022-06-07	438	0.103	0.00053	0.00024	0.0802	< 0.020	< 0.000050	0.017	0.0000874	82.6	0.0003	0.00036	0.00081	0.074	0.000098									
FR LP1	FR LP1 WS 2022-06-08 NP	2022-06-08	460	0.069	0.00065	0.00028	0.0728	< 0.020	< 0.000050	0.018	0.0000824	87	0.00016	0.00047	0.00074	0.042	0.000054									
FR LP1	FR LP1 MON 2022-06-01 NP	2022-06-09	513	0.0843	0.00068	0.00026	0.0656	< 0.020	< 0.000050	0.02	0.000103	96.2	0.00024	0.00047	0.00086	0.07	0.000076									
FR LP1	FR LP1 WS 2022-06-10 NP	2022-06-10	517	0.0547	0.00048	0.00021	0.0844	< 0.020	< 0.000050	0.018	0.0000877	86.8	0.00014	0.0003	0.0007	0.041	0.000064									
FR LP1	FR LP1 WS 2022-06-11 NP	2022-06-11	444	0.0602	0.00052	0.00023	0.0739	< 0.020	< 0.000050	0.016	0.0000967	79.5	0.00018	0.00035	0.00092	0.052	0.00007									
FR LP1	FR LP1 WS 2022-06-12 NP	2022-06-12	432	0.0717	0.00047	0.0002	0.0746	< 0.020	< 0.000050	0.016	0.0000945	77.3	0.00016	0.00026	0.00076	0.052	0.000058									
FR LP1	FR LP1 MON 2022-06-13 NP	2022-06-13	424	0.031	0.00058	0.00021	0.069	< 0.020	< 0.000050	0.016	0.000065	77.4	0.00012	0.0002	0.00066	0.02	< 0.000050									
FR LP1	FR LP1 WS 2022-06-20 NP	2022-06-20	434	0.0499	0.00057	0.00021	0.063	< 0.020	< 0.000050	0.017	0.0000835	81.1	0.00021	0.00034	0.00088	0.046	0.000085									
FR LP1	FR LP1 WS 2022-06-28 NP	2022-06-28	382	0.159	0.00052	0.00033	0.0823	0.000021	< 0.000050	0.023	0.000148	77.1	0.00038	0.00074	0.00462	0.201	0.00024									
FR LP1	FR LP1 WS 2022-07-05 NP	2022-07-05	436	0.0698	0.00055	0.00026	0.0616	< 0.020	< 0.000050	0.024	0.0000653	80.9	0.00029	0.0003	0.0029	0.056	0.000095									
FR LP1	FR LP1 WS 2022-07-12 N	2022-07-12	485	0.0507	0.00052	0.00027	0.0684	< 0.020	< 0.000050	0.029	0.0000663	94.3	0.00016	0.00044	0.00195	0.065	0.000093									
FR LP1	FR LP1 WEK 2022-07-11 N	2022-07-12	540	0.0378	0.00056	0.00029	0.0698	< 0.020	< 0.000050	0.027	0.0000746	98	0.00022	0.00028	0.0019	0.827	0.000054									
FR LP1	FR LP1 WS 2022-08-18 N	2022-08-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
FR LP1	FR LP1 WS 2022-08-24 N	2022-08-24	680	0.0236	0.00098	0.00083	0.0581	< 0.020	< 0.000050	0.029	0.0000203	113	0.00019	0.00027	0.0011	0.018	< 0.000050									
FR LP1	FR LP1 WS 2022-09-01 N	2022-09-01	752	0.025	0.00075	0.00043	0.0538	< 0.020	< 0.000050	0.029	0.0000178	129	0.00011	0.0002	0.00085	0.018	< 0.000050									
FR LP1	FR LP1 WS 2022-09-05 N	2022-09-05	733	0.0132	0.00073	0.00053	0.0534	< 0.020	< 0.000050	0.034	0.0000068	132	0.0001	0.00012	0.0007	< 0.010	< 0.000050									
FR LP1	FR LP1 WS SEPT-2022 N	2022-09-06	800	0.015	0.00067	0.00045	0.0536	< 0.020	< 0.000050	0.03	0.0000056	121	< 0.00010	0.00013	0.00061	< 0.010	< 0.000050									
FR LP1	FR LP1 MON 2022-10-01 N	2022-10-12	772	0.0095	0.0007	0.00042	0.0482	< 0.020	< 0.000050	0.03	< 0.00050	122	< 0.00010	< 0.01	0.00051	< 0.010	< 0.000050									
FR LP1	FR LP1 MON 2022-11-01 N	2022-11-03	886	0.0124	0.00067	0.0004	0.0436	0.000026	0.000188	0.026	0.0000092	133	0.00014	0.00016	0.00051	< 0.010	0.000068									
FR PP1	FR PP1 MON 2022-01-04 N	2022-01-07	877	0.0116	0.00066	0.00027	0.0438	< 0.020	< 0.000050	0.031	0.0000194	158	0.00016	0.00021	0.00057	0.011	< 0.000050									
FR PP1	FR PP1 MON 2022-02-01 N	2022-02-06	1400	< 0.0060	0.00064	0.00028	0.0612	< 0.040	< 0.000100	< 0.020	0.000962	344	< 0.00020	0.00041	0.00122	< 0.020	< 0.000100									
FR PP1	FR PP1 WS MON 2022-03-01 N	2022-03-08	1630	0.0071	0.00068	0.00032	0.0654	< 0.040	< 0.000100	< 0.020	0.00103	390	0.0002	0.00035	0.00135	< 0.020	< 0.000100									
FR PP1	FR PP1 WEK 2022-03-14 N	2022-03-14	1560	0.0078	0.00065	0.00032	0.0619	< 0.040	< 0.000100	< 0.020	0.000972	366	< 0.00020	0.00036	0.00122	< 0.020	< 0.000100									
FR PP1	FR DC WEK 2022-03-28 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
FR PP1	FR PP1 MON 2022-04-01 N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
FR PP1	FR PP1 WEK 2022-04-11 N	2022-04-11	672	0.358	0.00082	0.00052	0.0576	0.000035	< 0.000050	0.012	0.00129	180	0.00084	0.00238	0.00331	0.353	0.000398									
FR PP1	FR DC2 WEK 2022-04-18 N	2022-04-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
FR PP1	FR PP1 WEK 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
FR PP1	FR PP1 MON 2022-05-01 N	2022-05-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
FR PP1	FR PP1 WEK 2022-05-09 N	2022-05-11	744	0.087	0.00079	0.00031	0.0471	< 0.020	< 0.000050	0.017	0.00189	194	0.00025	<b>0.00486</b>	0.00241	0.088	0.000269									
FR PP1	FR PP1 WEK 2022-05-16 N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
FR PP1	FR DC2 WEK 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
FR PP1	FR PP1 WEK 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
FR PP1	FR DC2 MON 2022-06-01 N	2022-06-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
FR PP1	FR DC2 WEK 2022-06-13 N	2022-06-15	1040	0.03785	0.000575	0.000285	0.0527	< 0.020	< 0.000050	0.011	0.001185	259.5	0.00015	0.000965	0.002045	0.061	< 0.000050									
FR PP1	FR PP1 WEK 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
FR PP1	FR PP1 MON 2022-06-27 N	2022-06-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
FR PP1	FR DC2 MON 2022-07-01 N	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
FR PP1	FR PP1 WEK 2022-07-11 N	2022-07-12	1170	0.02315	0.000655	0.00027	0.0543	< 0.020	< 0.000050	0.015	0.00119	260.5	0.00011	0.00094	0.001725	0.036	< 0.000050									
FR PP1	FR DC1 MON 2022-08-01 N	2022-08-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
FR PP1	FR PP1 WS SEPT-2022 N	2022-09-07	1510	0.0167	0.000715	0.000295	0.0633	< 0.040	< 0.000100	< 0.020	0.00103	377	< 0.00020	0.0006	0.001505	0.037	< 0.000100									

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																												
			Hardness	Lithium	Magnesium	Manganese		Nickel*	Potassium	Selenium	Silver		Sodium	Strontium	Thallium	Tin	Titanium	Uranium*	Zinc												
						mg/L	mg/L				mg/L	mg/L							mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03 <sup>a</sup>	0.0009-0.01 <sup>a</sup>	0.025-0.15 <sup>b</sup>	n/a	2	0.0001-0.003 <sup>a</sup>	0.00005-0.0015 <sup>b</sup>	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2 <sup>b</sup>	0.0075-2 <sup>b</sup>											
Fording River Operation																															
FR LP1	FR LP1 WS 2022-05-23 N	2022-05-23	501	0.024	61.5	<b>0.0157</b>	0.00289	2.61	<b>56.7</b>	< 0.000010	1.81	0.11	0.000016	< 0.00010	0.00197	0.002	0.0115														
FR LP1	FR LP1 WS 2022-05-24 N	2022-05-24	494	0.024	62.1	<b>0.0116</b>	0.0026	2.61	<b>56.6</b>	< 0.000010	1.83	0.11	0.000014	< 0.00010	0.00323	0.00197	0.0133														
FR LP1	FR LP1 WS 2022-05-25 N	2022-05-25	494	0.028	63	<b>0.0123</b>	0.0029	2.59	<b>55.3</b>	< 0.000010	1.97	0.1	0.000017	< 0.00010	0.00247	0.00199	0.0123														
FR LP1	FR LP1 WS 2022-05-26 N	2022-05-26	494	0.024	64	<b>0.013</b>	0.00296	2.48	<b>53</b>	< 0.000010	1.86	0.1	0.000016	< 0.00010	0.00244	0.00191	0.0113														
FR LP1	FR LP1 WS 2022-05-27 N	2022-05-27	480	0.024	62.4	<b>0.0107</b>	0.00276	2.43	<b>52.7</b>	< 0.000010	1.77	0.1	0.000016	< 0.00010	0.00207	0.00187	0.0102														
FR LP1	FR LP1 WS 2022-05-28 N	2022-05-28	456	0.024	61.8	<b>0.0119</b>	0.00262	2.58	<b>52.2</b>	< 0.000010	1.82	0.1	0.000012	< 0.00010	0.00244	0.00176	0.0101														
FR LP1	FR LP1 WS 2022-05-29 N	2022-05-29	443	0.023	57.5	<b>0.0102</b>	0.00249	2.48	<b>51</b>	< 0.000010	1.72	0.1	0.000013	< 0.00010	0.00265	0.00174	0.0106														
FR LP1	FR LP1 WS 2022-05-30 N	2022-05-30	441	0.023	60.9	<b>0.0107</b>	0.00266	2.54	<b>50.1</b>	< 0.000010	1.78	0.1	0.000016	< 0.00010	0.00275	0.00162	0.0108														
FR LP1	FR LP1 WS 2022-06-07 NP	2022-06-07	438	0.022	58.1	<b>0.0132</b>	0.00281	2.46	<b>48.1</b>	< 0.000010	1.73	0.1	0.000017	< 0.00010	< 0.00330	0.00162	0.0111														
FR LP1	FR LP1 WS 2022-06-08 NP	2022-06-08	480	0.024	61	<b>0.0089</b>	0.00454	2.35	<b>55.1</b>	< 0.000010	1.85	0.1	0.000017	< 0.00010	0.0019	0.00196	0.0137														
FR LP1	FR LP1 MON 2022-06-01 NP	2022-06-09	513	0.027	71.4	<b>0.0122</b>	0.00515	2.79	<b>66.7</b>	0.00001	2.17	0.11	0.000018	< 0.00010	0.00243	0.00214	0.0226														
FR LP1	FR LP1 WS 2022-06-10 NP	2022-06-10	517	0.026	58.7	<b>0.01</b>	0.00244	2.47	<b>53</b>	< 0.000010	1.93	0.1	0.000014	< 0.00010	0.00148	0.00173	0.0108														
FR LP1	FR LP1 WS 2022-06-11 NP	2022-06-11	444	0.022	54.8	<b>0.0111</b>	0.00246	2.42	<b>48.2</b>	< 0.000010	1.76	0.09	0.000014	< 0.00010	0.0017	0.00157	0.0115														
FR LP1	FR LP1 WS 2022-06-12 NP	2022-06-12	432	0.022	54.2	<b>0.00936</b>	0.00231	2.42	<b>47.6</b>	< 0.000010	1.72	0.09	0.000013	< 0.00010	0.002	0.00156	0.0102														
FR LP1	FR LP1 MON 2022-06-13 NP	2022-06-13	424	0.022	54	<b>0.00499</b>	0.00273	2.42	<b>45.8</b>	< 0.000010	1.72	0.09	0.000011	< 0.00010	< 0.00120	0.00152	0.0068														
FR LP1	FR LP1 WS 2022-06-20 NP	2022-06-20	434	0.022	55.8	<b>0.00894</b>	0.00253	2.37	<b>47.6</b>	0.000032	1.64	0.09	0.000015	< 0.00010	< 0.00150	0.0016	0.024														
FR LP1	FR LP1 WS 2022-06-28 NP	2022-06-28	382	0.02	47.3	<b>0.0265</b>	0.0034	2.5	<b>39.2</b>	0.00002	1.54	0.09	0.000022	< 0.00010	0.0034	0.00153	0.0267														
FR LP1	FR LP1 WS 2022-07-05 NP	2022-07-05	436	0.022	56.1	<b>0.00858</b>	0.00239	2.62	<b>43.5</b>	0.000013	1.74	0.09	0.000017	< 0.00010	< 0.00150	0.00158	0.0208														
FR LP1	FR LP1 WS 2022-07-12 N	2022-07-12	485	0.03	67.5	<b>0.0115</b>	0.00334	2.85	<b>51.3</b>	< 0.000010	2.24	0.1	0.000022	< 0.00010	0.00108	0.00208	0.0163														
FR LP1	FR LP1 WEK 2022-07-11 N	2022-07-12	540	0.028	75	<b>0.00919</b>	0.00312	2.93	<b>51.2</b>	< 0.000010	2.26	0.11	0.000016	0.00026	< 0.00120	0.00209	0.0229														
FR LP1	FR LP1 WS 2022-08-18 N	2022-08-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR LP1	FR LP1 WS 2022-08-24 N	2022-08-24	680	0.037	102	<b>0.00491</b>	0.00426	4.42	<b>64</b>	< 0.000010	2.98	0.14	0.000028	< 0.00010	< 0.00030	0.00336	0.0252														
FR LP1	FR LP1 WS 2022-09-01 N	2022-09-01	752	0.038	104	0.00232	0.0048	3.67	<b>68.9</b>	< 0.000010	3.06	0.14	0.000033	< 0.00010	0.00053	0.0029	0.0107														
FR LP1	FR LP1 WS 2022-09-05 N	2022-09-05	733	0.039	111	0.00147	0.00366	3.43	<b>78</b>	< 0.000010	3.3	0.14	0.000028	< 0.00010	< 0.00030	0.00283	0.0061														
FR LP1	FR LP1 WS SEPT-2022 N	2022-09-06	800	0.037	104	0.00102	0.00374	3.36	<b>74.4</b>	< 0.000010	3.2	0.14	0.000038	< 0.00010	< 0.00030	0.00279	0.0059														
FR LP1	FR LP1 MON 2022-10-01 N	2022-10-12	772	0.043	112	0.00035	0.00365	3.69	<b>74.8</b>	< 0.000010	3.34	0.14	0.000027	< 0.00010	< 0.00030	0.00289	< 0.0030														
FR LP1	FR LP1 MON 2022-11-01 N	2022-11-03	886	0.043	121	0.00118	0.00368	3.5	<b>80.2</b>	< 0.000010	3.4	0.15	0.000064	< 0.00010	< 0.00030	0.00348	0.0034														
FR PP1	FR PP1 MON 2022-01-04 N	2022-01-07	877	0.053	128	0.00321	0.00549	3.71	<b>101</b>	< 0.000010	4.12	0.17	0.000023	< 0.00010	< 0.00030	0.00355	0.0119														
FR PP1	FR PP1 MON 2022-02-01 N	2022-02-06	1400	0.018	133	<b>0.0135</b>	0.0602	4.11	<b>241</b>	< 0.000020	1.41	0.26	0.000053	< 0.00020	< 0.00060	<b>0.01</b>	0.0494														
FR PP1	FR PP1 WS MON 2022-03-01 N	2022-03-08	1630	0.02	149	<b>0.0167</b>	0.0569	4.2	<b>278</b>	< 0.000020	1.6	0.28	0.000057	< 0.00020	< 0.00060	<b>0.0105</b>	0.0521														
FR PP1	FR PP1 WEK 2022-03-14 N	2022-03-14	1560	0.017	139	<b>0.0161</b>	0.0525	3.95	<b>272</b>	< 0.000020	1.48	0.27	0.000059	< 0.00020	< 0.00060	<b>0.0105</b>	0.0536														
FR PP1	FR PP1 WEK 2022-03-21 N	2022-03-21	1450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR PP1	FR DC WEK 2022-03-28 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR PP1	FR PP1 MON 2022-04-01 N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR PP1	FR PP1 WEK 2022-04-11 N	2022-04-11	672	0.014	71.9	<b>0.0371</b>	0.0575	3.16	<b>151</b>	0.00003	1.33	0.15	0.000065	< 0.00010	0.00557	0.00453	0.0813														
FR PP1	FR DC2 WEK 2022-04-18 N	2022-04-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR PP1	FR PP1 WEK 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR PP1	FR PP1 MON 2022-05-01 N	2022-05-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR PP1	FR PP1 WEK 2022-05-09 N	2022-05-11	744	0.018	75	<b>0.09</b>	0.0809	3.32	<b>171</b>	< 0.000010	1.06	0.15	0.000061	< 0.00010	0.00183	0.00493	0.0892														
FR PP1	FR PP1 WEK 2022-05-16 N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR PP1	FR DC2 WEK 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR PP1	FR PP1 WEK 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR PP1	FR DC2 MON 2022-06-01 N	2022-06-07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR PP1	FR DC2 WEK 2022-06-13 N	2022-06-15	1040	0.017	93.7	<b>0.0287</b>	0.06395	3.035	<b>209</b>	< 0.000010	1.13	0.18	0.000052	< 0.00010	< 0.00120	0.00679	0.06005														
FR PP1	FR PP1 WEK 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR PP1	FR PP1 WEK 2022-06-27 N	2022-06-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR PP1	FR DC2 MON 2022-07-01 N	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR PP1	FR PP1 WEK 2022-07-11 N	2022-07-12	1170	0.023	104	<b>0.02905</b>	0.0641	3.73	<b>246.5</b>	< 0.000010	1.32	0.19	0.0000545	< 0.00010	0.00055	0.007845	0.0613														
FR PP1	FR DC1 MON 2022-08-01 N	2022-08-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
FR PP1	FR PP1 WS SEPT-2022 N	2022-09-07	1510	0.029	147	<b>0.0145</b>	0.0688	4.56	<b>358.5</b>	0.0004635	1.58	0.25	0.0000675	< 0.00020	< 0.00060	<b>0.0116</b>	0.058														

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic	Barium*	Beryllium*	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead			
						mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
						Acute	Chronic	Chronic				Chronic				Acute	Chronic		Acute	Acute
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5*	3.3-3.5*	
Fording River Operation																				
FR PP1	FR PP1 MON 2022-10-25 NP	2022-10-24	1870	< 0.0060	0.0007	0.00026	0.0592	< 0.040	< 0.000100	< 0.020	0.000596	398	< 0.00020	0.0003	< 0.00100	< 0.020	< 0.000100			
FR PP1	FR PP1 MON 2022-11-01 N	2022-11-02	1660	0.0101	0.0006	0.00032	0.0596	< 0.020	< 0.000050	0.014	0.00111	485	< 0.00010	0.00051	0.00107	0.013	< 0.000050			
FR SCOUT	FR SCOUT WS 2022-1-06 N 0900	2022-01-06	1700	0.0477	0.00085	0.00025	0.0556	< 0.040	< 0.000100	< 0.020	0.00096	432	< 0.00020	0.00042	0.00103	0.026	< 0.000100			
FR SCOUT	FR SCOUT WS 2022-01-13 N	2022-01-13	2000	0.008	0.0007	0.00024	0.0286	< 0.040	< 0.000100	< 0.020	0.000374	413	< 0.00020	0.00032	< 0.00100	0.04	< 0.000100			
FR SCOUT	FR SCOUT WS 2022-02-10 N 0900	2022-02-10	2250	0.0171	0.00073	0.00023	0.0303	< 0.040	< 0.000100	< 0.020	0.000489	408	< 0.00020	0.00034	< 0.00100	< 0.020	< 0.000100			
FR SCOUT	FR SCOUT WS 20220216 N	2022-02-16	2070	< 0.0150	0.00075	< 0.00050	0.0286	< 0.100	< 0.000250	< 0.050	0.000444	400	< 0.00050	< 0.50	< 0.00250	< 0.050	< 0.000250			
FR SCOUT	FR SCOUT WS 2022-03-10 N	2022-03-10	891	0.0072	0.00032	0.00013	0.0874	< 0.020	< 0.000050	0.013	0.000125	175	0.0002	0.00012	< 0.00050	0.038	< 0.000050			
FR SCOUT	FR SCOUT 2022-03-10 N 0900	2022-03-10	2180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SCOUT	FR SCOUT 2022-04-07 N 0900	2022-04-07	-	< 0.0060	0.00044	< 0.00020	0.0168	< 0.000040	< 0.000100	< 0.020	0.0001	403	< 0.00020	< 0.00020	< 0.00100	0.049	< 0.000100			
FR SCOUT	FR SCOUT WS 2022-04-07 N	2022-04-07	1800	0.0153	0.00046	0.00021	0.0275	< 0.000040	< 0.000100	< 0.020	0.000342	329	< 0.00020	0.00031	< 0.00100	0.068	< 0.000100			
FR SCOUT	FR SCOUT 2022-05-05 N 0900	2022-05-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SCOUT	FR SCOUT 2022-06-02 N 0900	2022-06-02	528	0.128	0.00029	0.00029	0.0398	< 0.000020	< 0.000050	< 0.010	0.000276	96.6	0.00031	0.00022	0.00083	0.086	< 0.000073			
FR SCOUT	FR SCOUT WS 2022-06-04 N	2022-06-04	251	0.0654	0.0002	0.0003	0.0312	< 0.020	< 0.000050	< 0.010	0.000162	48.5	0.00015	< 0.10	< 0.00050	0.03	< 0.000050			
FR SCOUT	FR SCOUT 2022-07-14 N 0900	2022-07-14	257	0.0481	0.00013	0.00016	0.041	< 0.020	< 0.000050	< 0.010	0.000599	55.5	0.00017	0.00013	< 0.00050	0.075	< 0.000069			
FR SCOUT	FR SCOUT WS 2022 07 25 N	2022-07-25	902	0.0137	0.00039	0.00024	0.0405	< 0.020	< 0.000050	< 0.010	0.000552	151	< 0.00010	0.00046	< 0.00050	0.012	< 0.000050			
FR SCOUT	FR SCOUT 2022-08-11 N 0900	2022-08-11	392	0.0082	0.00019	0.00012	0.0458	< 0.020	< 0.000050	< 0.010	0.000115	86.2	0.00014	< 0.10	< 0.00050	0.022	< 0.000050			
FR SCOUT	FR SCOUT 2022-09-08 N 0900	2022-09-08	1660	0.0115	0.0006	0.00025	0.0418	< 0.040	< 0.000100	< 0.020	0.00106	298	< 0.00020	0.00076	< 0.00100	< 0.020	< 0.000100			
FR SCOUT	FR SCOUT 2022-10-06 N 0900	2022-10-06	2150	0.0102	0.00071	< 0.00020	0.0347	< 0.020	< 0.000100	< 0.020	0.0013	390	0.00024	0.00084	< 0.00100	< 0.020	< 0.000100			
FR SCOUT	FR SCOUT 2022-11-03 N 0900	2022-11-03	2170	0.0099	0.00065	0.00025	0.0462	< 0.040	< 0.000100	0.08	0.00128	447	< 0.00020	0.0007	< 0.00100	< 0.020	< 0.000100			
FR SCOUT	FR SCOUT 2022-12-01 N 0900 CALC	2022-12-01	2380	0.0199	0.00066	0.00025	0.0319	< 0.040	< 0.000100	< 0.020	0.00125	428	< 0.00020	0.00064	< 0.00100	< 0.020	< 0.000100			
FR SCOUT	FR SCOUT 2022-12-22 N 0900	2022-12-22	2560	< 0.0060	0.00066	< 0.00020	0.0285	< 0.040	< 0.000100	< 0.020	0.000883	414	< 0.00020	0.00039	0.00174	< 0.020	< 0.000100			
FR SCOUT	FR SCOUT 2022-12-29 N 0900	2022-12-29	2620	< 0.0060	0.00069	< 0.00020	0.0261	< 0.000040	< 0.000100	< 0.020	0.00087	455	< 0.00010	0.00034	< 0.00100	< 0.020	< 0.000100			
FR SP1	FR SP1 MON 2022-01-04 N	2022-01-08	2550	0.0089	0.00066	< 0.00020	0.0314	< 0.040	< 0.000100	< 0.020	0.000758	444	< 0.00020	0.00031	0.00117	< 0.020	< 0.000100			
FR SP1	FR SP1 MON 2022-02-01 N	2022-02-06	672	< 0.0030	0.00016	< 0.00010	0.0219	< 0.020	< 0.000050	0.019	0.000159	142	< 0.00010	0.00013	< 0.00050	< 0.010	< 0.000050			
FR SP1	FR SP1 MON 2022-03-01 N	2022-03-04	1640	0.0071	0.00066	0.00032	0.0654	< 0.040	< 0.000100	< 0.020	0.00103	390	0.0002	0.00035	0.00135	< 0.020	< 0.000100			
FR SP1	FR SP1 WEK 2022-03-14 N	2022-03-19	674	0.0062	0.00019	< 0.00010	0.0248	< 0.020	< 0.000050	0.022	0.000144	159	< 0.00010	0.00011	< 0.00050	0.01	< 0.000050			
FR SP1	FR SP1 WEK 2022-03-21 N	2022-03-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WEK 2022-03-28 N	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 MON 2022-04-01 N	2022-04-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WEK 2022-04-11 N	2022-04-14	729	0.012	0.00018	< 0.00010	0.0264	< 0.020	< 0.000050	0.019	0.000148	146	< 0.00010	0.00022	< 0.00050	0.021	< 0.000050			
FR SP1	FR SP1 WEK 2022-04-18 N	2022-04-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR DC2 WEK 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR DC2 MON 2022-05-01 N	2022-05-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WEK 2022-05-09 N	2022-05-12	739	0.0031	0.000195	0.000135	0.02405	< 0.020	< 0.000050	0.021	0.000119	164.5	< 0.00010	0.000165	< 0.00050	< 0.010	< 0.000050			
FR SP1	FR SP1 WEK 2022-05-16 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WEK 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WEK 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 MON 2022-06-01 N	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR FLD1 2022-06-13 N	2022-06-13	703	0.0033	0.0002	< 0.00010	0.0223	< 0.020	< 0.000050	0.019	0.000123	154	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050			
FR SP1	FR SP1 WEK 2022-06-13 N	2022-06-13	< 0.50	< 0.0030	< 0.00010	< 0.00010	< 0.00010	< 0.020	< 0.000050	< 0.010	< 0.0050	< 0.050	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050			
FR SP1	FR SP1 WEK 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WEK 2022-06-27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 MON 2022-07-01 N	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR SP1 WEK 2022-07-11 N	2022-07-12	691	< 0.0030	0.00021	< 0.00010	0.02	< 0.020	< 0.000050	0.02	0.000135	136	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.000050			
FR SP1	FR SP1 MON 2022-08-01 N	2022-08-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FR SP1	FR DC2 MON 2022-09-01 NP	2022-09-08	632	0.0098	0.00025	< 0.00010	0.0223	< 0.020	< 0.000050	0.018	0.00011	128	< 0.00010	< 0.10	< 0.00050	0.025	< 0.000050			
FR SP1	FR SP1 WS 2022-09-30 NP	2022-09-30	719	0.0071	0.000215	0.000105	0.0226	< 0.020	< 0.000050	0.019	0.0000836	162	< 0.00010	0.00012	< 0.00050	< 0.010	< 0.000050			
FR SP1	FR SP1 MON 2022-10-01 N	2022-10-19	767	0.0092	0.00022	< 0.00010	0.0251	< 0.020	< 0.000050	0.02	0.0000881	154	< 0.00010	0.00013	< 0.00050	0.013	< 0.000050			
FR SP1	FR SP1 MON 2022-11-01 N	2022-11-03	798	0.0089	0.0002	< 0.00010	0.0215	< 0.020	< 0.000050	0.018	0.000123	166	< 0.00010	0.00014	< 0.00050	0.019	< 0.000050			

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

		Total Metals																		
Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03 <sup>a</sup>	0.0009-0.01 <sup>a</sup>	0.025-0.15 <sup>a</sup>	n/a	2	0.0001-0.003 <sup>a</sup>	0.00005-0.0015 <sup>a</sup>	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2 <sup>a</sup>	0.0075-2 <sup>a</sup>
Fording River Operation																				
FR PP1	FR PP1 MON 2022-10-25 NP	2022-10-24	1870	0.034	180	0.00772	0.0711	4.48	468	< 0.000020	1.69	0.3	0.00006	< 0.00020	< 0.00060	0.0134	0.0365			
FR PP1	FR PP1 MON 2022-11-01 N	2022-11-02	1660	0.029	195	<b>0.0144</b>	0.0726	4.98	434	< 0.000010	1.84	0.31	0.000066	< 0.00010	< 0.00030	<b>0.0128</b>	0.064			
FR SCOUT	FR SCOUT WS 2022-1-06 N 0900	2022-01-06	1700	0.028	189	<b>0.0141</b>	0.0685	4.53	375	< 0.000020	1.71	0.28	0.000062	< 0.00020	0.00108	<b>0.0136</b>	0.049			
FR SCOUT	FR SCOUT WS 2022-01-13 N	2022-01-13	2050	0.077	335	0.00378	0.0401	5.17	530	< 0.000020	8.1	0.24	0.000044	< 0.00020	< 0.00060	<b>0.017</b>	0.0227			
FR SCOUT	FR SCOUT WS 2022-02-10 N 0900	2022-02-10	2220	0.075	316	0.00448	0.0452	4.7	555	< 0.000020	3.02	0.25	0.000055	< 0.00020	< 0.00060	<b>0.0174</b>	0.031			
FR SCOUT	FR SCOUT WS 20220216 N	2022-02-16	2070	0.079	328	0.00586	0.047	4.73	508	< 0.000050	3.2	0.24	< 0.000050	< 0.00050	< 0.00150	<b>0.0175</b>	0.0321			
FR SCOUT	FR SCOUT WS 2022-03-10 N	2022-03-10	891	0.083	93.1	<b>0.014</b>	0.0097	2.78	127	< 0.000010	3.51	0.23	0.000014	< 0.00010	< 0.00030	0.00577	0.0546			
FR SCOUT	FR SCOUT 2022-03-10 N 0900	2022-03-10	2180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SCOUT	FR SCOUT 2022-04-07 N 0900	2022-04-07	-	0.106	303	0.0129	0.0156	6.67	168	< 0.000020	15.1	0.26	< 0.000020	< 0.00020	< 0.0100	<b>0.0176</b>	0.0084			
FR SCOUT	FR SCOUT WS 2022-04-07 N	2022-04-07	1800	0.091	237	<b>0.0171</b>	0.0257	4.2	262	< 0.000020	9.56	0.22	< 0.000020	< 0.00020	< 0.0200	<b>0.0135</b>	0.0195			
FR SCOUT	FR SCOUT 2022-05-05 N 0900	2022-05-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SCOUT	FR SCOUT 2022-06-02 N 0900	2022-06-02	528	0.018	71.2	<b>0.00342</b>	0.0117	1.6	120	0.00001	1	0.07	0.000024	< 0.00010	< 0.0100	0.00365	0.015			
FR SCOUT	FR SCOUT WS 2022-06-04 N	2022-06-04	251	0.008	33.8	0.00122	0.00516	0.805	43.7	< 0.000010	0.53	0.04	0.000013	< 0.00010	0.00193	0.00145	0.0106			
FR SCOUT	FR SCOUT 2022-07-14 N 0900	2022-07-14	257	0.015	25.7	<b>0.00743</b>	0.00255	0.976	19.4	< 0.000010	1.46	0.09	< 0.000010	< 0.00010	0.00072	0.00143	0.0056			
FR SCOUT	FR FRSOUT WS 2022 07 25 N	2022-07-25	902	0.025	115	0.00422	0.0213	2.12	191	< 0.000010	1.17	0.1	0.000024	< 0.00010	0.00043	0.00598	0.0286			
FR SCOUT	FR SCOUT 2022-08-11 N 0900	2022-08-11	392	0.035	39.3	<b>0.00479</b>	0.0051	1.49	51.1	< 0.000010	1.62	0.12	< 0.000010	< 0.00010	< 0.00030	0.00244	0.0051			
FR SCOUT	FR SCOUT 2022-09-08 N 0900	2022-09-08	1660	0.062	220	0.0077	0.0448	3.87	365	< 0.000020	2	0.18	0.000042	< 0.00020	< 0.00060	<b>0.0132</b>	0.0518			
FR SCOUT	FR SCOUT 2022-10-06 N 0900	2022-10-06	2150	0.086	327	0.00783	0.0607	5.01	483	< 0.000020	3.32	0.2	0.000054	< 0.00020	< 0.00060	<b>0.0146</b>	0.0703			
FR SCOUT	FR SCOUT 2022-11-03 N 0900	2022-11-03	2170	0.083	326	0.00571	0.0577	4.6	477	< 0.000020	2.88	0.26	0.000059	< 0.00020	< 0.00060	<b>0.0171</b>	0.071			
FR SCOUT	FR SCOUT 2022-12-01 N 0900_CALC	2022-12-01	2380	0.079	354	0.00568	0.0586	4.91	504	< 0.000020	2.89	0.23	0.000062	< 0.00020	0.00071	<b>0.0171</b>	0.0733			
FR SCOUT	FR SCOUT 2022-12-22 N 0900	2022-12-22	2560	0.099	336	0.00746	0.0487	5.14	559	< 0.000020	4.44	0.26	0.00005	< 0.00020	< 0.00060	<b>0.021</b>	0.14			
FR SCOUT	FR SCOUT 2022-12-29 N 0900	2022-12-29	2620	0.103	376	0.00472	0.0554	4.96	615	< 0.000020	2.98	0.26	0.000055	< 0.00020	< 0.00060	<b>0.0199</b>	0.0572			
FR SP1	FR SP1 MON 2022-01-04 N	2022-01-08	2550	0.1	356	0.00475	0.0521	4.62	610	< 0.000020	2.89	0.26	0.000056	< 0.00020	< 0.00060	<b>0.0183</b>	0.0459			
FR SP1	FR SP1 MON 2022-02-01 N	2022-02-06	672	0.053	77.4	0.00069	0.00198	3.71	31.3	< 0.000010	1.97	0.17	0.000014	< 0.00010	< 0.00030	0.00454	< 0.0030			
FR SP1	FR SP1 MON 2022-03-01 N	2022-03-04	1640	0.02	149	<b>0.0167</b>	0.0569	4.2	278	< 0.000020	1.6	0.28	0.000057	< 0.00020	< 0.00060	<b>0.0105</b>	0.0521			
FR SP1	FR SP1 WEK 2022-03-14 N	2022-03-19	674	0.064	80.8	0.00086	0.00221	4.05	27.6	< 0.000010	1.89	0.18	0.000018	< 0.00010	< 0.00030	0.00478	< 0.0030			
FR SP1	FR SP1 WEK 2022-03-21 N	2022-03-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SP1	FR SP1 WEK 2022-03-28 N	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SP1	FR SP1 MON 2022-04-01 N	2022-04-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SP1	FR SP1 WEK 2022-04-11 N	2022-04-14	729	0.062	102	0.00276	0.0025	3.93	82.4	< 0.000010	3.4	0.18	0.000016	< 0.00010	< 0.00030	0.00482	< 0.0030			
FR SP1	FR SP1 WEK 2022-04-18 N	2022-04-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SP1	FR DC2 WEK 2022-04-25 N	2022-04-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SP1	FR DC2 MON 2022-05-01 N	2022-05-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SP1	FR SP1 WEK 2022-05-09 N	2022-05-12	739	0.06	95.45	0.00065	0.00234	3.86	46.9	< 0.000010	2.5	0.2	0.000019	< 0.00010	< 0.00030	0.00559	< 0.0030			
FR SP1	FR SP1 WEK 2022-05-16 N	2022-05-16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SP1	FR SP1 WEK 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SP1	FR SP1 WEK 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SP1	FR SP1 MON 2022-06-01 N	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SP1	FR FLD1 2022-06-13 N	2022-06-13	703	0.055	79.8	0.00045	0.00219	3.43	61.3	< 0.000010	1.79	0.16	0.000018	< 0.00010	< 0.00030	0.00407	< 0.0030			
FR SP1	FR SP1 WEK 2022-06-13 N	2022-06-13	< 0.50 <sup>a</sup>	0.0010 <sup>a</sup>	0.0050 <sup>a</sup>	< 0.00010	< 0.00050	< 0.050	< 0.050	< 0.000010	0.050	0.000	< 0.000010	< 0.00010	< 0.00030	< 0.000010	< 0.0030			
FR SP1	FR SP1 WEK 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SP1	FR SP1 WEK 2022-06-27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SP1	FR SP1 MON 2022-07-01 N	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SP1	FR SP1 WEK 2022-07-11 N	2022-07-12	691	0.06	73.2	0.00035	0.00187	3.73	75.2	< 0.000010	1.79	0.16	0.00002	< 0.00010	< 0.00030	0.00394	< 0.0030			
FR SP1	FR SP1 MON 2022-08-01 N	2022-08-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FR SP1	FR DC2 MON 2022-09-01 NP	2022-09-08	632	0.051	70.2	0.00088	0.0019	3.66	51.6	0.000348	1.7	0.15	0.000019	0.00011	< 0.00030	0.00417	< 0.0030			
FR SP1	FR SP1 WS 2022-09-30 NP	2022-09-30	719	0.059	88.55	0.00055	0.00206	3.4	43.35	< 0.000010	1.9	0.17	0.000019	< 0.00010	< 0.00030	0.004575	< 0.0030			
FR SP1	FR SP1 MON 2022-10-01 N	2022-10-19	767	0.059	90.2	0.00098	0.00226	3.89	40.5	< 0.000010	2.19	0.18	0.000018	< 0.00010	< 0.00030	0.00483	< 0.0030			
FR SP1	FR SP1 MON 2022-11-01 N	2022-11-03	798	0.056	96.3	0.00102	0.00229	3.6	31.3	< 0.000010	2.06	0.17	0.000021	< 0.00010	< 0.00030	0.00509	0.0043			

< Denotes concentration less than indicated detection limit

- Denotes analysis not conducted

n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL

**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L		Copper mg/L	Iron mg/L	Lead mg/L	
														Acute	Chronic			Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>a</sup>	3.3-3.5 <sup>b</sup>
<b>Greenhills Operation</b>																			
GH FC1	GH FC1 WS 2022-01-03 NP	2022-01-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH FC1	GH FC1 WS 2022-02-07 NP	2022-02-07	332	0.102	< 0.00010	0.00034	0.0672	< 0.020	< 0.000050	< 0.010	0.0000131	85.6	< 0.00010	1E-04	< 0.00050	0.356	0.000071		
GH FC1	GH FC1 WS 2022-03-07 N	2022-03-07	313	0.0075	< 0.00010	0.00022	0.0725	< 0.020	< 0.000050	< 0.010	< 0.0050	81.6	0.00023	< 0.10	0.00074	0.039	0.000112		
GH FC1	GH FC1 WS 2022-03-14 NP	2022-03-17	299	0.0045	< 0.00010	0.00017	0.0627	< 0.020	< 0.000050	< 0.010	< 0.0050	79.2	< 0.00010	< 0.10	< 0.00050	0.03	< 0.000050		
GH FC1	GH FC1 WS 2022-03-20 NP	2022-03-20	288	0.0177	< 0.00010	0.00019	0.0755	< 0.020	< 0.000050	< 0.010	< 0.0050	84.8	< 0.00010	< 0.10	< 0.00050	0.078	< 0.000050		
GH FC1	GH FC1 WS 2022-03-21 NP	2022-03-22	321	0.107	< 0.00010	0.00024	0.0745	< 0.020	< 0.000050	< 0.010	0.0000154	74	0.00019	1E-04	< 0.00050	0.283	0.000141		
GH FC1	GH FC1 WS 2022-03-28 NP	2022-03-29	263	0.0129	< 0.00010	0.00017	0.0548	< 0.020	< 0.000050	< 0.010	< 0.0050	70.8	< 0.00010	< 0.10	< 0.00050	0.057	< 0.000050		
GH FC1	GH FC1 WS 2022-04-04 NP	2022-04-06	267	0.0895	< 0.00010	0.00025	0.0465	< 0.020	< 0.000050	< 0.010	0.0000189	82.2	< 0.00010	< 0.10	< 0.00050	0.233	0.000087		
GH FC1	GH FC1 WS 2022-04-11 NP	2022-04-13	248	0.0066	< 0.00010	0.00013	0.0497	< 0.020	< 0.000050	< 0.010	< 0.0050	64.2	< 0.00010	< 0.10	< 0.00050	0.023	< 0.000050		
GH FC1	GH FC1 WS 2022-04-18 NP	2022-04-21	255	0.0106	< 0.00010	0.00024	0.0532	< 0.020	< 0.000050	< 0.010	< 0.0050	68.5	< 0.00010	< 0.10	< 0.00050	0.034	< 0.000050		
GH FC1	GH FC1 WS 2022-04-25 NP	2022-04-27	266	0.0148	< 0.00010	0.00018	0.0524	< 0.020	< 0.000050	< 0.010	< 0.0050	66.6	< 0.00010	< 0.10	< 0.00050	0.034	< 0.000050		
GH FC1	GH FC1 WS 2022-05-02 NP	2022-05-04	259	0.0081	< 0.00010	0.00013	0.0509	< 0.020	< 0.000050	< 0.010	< 0.0050	66.4	0.00049	< 0.10	< 0.00050	0.024	< 0.000050		
GH FC1	GH FC1 WS 2022-05-09 NP	2022-05-11	262	0.0067	< 0.00010	0.00019	0.0566	< 0.020	< 0.000050	< 0.010	< 0.0050	66	< 0.00010	< 0.10	< 0.00050	0.027	< 0.000050		
GH FC1	GH FC1 WS 2022-05-16 NP	2022-05-18	257	0.0122	< 0.00010	0.00017	0.052	< 0.020	< 0.000050	< 0.010	< 0.0050	62.3	< 0.00010	< 0.10	< 0.00050	0.026	< 0.000050		
GH FC1	GH FC1 WS 2022-05-23 NP	2022-05-27	264	0.0124	< 0.00010	0.00018	0.0586	< 0.020	< 0.000050	< 0.010	< 0.0050	67.7	< 0.00010	< 0.10	< 0.00050	0.032	< 0.000050		
GH FC1	GH FC1 WS 2022-05-30 NP	2022-06-01	287	0.0079	< 0.00010	0.00018	0.0615	< 0.020	< 0.000050	< 0.010	< 0.0050	68.4	< 0.00010	< 0.10	< 0.00050	0.038	< 0.000050		
GH FC1	GH FC1 WS 2022-06-06 NP	2022-06-08	270	0.009	< 0.00010	0.0002	0.0562	< 0.020	< 0.000050	< 0.010	< 0.0050	68.3	< 0.00010	< 0.10	< 0.00050	0.029	< 0.000050		
GH FC1	GH FC1 WS 2022-06-13 NP	2022-06-15	266	0.0096	< 0.00010	0.00021	0.0691	< 0.020	< 0.000050	0.011	< 0.0050	69.7	< 0.00010	< 0.10	< 0.00050	0.037	< 0.000050		
GH FC1	GH FC1 WS 2022-06-20 NP	2022-06-22	255	0.0115	< 0.00010	0.00017	0.0491	< 0.020	< 0.000050	< 0.010	0.0000053	58.4	< 0.00010	< 0.10	< 0.00050	0.043	< 0.000050		
GH FC1	GH FC1 WS 2022-06-27 NP	2022-06-29	314	0.0069	< 0.00010	0.00018	0.0648	< 0.020	< 0.000050	0.012	< 0.000050	80.8	< 0.00010	< 0.10	< 0.00050	0.025	< 0.000050		
GH FC1	GH FC1 WS 2022-07-04 NP	2022-07-06	281	0.0078	< 0.00010	0.00016	0.0624	< 0.020	< 0.000050	0.01	< 0.0050	71.6	< 0.00010	< 0.10	< 0.00050	0.028	< 0.000050		
GH FC1	GH FC1 WS 2022-07-11 NP	2022-07-13	281	0.0084	< 0.00010	0.00022	0.0591	< 0.020	< 0.000050	0.01	< 0.0050	65.2	< 0.00010	< 0.10	< 0.00050	0.039	< 0.000050		
GH FC1	GH FC1 WS 2022-08-01 NP	2022-08-04	284	0.0067	< 0.00010	0.00024	0.0653	< 0.020	< 0.000050	0.012	< 0.0050	70.4	< 0.00010	< 0.10	< 0.00050	0.039	< 0.000050		
GH FC1	GH FC1 WS 2022-09-05 NP	2022-09-08	302	0.0054	< 0.00010	0.00024	0.0726	< 0.020	< 0.000050	0.011	< 0.0050	77	< 0.00010	< 0.10	< 0.00050	0.058	< 0.000050		
GH FC1	GH FC1 WS 2022-10-03 NP	2022-10-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH FC1	GH FC1 WS 2022-11-07 NP	2022-11-09	316	0.0055	< 0.00010	0.00022	0.067	< 0.020	< 0.000050	< 0.010	< 0.0050	81.2	< 0.00010	< 0.10	< 0.00050	0.077	< 0.000050		
GH GH1	GH GH1 WS 2022-01-03 N	2022-01-04	263	0.004	< 0.00010	0.00018	0.0577	< 0.020	< 0.000050	< 0.010	< 0.0050	71.8	< 0.00010	< 0.10	< 0.00050	0.094	< 0.000050		
GH GH1	GH GH1 WS 2022-02-07 N	2022-02-04	951	0.0047	0.00043	0.00022	0.0439	< 0.020	< 0.000050	0.011	0.0000058	193	0.00015	< 0.10	< 0.00050	< 0.010	< 0.000050		
GH GH1	GH GH1 WS 2022-02-19 N	2022-02-19	1000	0.0032	0.0004	0.0002	0.049	< 0.020	< 0.000050	0.01	0.000006	200	0.00016	< 0.10	< 0.00050	< 0.010	< 0.000050		
GH GH1	GH GH1 WS 2022-02-20 NP	2022-02-20	1000	0.0056	0.00038	0.00022	0.0428	< 0.020	< 0.000050	0.01	0.000005	188	0.00012	< 0.10	< 0.00050	< 0.010	< 0.000050		
GH GH1	GH GH1 WS 2022-02-21 N	2022-02-21	1030	0.0041	0.00039	0.0002	0.0443	< 0.020	< 0.000050	0.01	0.0000064	192	0.00016	< 0.10	< 0.00050	< 0.010	< 0.000050		
GH GH1	GH GH1 WS 2022-03-07 N	2022-03-04	983	0.0058	0.0004	0.00022	0.0446	< 0.020	< 0.000050	0.01	0.0000078	195	0.00018	< 0.10	< 0.00050	< 0.010	< 0.000050		
GH GH1	GH GH1 WS 2022-03-14 N	2022-03-15	1040	< 0.0120	0.00036	0.00016	0.046	< 0.020	< 0.000050	0.01	0.0000102	201	0.00013	< 0.10	< 0.00050	< 0.010	< 0.000050		
GH GH1	GH GH1 WS 2022-03-21 N	2022-03-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-03-28 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH FOX3 WS 2022-04-04 N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-04-04 N	2022-04-04	614	0.0517	0.00035	0.00025	0.04375	< 0.020	< 0.000050	< 0.010	0.0000316	122.5	0.00016	< 0.10	< 0.00050	0.0495	0.0000525		
GH GH1	GH GH1 WS 2022-04-11 N	2022-04-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-04-18 N	2022-04-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-04-25 N	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-05-09 N	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-05-16 N	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-05-30 N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-06-06 N	2022-06-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-06-13 N	2022-06-14	575	0.0161	0.00034	0.00019	0.0462	< 0.020	< 0.000050	0.011	0.000106	109	0.00015	< 0.10	< 0.00050	0.017	< 0.000050		
GH GH1	GH GH1 WS 2022-06-17 N	2022-06-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-06-18 N	2022-06-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-06-19 N	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
Greenhills Operation																				
GH FC1	GH FC1 WS 2022-01-03 NP	2022-01-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH FC1	GH FC1 WS 2022-02-07 NP	2022-02-07	332	0.004	31.4	<b>0.0688</b>	< 0.00050	0.767	0.157	< 0.000010	2.7	0.1	< 0.000010	< 0.00010	0.00206	0.000429	< 0.0030			
GH FC1	GH FC1 WS 2022-03-07 N	2022-03-07	313	0.004	31.8	<b>0.0101</b>	< 0.00050	0.786	0.107	< 0.000010	2.84	0.09	< 0.000010	0.00035	< 0.00030	0.000468	0.0034			
GH FC1	GH FC1 WS 2022-03-14 NP	2022-03-17	299	0.004	30.5	<b>0.0089</b>	< 0.00050	1.04	0.1	< 0.000010	2.83	0.09	< 0.000010	< 0.00010	< 0.00030	0.000364	< 0.0030			
GH FC1	GH FC1 WS 2022-03-20 NP	2022-03-20	288	0.003	31.6	<b>0.0398</b>	< 0.00050	1.03	0.244	< 0.000010	5.51	0.14	< 0.000010	< 0.00010	0.00037	0.000297	< 0.0030			
GH FC1	GH FC1 WS 2022-03-21 NP	2022-03-22	321	0.003	25.4	<b>0.0851</b>	< 0.00050	1.07	0.185	< 0.000010	5.1	0.12	< 0.000010	< 0.00010	0.0019	0.000314	0.0244			
GH FC1	GH FC1 WS 2022-03-28 NP	2022-03-29	263	0.004	28.1	<b>0.0122</b>	< 0.00050	1.25	0.102	< 0.000010	2.58	0.09	< 0.000010	< 0.00010	0.00034	0.000277	< 0.0030			
GH FC1	GH FC1 WS 2022-04-04 NP	2022-04-06	267	0.003	26.4	<b>0.0508</b>	< 0.00050	1.43	0.16	< 0.000010	1.8	0.07	< 0.000010	< 0.00010	< 0.00210	0.000289	< 0.0030			
GH FC1	GH FC1 WS 2022-04-11 NP	2022-04-13	248	0.003	23.6	<b>0.00356</b>	< 0.00050	1.26	0.118	< 0.000010	1.97	0.07	< 0.000010	< 0.00010	< 0.00030	0.00032	< 0.0030			
GH FC1	GH FC1 WS 2022-04-18 NP	2022-04-21	255	0.004	27.6	<b>0.00529</b>	< 0.00050	1.41	0.125	< 0.000010	2.56	0.08	< 0.000010	< 0.00010	< 0.00030	0.000382	< 0.0030			
GH FC1	GH FC1 WS 2022-04-25 NP	2022-04-27	266	0.004	26.8	<b>0.00754</b>	< 0.00050	1.13	<b>0.117</b>	< 0.000010	2.39	0.08	< 0.000010	< 0.00010	< 0.00060	0.00038	< 0.0030			
GH FC1	GH FC1 WS 2022-05-02 NP	2022-05-04	259	0.003	25.1	<b>0.00437</b>	< 0.00050	1.13	< 0.050	< 0.000010	2.13	0.08	< 0.000010	< 0.00010	< 0.00030	0.000304	< 0.0030			
GH FC1	GH FC1 WS 2022-05-09 NP	2022-05-11	262	0.004	26.4	<b>0.00571</b>	< 0.00050	1.21	0.099	< 0.000010	2.43	0.08	< 0.000010	< 0.00010	< 0.00030	0.000309	< 0.0030			
GH FC1	GH FC1 WS 2022-05-16 NP	2022-05-18	257	0.004	24.8	<b>0.00474</b>	< 0.00050	1.23	0.072	< 0.000010	2.44	0.07	< 0.000010	< 0.00010	0.00032	0.000324	< 0.0030			
GH FC1	GH FC1 WS 2022-05-23 NP	2022-05-27	264	0.004	25.7	<b>0.00655</b>	< 0.00050	1.2	0.081	< 0.000010	2.44	0.08	< 0.000010	< 0.00010	< 0.00030	0.000328	< 0.0030			
GH FC1	GH FC1 WS 2022-05-30 NP	2022-06-01	287	0.004	26.7	<b>0.00872</b>	< 0.00050	1.2	0.086	< 0.000010	2.48	0.09	< 0.000010	< 0.00010	< 0.00030	0.000293	< 0.0030			
GH FC1	GH FC1 WS 2022-06-06 NP	2022-06-08	270	0.004	26.7	<b>0.00792</b>	< 0.00050	1.08	0.15	< 0.000010	2.39	0.09	< 0.000010	< 0.00010	< 0.00030	0.000299	< 0.0030			
GH FC1	GH FC1 WS 2022-06-13 NP	2022-06-15	266	0.004	28.9	<b>0.00955</b>	< 0.00050	1.23	0.107	< 0.000010	2.67	0.09	< 0.000010	< 0.00010	< 0.00030	0.000278	< 0.0030			
GH FC1	GH FC1 WS 2022-06-20 NP	2022-06-22	255	0.003	23.7	<b>0.0133</b>	< 0.00050	0.888	0.113	< 0.000010	2.27	0.07	< 0.000010	< 0.00010	0.00034	0.000289	< 0.0030			
GH FC1	GH FC1 WS 2022-06-27 NP	2022-06-29	314	0.004	28.8	<b>0.00826</b>	< 0.00050	0.784	0.121	< 0.000010	2.28	0.09	< 0.000010	< 0.00010	< 0.00030	0.000282	< 0.0030			
GH FC1	GH FC1 WS 2022-07-04 NP	2022-07-06	281	0.004	27.3	<b>0.00917</b>	< 0.00050	0.608	0.062	< 0.000010	2.34	0.08	< 0.000010	< 0.00010	< 0.00030	0.00026	< 0.0030			
GH FC1	GH FC1 WS 2022-07-11 NP	2022-07-13	281	0.004	26.2	<b>0.0115</b>	< 0.00050	0.689	0.092	< 0.000010	2.35	0.09	< 0.000010	< 0.00010	< 0.00030	0.000252	< 0.0030			
GH FC1	GH FC1 WS 2022-08-01 NP	2022-08-04	284	0.005	28	<b>0.0129</b>	< 0.00050	0.642	0.082	< 0.000010	2.47	0.09	< 0.000010	< 0.00010	< 0.00030	0.000269	< 0.0030			
GH FC1	GH FC1 WS 2022-09-05 NP	2022-09-08	302	0.005	31.1	<b>0.0219</b>	< 0.00050	0.752	<b>0.116</b>	< 0.000010	2.63	0.1	< 0.000010	< 0.00010	< 0.00030	0.000235	< 0.0030			
GH FC1	GH FC1 WS 2022-10-03 NP	2022-10-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH FC1	GH FC1 WS 2022-11-07 NP	2022-11-09	316	0.004	31.3	<b>0.047</b>	< 0.00050	1.09	0.057	< 0.000010	2.92	0.1	< 0.000010	< 0.00010	< 0.00030	0.000168	< 0.0030			
GH GH1	GH GH1 WS 2022-01-03 N	2022-01-04	263	0.005	29.6	<b>0.0585</b>	< 0.00050	0.929	<b>0.076</b>	< 0.000010	2.61	0.08	< 0.000010	< 0.00010	< 0.00030	0.00021	< 0.0030			
GH GH1	GH GH1 WS 2022-02-07 N	2022-02-04	951	0.016	133	<b>0.00187</b>	0.00813	2.17	<b>132</b>	< 0.000010	2.79	0.22	< 0.000010	< 0.00010	< 0.00030	0.00828	0.0036			
GH GH1	GH GH1 WS 2022-02-19 N	2022-02-19	1000	0.017	146	0.00216	0.00817	2.41	<b>142</b>	< 0.000010	2.81	0.23	< 0.000010	< 0.00010	< 0.00030	0.00769	< 0.0030			
GH GH1	GH GH1 WS 2022-02-20 NP	2022-02-20	1000	0.017	150	0.0018	0.00816	2.27	<b>146</b>	< 0.000010	2.92	0.2	< 0.000010	< 0.00010	< 0.00030	0.0081	< 0.0030			
GH GH1	GH GH1 WS 2022-02-21 N	2022-02-21	1030	0.017	150	0.00164	0.00807	2.33	<b>153</b>	< 0.000010	3.05	0.21	< 0.000010	< 0.00010	< 0.00030	0.00817	< 0.0030			
GH GH1	GH GH1 WS 2022-03-07 N	2022-03-04	983	0.017	150	0.00156	0.00823	2.34	<b>149</b>	< 0.000010	3.02	0.21	< 0.000010	< 0.00010	< 0.00030	<b>0.00853</b>	< 0.0030			
GH GH1	GH GH1 WS 2022-03-14 N	2022-03-15	1040	0.017	148	0.00323	0.00855	2.38	<b>149</b>	< 0.000010	2.92	0.22	< 0.000010	< 0.00010	< 0.00030	0.00786	< 0.0030			
GH GH1	GH GH1 WS 2022-03-21 N	2022-03-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-03-28 N	2022-03-28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-04-04 N	2022-04-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-04-04 N	2022-04-04	614	0.01	83.45	<b>0.00347</b>	0.005465	1.73	<b>73.95</b>	< 0.000010	2.83	0.16	< 0.000010	< 0.00010	0.001505	0.00483	< 0.0030			
GH GH1	GH GH1 WS 2022-04-11 N	2022-04-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-04-18 N	2022-04-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-04-25 N	2022-04-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-05-09 N	2022-05-10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-05-16 N	2022-05-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-05-23 N	2022-05-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-05-30 N	2022-05-30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-06-06 N	2022-06-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-06-13 N	2022-06-14	575	0.011	67	0.00146	0.00679	1.48	<b>65.5</b>	< 0.000010	2.1	0.14	< 0.000010	< 0.00010	0.00067	0.00406	0.006			
GH GH1	GH GH1 WS 2022-06-17 N	2022-06-17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-06-18 N	2022-06-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-06-19 N	2022-06-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GH GH1	GH GH1 WS 2022-06-20 N	2022-06-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																		
			Hardness mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt		Copper mg/L	Iron mg/L	Lead			
														Acute	Chronic			Acute	Chronic	Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>a</sup>	3.3-3.5 <sup>a</sup>		
<b>Greenhills Operation</b>																					
GH GH1	GH GH1 WS 2022-06-21 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-06-22 N	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-06-27 N	2022-06-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-07-04 N	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH FOX3 WS 2022-07-04 N	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-07-11 N	2022-07-11	356	0.02903333	0.000263333	0.000213	0.0368333	< 0.020	< 0.000050	0.011333	0.000084	71.016667	0.00015667	< 0.10	0.00055667	0.026333	< 0.000050				
GH GH1	GH GH1 WS 2022-08-01 N	2022-08-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH GH1	GH GH1 WS 2022-09-05 N	2022-09-05	937	0.0069	0.00048	0.00019	0.053	< 0.020	< 0.000050	0.012	0.000013	162	0.0001	< 0.10	< 0.00050	< 0.10	< 0.00050				
GH GH1	GH GH1 WS 2022-10-03 N	2022-10-03	1020	0.00405	0.000445	0.000235	0.0431	< 0.020	< 0.000050	0.0105	< 0.0050	156	< 0.00010	< 0.10	< 0.00050	< 0.10	< 0.00050				
GH GH1	GH GH1 WS 2022-11-07 N	2022-11-03	1130	0.0111	0.00043	0.00022	0.0467	< 0.020	< 0.000050	0.01	0.0000076	193	0.00011	< 0.10	< 0.00050	< 0.10	< 0.00050				
GH GH1	GH GH1 WS 2022-11-07 N CALC	2022-11-07	1080	0.0117	0.00041	0.0002	0.0425	< 0.020	< 0.000050	< 0.010	0.0000099	183	0.00014	< 0.10	< 0.00050	0.011	< 0.00050				
GH GH1	GH GH1 WS 2022-11-10 N	2022-11-10	1130	0.0119	0.00036	0.00017	0.0489	< 0.020	< 0.000050	0.01	< 0.0050	188	0.00012	< 0.10	< 0.00050	< 0.10	< 0.00050				
GH GH1	GH FOX1 WS 2022-11-17 FD	2022-11-17	970	0.0078	0.00039	0.00022	0.045	< 0.020	< 0.000050	0.011	0.0000066	186	0.00013	< 0.10	< 0.00050	< 0.10	< 0.00050				
GH LC1	GH LC1 WS 2022-06-06 N	2022-06-19	714	0.00596667	0.0003	0.000173	0.0299667	< 0.020	< 0.000050	0.010667	< 0.0050	132.35	0.00011667	< 0.10	< 0.00050	< 0.10	< 0.00050				
GH LC1	GH LC1 WS 2022-06-20 N	2022-06-20	387	0.248	0.00046	0.00044	0.0728	< 0.020	< 0.000050	0.023	0.0000733	93.3	0.00056	3E-04	0.00103	0.364	0.000236				
GH PC1	GH PC1 WS 2022-08-01 N	2022-08-08	291	0.0877	0.00035	0.00037	0.0729	< 0.020	< 0.000050	0.019	0.0000574	72.8	0.00028	2E-04	0.00082	0.126	0.000123				
GH PC1	GH PC1 WS SESMP 2022-08 N	2022-08-17	609	0.0118	< 0.00010	0.00025	0.0832	< 0.020	< 0.000050	< 0.010	0.0000312	108	0.00076	< 0.10	< 0.00050	0.02	< 0.00050				
GH PC1	GH PC1 DS WS 2022-08-24 NP	2022-08-24	592	0.0092	< 0.00010	0.00037	0.0846	< 0.020	< 0.000050	< 0.010	0.0000299	105	0.00038	< 0.10	< 0.00050	< 0.10	< 0.00050				
GH PC1	GH PC1 DS WS 2022-08-25 NP	2022-08-25	596	0.0105	< 0.00010	0.00026	0.0817	< 0.020	< 0.000050	< 0.010	0.0000237	104	0.00037	< 0.10	< 0.00050	< 0.10	< 0.00050				
GH PC1	GH PC1 DS WS 2022-08-26 NP	2022-08-26	565	0.011	< 0.00010	0.00021	0.0808	< 0.020	< 0.000050	< 0.010	0.0000309	102	0.00027	< 0.10	< 0.00050	< 0.10	< 0.00050				
GH PC1	GH PC1 DS WS 2022-08-27 NP	2022-08-27	595	0.0069	0.00012	0.00025	0.0858	< 0.020	< 0.000050	< 0.010	0.0000255	116	0.00032	< 0.10	< 0.00050	< 0.10	< 0.00050				
GH PC1	GH PC1 DS WS 2022-08-28 NP	2022-08-28	537	0.0106	< 0.00010	0.00032	0.0863	< 0.020	< 0.000050	< 0.010	0.0000225	109	0.0003	< 0.10	< 0.00050	0.012	< 0.00050				
GH TC2	GH TC2 WS 2022-01-03 N	2022-01-12	524	0.0092	< 0.00010	0.00033	0.0924	< 0.020	< 0.000050	< 0.010	0.0000312	115	0.00032	< 0.10	< 0.00050	< 0.10	< 0.00050				
GH TC2	GH TC2 WS 2022-02-07 N	2022-02-08	1080	0.0107	0.00019	0.00016	0.0633	< 0.020	< 0.000050	0.023	0.0000238	217	< 0.00010	< 0.10	< 0.00050	0.015	< 0.00050				
GH TC2	GH TC2 WS 2022-03-07 N	2022-03-08	1090	0.0083	0.0002	0.00016	0.0617	< 0.020	< 0.000050	0.023	0.0000247	244	< 0.00010	< 0.10	< 0.00050	0.015	< 0.00050				
GH TC2	GH TC2 WS 2022-03-14 N	2022-03-17	1110	0.0202	0.00017	0.00019	0.0646	< 0.020	< 0.000050	0.023	0.0000249	250	< 0.00010	< 0.10	< 0.00050	0.027	< 0.00050				
GH TC2	GH TC2 WS 2022-03-20 N	2022-03-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-03-21 N	2022-03-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-03-28 N	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-04-04 N	2022-04-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-04-11 N	2022-04-12	685	0.0389	0.00015	0.00016	0.0703	< 0.020	< 0.000050	0.019	0.0000286	138	0.00011	< 0.10	0.00051	0.068	< 0.000050				
GH TC2	GH TC2 WS 2022-04-18 N	2022-04-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-04-25 N	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-05-02 N	2022-05-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-05-09 N	2022-05-11	468	0.088	0.00013	0.00021	0.0639	< 0.020	< 0.000050	0.02	0.0000379	103	0.00015	1E-04	0.00061	0.119	0.000104				
GH TC2	GH TC2 WS 2022-05-16 N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-05-23 N	2022-05-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-06-06 N	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-06-13 N	2022-06-15	606	0.0077	0.00018	0.00022	0.0767	< 0.020	< 0.000050	0.026	0.0000202	133	< 0.00010	< 0.10	< 0.00050	0.016	< 0.000050				
GH TC2	GH TC2 WS 2022-06-20 N	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-06-27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-07-04 N	2022-07-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-07-11 N	2022-07-13	640	0.063	0.00016	0.00025	0.0744	< 0.020	< 0.000050	0.028	0.0000274	116	0.00013	< 0.10	0.0005	0.08	< 0.000050				
GH TC2	GH TC2 WS 2022-08-01 N	2022-08-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS SESMP 2022-08 N	2022-08-22	907	0.0124	0.00027	0.00033	0.0715	< 0.020	< 0.000050	0.036	0.0000162	199	< 0.00010	< 0.10	< 0.00050	0.023	< 0.000050				
GH TC2	GH TC2 WS 2022-09-05 N	2022-09-08	1350	0.0301	0.0003	0.00036	0.0641	< 0.020	< 0.000050	0.03	0.000026	217	< 0.00010	< 0.10	< 0.00050	0.123	0.000062				
GH TC2	GH TC2 WS 2022-09-14 N	2022-09-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GH TC2	GH TC2 WS 2022-09-21 N	2022-09-21	1420	0.0055	0.00031	0.00026	0.0637	< 0.020	< 0.000050	0.03	0.0000062	264	< 0.00010	< 0.10	< 0.00050	< 0.10	< 0.000050				
GH TC2	GH TC2 WS 2022-09-22 N	2022-09-22	1310	0.0195	0.00026	0.00025	0.0595	< 0.020	< 0.000050	0.023	0.0000116	211	< 0.00010	< 0.10	< 0.00050	0.041	< 0.000050				

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL



APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc	
						Acute mg/L	Chronic mg/L				Acute mg/L	Chronic mg/L								
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*	
Greenhills Operation																				
GH GH1	GH GH1 WS 2022-06-21 N	2022-06-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-06-22 N	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-06-27 N	2022-06-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-07-04 N	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH FOX3 WS 2022-07-04 N	2022-07-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-07-11 N	2022-07-11	356	0.007	43.57	<b>0.00225667</b>	0.005106667	1.0333	<b>42.25</b>	< 0.000010	1.4	0.09	< 0.000010	< 0.000010	0.0010133	0.00262	0.0051667			
GH GH1	GH GH1 WS 2022-08-01 N	2022-08-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH GH1	GH GH1 WS 2022-09-05 N	2022-09-05	937	0.017	121	0.00188	0.0103	2.18	<b>113</b>	< 0.000010	2.38	0.18	< 0.000010	< 0.000010	< 0.00030	0.00769	< 0.0030			
GH GH1	GH GH1 WS 2022-10-03 N	2022-10-03	1020	0.017	144.5	0.000895	0.00855	2.385	<b>145</b>	< 0.000010	2.43	0.17	< 0.000010	< 0.000010	< 0.00030	0.00767	< 0.0030			
GH GH1	GH GH1 WS 2022-11-07 N	2022-11-03	1130	0.017	179	0.00176	0.00914	2.6	<b>167</b>	< 0.000010	2.75	0.21	< 0.000010	< 0.000010	< 0.00030	<b>0.00861</b>	< 0.0030			
GH GH1	GH GH1 WS 2022-11-07 N CALC	2022-11-07	1080	0.019	154	0.00107	0.00798	2.37	<b>175</b>	< 0.000010	2.51	0.2	< 0.000010	< 0.000010	< 0.00030	0.00826	< 0.0030			
GH GH1	GH GH1 WS 2022-11-10 N	2022-11-10	1130	0.018	168	0.00094	0.00778	2.48	<b>156</b>	< 0.000010	2.59	0.2	< 0.000010	< 0.000010	< 0.00030	0.0081	< 0.0030			
GH GH1	GH FOX1 WS 2022-11-17 FD	2022-11-17	970	0.02	169	0.0011	0.00829	2.58	<b>168</b>	< 0.000010	2.81	0.2	< 0.000010	< 0.000010	< 0.00030	0.00848	< 0.0030			
GH LC1	GH LC1 WS 2022-06-06 N	2022-06-19	714	0.015	118.3	0.000656667	0.0058	1.75	<b>116.683</b>	< 0.000010	1.88	0.14	< 0.000010	< 0.000010	< 0.00030	0.00609333	< 0.0030			
GH LC1	GH LC1 WS 2022-06-20 N	2022-06-20	387	0.047	45.2	<b>0.0189</b>	0.0126	1.98	<b>52.5</b>	0.00001	10.9	0.3	0.000012	< 0.000010	0.00447	0.00327	0.0038			
GH PC1	GH PC1 WS 2022-08-01 N	2022-08-08	291	0.028	29.2	<b>0.015</b>	0.00667	1.55	<b>25.9</b>	< 0.000010	7.97	0.23	< 0.000010	< 0.000010	0.00129	0.00189	< 0.0030			
GH PC1	GH PC1 WS SESMP 2022-08 N	2022-08-17	609	0.007	78	0.00094	0.0014	1.1	<b>63</b>	< 0.000010	0.83	0.13	0.000012	< 0.000010	< 0.00030	0.00538	0.007			
GH PC1	GH PC1 DS WS 2022-08-24 NP	2022-08-24	592	0.008	80.1	0.00084	0.00134	1.11	<b>68.2</b>	< 0.000010	0.86	0.14	0.000019	< 0.000010	< 0.00030	0.00529	0.0068			
GH PC1	GH PC1 DS WS 2022-08-25 NP	2022-08-25	596	0.007	88.5	0.00089	0.00127	1.1	<b>59</b>	< 0.000010	0.84	0.13	< 0.000010	< 0.000010	< 0.00030	0.00504	0.0059			
GH PC1	GH PC1 DS WS 2022-08-26 NP	2022-08-26	565	0.007	75.2	0.00098	0.00128	1.04	<b>65.4</b>	< 0.000010	0.85	0.13	0.000012	< 0.000010	< 0.00030	0.00486	0.0121			
GH PC1	GH PC1 DS WS 2022-08-27 NP	2022-08-27	595	0.009	85	0.00075	0.00132	1.13	<b>67.7</b>	< 0.000010	0.86	0.14	0.000012	< 0.000010	< 0.00030	0.00517	0.0059			
GH PC1	GH PC1 DS WS 2022-08-28 NP	2022-08-28	537	0.008	75.7	0.00124	0.00134	1.06	<b>72.6</b>	< 0.000010	0.8	0.15	< 0.000010	< 0.000010	< 0.00030	0.0053	0.007			
GH TC2	GH TC2 WS 2022-01-03 N	2022-01-12	524	0.009	78	0.00088	0.00133	1.09	<b>81.5</b>	< 0.000010	0.84	0.16	< 0.000010	< 0.000010	< 0.00030	0.00563	0.0067			
GH TC2	GH TC2 WS 2022-02-07 N	2022-02-08	1080	0.029	134	0.00503	0.00406	1.91	<b>144</b>	< 0.000010	10.5	0.59	< 0.000010	< 0.000010	< 0.00030	0.00631	< 0.0030			
GH TC2	GH TC2 WS 2022-03-07 N	2022-03-08	1090	0.031	153	<b>0.00625</b>	0.00345	1.87	<b>149</b>	< 0.000010	10.8	0.62	< 0.000010	< 0.000010	< 0.00030	0.00614	< 0.0030			
GH TC2	GH TC2 WS 2022-03-14 N	2022-03-17	1110	0.033	152	<b>0.00795</b>	0.0042	2.02	<b>154</b>	< 0.000010	11.3	0.6	< 0.000010	< 0.000010	0.00047	0.00566	< 0.0030			
GH TC2	GH TC2 WS 2022-03-20 N	2022-03-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-03-21 N	2022-03-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-03-28 N	2022-03-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-04-04 N	2022-04-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-04-11 N	2022-04-12	685	0.017	70.3	<b>0.00816</b>	0.0025	1.41	<b>66.1</b>	< 0.000010	6.62	0.37	< 0.000010	< 0.000010	0.00052	0.00279	< 0.0030			
GH TC2	GH TC2 WS 2022-04-18 N	2022-04-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-04-25 N	2022-04-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-05-02 N	2022-05-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-05-09 N	2022-05-11	468	0.014	56.4	<b>0.00986</b>	0.00238	1.35	<b>51.4</b>	< 0.000010	5.95	0.3	< 0.000010	< 0.000010	0.00181	0.00211	< 0.0030			
GH TC2	GH TC2 WS 2022-05-16 N	2022-05-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-05-23 N	2022-05-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-05-30 N	2022-06-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-06-06 N	2022-06-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-06-13 N	2022-06-15	606	0.022	87	0.00271	0.00407	1.79	<b>92.5</b>	< 0.000010	8.07	0.43	< 0.000010	< 0.000010	< 0.00030	0.00337	< 0.0030			
GH TC2	GH TC2 WS 2022-06-20 N	2022-06-22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-06-27 N	2022-06-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-07-04 N	2022-07-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-07-11 N	2022-07-13	640	0.021	74.2	<b>0.00637</b>	0.00415	1.58	<b>66.3</b>	< 0.000010	6.92	0.38	< 0.000010	< 0.000010	0.00195	0.0032	< 0.0030			
GH TC2	GH TC2 WS 2022-08-01 N	2022-08-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS SESMP 2022-08 N	2022-08-22	907	0.04	146	<b>0.00545</b>	0.00695	2.3	<b>169</b>	< 0.000010	9.55	0.56	0.000011	< 0.000010	< 0.00030	0.0072	< 0.0030			
GH TC2	GH TC2 WS 2022-09-05 N	2022-09-08	1350	0.046	174	<b>0.0172</b>	0.00733	2.47	<b>145</b>	< 0.000010	9.2	0.56	0.000013	< 0.000010	0.00036	0.00742	< 0.0030			
GH TC2	GH TC2 WS 2022-09-14 N	2022-09-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GH TC2	GH TC2 WS 2022-09-21 N	2022-09-21	1420	0.044	205	0.00095	0.0084	2.81	<b>191</b>	< 0.000010	10.7	0.63	< 0.000010	< 0.000010	< 0.00030	<b>0.00903</b>	< 0.0030			
GH TC2	GH TC2 WS 2022-09-22 N	2022-09-22	1310	0.042	162	0.00291	0.00734	2.38	<b>194</b>	< 0.000010	9.49	0.57	< 0.000010	< 0.000010	0.0004	<b>0.00853</b>	< 0.0030			

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**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Hardness mg/L	Total Metals														Lead	
				Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium* mg/L	Beryllium* mg/L	Bismuth mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	Iron mg/L	mg/L		
				Acute	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Chronic	Acute	Chronic	
<b>BC WQG FWAL</b>			n/a	n/a	n/a	0.005	1	0.00013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>1</sup>	3.3-3.5 <sup>2</sup>
<b>Greenhills Operation</b>																			
GH TC2	GH TC2 WS	2022-09-23 N	1310	0.0096	0.00027	0.00025	0.0572	< 0.020	< 0.000050	0.025	0.0000089	212	< 0.00010	< 0.10	< 0.00050	0.014	0.00006		
GH TC2	GH TC2 WS	2022-09-24 N	1280	0.0104	0.0003	0.00034	0.0617	< 0.020	< 0.000050	0.028	0.0000067	230	< 0.00010	< 0.10	< 0.00050	0.013	< 0.00050		
GH TC2	GH TC2 WS	2022-09-25 N	1200	0.0062	0.00018	0.00024	0.0594	< 0.020	< 0.000050	0.026	0.0000082	232	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.00050		
GH TC2	GH TC2 WS	2022-09-26 N	1310	0.008	0.00112	0.00021	0.0603	< 0.020	< 0.000050	0.025	0.000009	242	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.00050		
GH TC2	GH TC2 WS	2022-09-27 N	1260	0.0106	0.0002	0.00021	0.0613	< 0.020	< 0.000050	0.026	0.0000081	243	< 0.00010	< 0.10	< 0.00050	0.012	< 0.00050		
GH TC2	GH TC2 WS	2022-10-03 N	1430	0.006	0.00032	0.00022	0.0579	< 0.020	< 0.000050	0.021	0.0000088	211	< 0.00010	< 0.10	< 0.00050	< 0.010	< 0.00050		
GH TC2	GH TC2 WS	2022-11-07 N	1350	0.0092	0.00024	0.0002	0.0662	< 0.020	< 0.000050	0.026	0.0000096	251	< 0.00010	< 0.10	< 0.00050	0.014	< 0.00050		
GH WC1	GH FOX1 WS	2022-01-03 N	1300	0.0102	0.00024	< 0.00020	0.0634	< 0.040	< 0.000100	0.024	0.000021	235	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
GH WC1	GH FOX2 WS	2022-02-07 N	1114	< 0.0060	0.000766667	0.000183	0.0401	< 0.040	< 0.000100	0.020333	2,40333E-05	203.35	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
GH WC1	GH FOX2 WS	2022-03-07 N	1087	< 0.0060	0.000773333	0.00018	0.0392333	< 0.040	< 0.000100	0.019667	0.0000206	195.35	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
GH WC1	GH WC1 WS	2022-03-14 N	1074	< 0.0060	0.00076	0.000177	0.0419333	< 0.040	< 0.000100	0.020667	0.0000222	208.01667	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
GH WC1	GH WC1 WS	2022-03-23 N	1500	0.0064	0.00091	0.00021	0.0633	< 0.040	< 0.000100	0.026	0.0000322	316	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
GH WC1	GH WC1 WS	2022-03-28 N	1400	0.0205	0.0009	0.00022	0.064	< 0.040	< 0.000100	0.025	0.0000328	266	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
GH WC1	GH WC1 WS	2022-04-04 N	792	0.0664	0.00067	0.00024	0.0719	< 0.020	< 0.000050	0.019	0.0000456	177	0.00031	2E-04	0.00055	0.046	< 0.00050		
GH WC1	GH WC1 WS	2022-04-11 N	891	0.0194	0.00078	0.0002	0.0669	< 0.020	< 0.000050	0.02	0.0000436	182	< 0.00010	2E-04	0.00056	0.023	< 0.00050		
GH WC1	GH WC1 WS	2022-04-18 N	1060	0.0117	0.00083	0.0003	0.0706	< 0.020	< 0.000050	0.022	0.0000433	203	< 0.00010	2E-04	0.00051	0.013	< 0.00050		
GH WC1	GH WC1 WS	2022-04-25 N	1200	0.0045	0.00088	0.00022	0.0671	< 0.020	< 0.000050	0.021	0.0000356	232	< 0.00010	2E-04	0.00057	< 0.010	< 0.00050		
GH WC1	GH WC1 WS	2022-05-02 N	1120	0.0209	0.0009	0.00024	0.0752	< 0.020	< 0.000050	0.022	0.0000536	230	< 0.00010	2E-04	0.00052	0.031	< 0.00050		
GH WC1	GH WC1 WS	2022-05-09 N	1260	< 0.0120	0.001	0.0002	0.0704	< 0.020	< 0.000050	0.023	0.0000357	267	< 0.00010	2E-04	< 0.00050	0.011	< 0.00050		
GH WC1	GH WC1 WS	2022-05-16 N	1280	0.0131	0.00092	0.00028	0.0735	< 0.020	< 0.000050	0.022	0.0000348	244	< 0.00010	2E-04	0.00056	0.013	< 0.00050		
GH WC1	GH WC1 WS	2022-05-23 N	1620	0.0076	0.00106	0.00022	0.0748	< 0.040	< 0.000100	0.027	0.0000408	296	< 0.00020	3E-04	< 0.00100	< 0.020	< 0.000100		
GH WC1	GH WC1 WS	2022-05-30 N	1660	0.0054	0.00116	0.00023	0.065	< 0.020	< 0.000050	0.026	0.0000322	310	< 0.00010	3E-04	< 0.00050	< 0.010	< 0.00050		
GH WC1	GH WC1 WS	2022-06-06 N	1720	0.0062	0.00131	0.00026	0.0677	< 0.020	< 0.000050	0.027	0.0000286	346	< 0.00010	3E-04	0.00052	< 0.010	< 0.00050		
GH WC1	GH WC1 WS	2022-06-13 N	1770	0.0103	0.00129	0.00027	0.0744	< 0.040	< 0.000100	0.028	0.0000406	331	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
GH WC1	GH WC1 WS	2022-06-20 N	1450	0.0357	0.00097	0.0003	0.0687	< 0.020	< 0.000050	0.023	0.0000372	253	0.00022	2E-04	< 0.00050	0.034	< 0.00050		
GH WC1	GH WC1 WS	2022-06-27 N	1230	0.0067	0.0009	0.00023	0.0732	< 0.040	< 0.000100	0.026	0.0000402	255	< 0.00020	< 0.20	< 0.00100	< 0.020	< 0.000100		
GH WC1	GH FOX2 WS	2022-07-04 N	1570	0.0082	0.00112	0.00024	0.0696	< 0.020	< 0.000050	0.029	0.0000282	293	< 0.00010	2E-04	0.00057	< 0.010	< 0.00050		
GH WC1	GH WC1 WS	2022-07-11 N	954	0.13433333	0.000683333	0.000287	0.0497567	< 0.040	< 0.000100	0.024	0.0000435	168.35	0.00023	3E-04	< 0.00100	0.160333	0.0001407		
GH WC1	GH WC1 WS	2022-08-01 N	1630	< 0.0150	0.00128	< 0.00050	0.0671	< 0.100	< 0.000250	< 0.050	0.00003	293	< 0.00050	< 0.50	< 0.00250	< 0.050	< 0.000250		
GH WC1	GH FOX2 WS	2022-09-05 N	1950	0.0071	0.00178	0.00032	0.0654	< 0.040	< 0.000100	0.04	0.0000298	410	< 0.00020	4E-04	< 0.00100	< 0.020	< 0.000100		
GH WC1	GH WC1 WS	2022-09-12 N	1437	< 0.0060	0.001	0.000197	0.0365267	< 0.040	< 0.000100	0.024667	8,46667E-06	261.35	0.00033667	2E-04	< 0.00100	< 0.020	< 0.000100		
GH WC1	GH WC1 WS	2022-10-03 N	2170	0.0051	0.00149	0.00032	0.0484	< 0.020	< 0.000050	0.032	0.0000076	364	< 0.00010	3E-04	< 0.00050	< 0.010	< 0.00050		
GH WC1	GH FOX2 WS	2022-11-07 N	2340	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		

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**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness	Lithium	Magnesium	Manganese		Nickel*	Potassium	Selenium	Silver		Sodium	Strontium	Thallium	Tin	Titanium	Uranium*	Zinc	
						mg/L	mg/L				mg/L	mg/L							mg/L	mg/L
BC WQG FWAL			n/a	n/a	n/a	Acute	Chronic	Chronic	n/a	2	Acute	Chronic	n/a	n/a	n/a	n/a	n/a	0.0085	Acute	Chronic
						0.001-0.03*	0.0009-0.01*	0.025-0.15*											0.033-2*	0.0075-2*
Greenhills Operation																				
GH TC2	GH TC2 WS	2022-09-23	1310	0.043	170	0.00171		0.00732	2.5	<b>176</b>	< 0.000010		9.8	0.57	< 0.000010	< 0.000010	< 0.00030	0.00807	< 0.0030	
GH TC2	GH TC2 WS	2022-09-24	1280	0.046	171	0.00131		0.00746	2.66	<b>189</b>	< 0.000010		10.2	0.58	< 0.000010	< 0.000010	< 0.00030	0.00801	< 0.0030	
GH TC2	GH TC2 WS	2022-09-25	1200	0.042	172	0.00127		0.00814	2.59	<b>162</b>	< 0.000010		9.92	0.56	< 0.000010	< 0.000010	< 0.00030	0.008	< 0.0030	
GH TC2	GH TC2 WS	2022-09-26	1310	0.042	169	0.00144		0.00806	2.48	<b>160</b>	< 0.000010		9.98	0.56	< 0.000010	0.0009	0.00105	0.00796	< 0.0030	
GH TC2	GH TC2 WS	2022-09-27	1260	0.043	178	0.00203		0.00903	2.62	<b>167</b>	< 0.000010		10.4	0.57	< 0.000010	< 0.000010	0.00042	0.00825	< 0.0030	
GH TC2	GH TC2 WS	2022-10-03	1430	0.037	170	0.00105		0.00755	2.43	<b>173</b>	< 0.000010		9.31	0.53	< 0.000010	< 0.000010	< 0.00030	0.00753	< 0.0030	
GH TC2	GH TC2 WS	2022-11-07	1350	0.044	194	0.006		0.00818	2.74	<b>176</b>	< 0.000010		11.8	0.66	< 0.000010	< 0.000010	< 0.00030	0.00746	< 0.0030	
GH WC1	GH FOX1 WS	2022-01-03	1300	0.042	165	0.00353		0.00874	2.3	<b>165</b>	< 0.000020		10.3	0.62	< 0.000020	< 0.000020	< 0.00060	0.0082	< 0.0060	
GH WC1	GH FOX2 WS	2022-02-07	1114	0.088	147.7	0.000603333		0.0401	3.2733	<b>182.017</b>	< 0.000020		16.8	0.54	< 0.000020	< 0.000020	< 0.00060	<b>0.0091033</b>	< 0.0060	
GH WC1	GH FOX2 WS	2022-03-07	1087	0.087	138.3	0.00053		0.039533333	3.2367	<b>165.017</b>	< 0.000020		16.3	0.55	< 0.000020	< 0.000020	< 0.00060	<b>0.0092033</b>	< 0.0060	
GH WC1	GH WC1 WS	2022-03-14	1074	0.088	136.7	0.000436667		0.039286667	3.28	<b>162.683</b>	< 0.000020		16.4	0.6	< 0.000020	< 0.000020	< 0.00060	<b>0.0101033</b>	< 0.0060	
GH WC1	GH WC1 WS	2022-03-23	1500	0.122	208	0.00057		0.0543	4.65	<b>232</b>	< 0.000020		24.1	0.86	< 0.000020	< 0.000020	< 0.00060	<b>0.0131</b>	< 0.0060	
GH WC1	GH WC1 WS	2022-03-28	1400	0.109	188	0.00074		0.0483	4.4	<b>205</b>	< 0.000020		22.8	0.82	< 0.000020	< 0.000020	0.00066	<b>0.0118</b>	< 0.0060	
GH WC1	GH WC1 WS	2022-04-04	792	0.068	104	0.00187		0.0222	3.09	<b>121</b>	< 0.000010		13.8	0.53	0.000011	< 0.000010	0.0018	0.0058	< 0.0030	
GH WC1	GH WC1 WS	2022-04-11	891	0.082	112	0.00091		0.0268	3.2	<b>162</b>	< 0.000010		15.8	0.58	0.000011	0.00012	0.00042	0.00749	< 0.0030	
GH WC1	GH WC1 WS	2022-04-18	1060	0.094	125	0.00074		0.0331	3.69	<b>186</b>	< 0.000010		17	0.64	0.000012	< 0.000010	< 0.00030	<b>0.00888</b>	< 0.0030	
GH WC1	GH WC1 WS	2022-04-25	1200	0.103	158	0.00051		0.0416	3.69	<b>228</b>	< 0.000010		18.8	0.7	0.000011	< 0.000010	< 0.00030	<b>0.0103</b>	< 0.0030	
GH WC1	GH WC1 WS	2022-05-02	1120	0.1	146	0.00195		0.0419	3.82	<b>208</b>	< 0.000010		19	0.69	0.000014	< 0.000010	0.00039	<b>0.00989</b>	< 0.0030	
GH WC1	GH WC1 WS	2022-05-09	1260	0.106	167	0.00072		0.0488	4.14	<b>267</b>	< 0.000010		19	0.73	0.000013	< 0.000010	< 0.00030	<b>0.012</b>	< 0.0030	
GH WC1	GH WC1 WS	2022-05-16	1280	0.103	167	0.00088		0.0504	4.34	<b>223</b>	< 0.000010		17.6	0.69	0.000016	< 0.000010	< 0.00060	<b>0.011</b>	< 0.0030	
GH WC1	GH WC1 WS	2022-05-23	1620	0.136	196	0.00086		0.0657	5.04	<b>285</b>	< 0.000020		21.1	0.81	< 0.000020	< 0.000020	< 0.00060	<b>0.0135</b>	< 0.0060	
GH WC1	GH WC1 WS	2022-05-30	1660	0.135	220	0.00096		0.0744	5	<b>306</b>	< 0.000010		22.2	0.8	0.00002	< 0.000010	< 0.00030	<b>0.0148</b>	< 0.0030	
GH WC1	GH WC1 WS	2022-06-06	1720	0.151	255	0.00091		0.0817	5.59	<b>348</b>	< 0.000010		24.2	0.92	0.000021	< 0.000010	< 0.00030	<b>0.0173</b>	< 0.0030	
GH WC1	GH WC1 WS	2022-06-13	1770	0.172	236	0.00108		0.082	5.61	<b>340</b>	< 0.000020		23.8	0.87	< 0.000020	< 0.000020	< 0.00060	<b>0.0169</b>	< 0.0060	
GH WC1	GH WC1 WS	2022-06-20	1450	0.125	180	0.00187		0.0586	4.47	<b>256</b>	< 0.000010		19.2	0.72	0.000022	< 0.000010	0.00099	<b>0.0136</b>	< 0.0030	
GH WC1	GH WC1 WS	2022-06-27	1230	0.111	160	0.00085		0.0474	4	<b>191</b>	< 0.000020		15.8	0.65	< 0.000020	< 0.000020	< 0.00060	<b>0.0106</b>	< 0.0060	
GH WC1	GH FOX2 WS	2022-07-04	1570	0.133	210	0.00093		0.0647	5.03	<b>259</b>	< 0.000010		21.6	0.74	0.000018	< 0.000010	0.00031	<b>0.0134</b>	< 0.0030	
GH WC1	GH WC1 WS	2022-07-11	954	0.087	118.3	0.004036667		0.0383	2.99	<b>155.35</b>	< 0.000020		12.5	0.48	1.93333E-05	< 0.000020	0.0030267	<b>0.00823667</b>	< 0.0060	
GH WC1	GH WC1 WS	2022-08-01	1630	0.167	231	0.00115		0.0796	5.78	<b>293</b>	< 0.000050		23.4	0.81	< 0.000050	< 0.000050	< 0.00150	<b>0.0166</b>	< 0.0150	
GH WC1	GH FOX2 WS	2022-09-05	1950	0.234	300	0.00156		0.106	7.03	<b>420</b>	< 0.000020		30.2	1.1	0.000061	< 0.000020	< 0.00060	<b>0.0239</b>	< 0.0060	
GH WC1	GH WC1 WS	2022-09-12	1437	0.132	229.3	0.000806667		0.072833333	4.59	<b>280.683</b>	< 0.000020		20.2	0.63	2.26867E-05	< 0.000020	< 0.00060	<b>0.0148367</b>	< 0.0060	
GH WC1	GH WC1 WS	2022-10-03	2170	0.201	296	0.00105		0.105	7.04	<b>459</b>	< 0.000010		28.7	0.96	0.000032	< 0.000010	< 0.00030	<b>0.0239</b>	< 0.0030	
GH WC1	GH FOX2 WS	2022-11-07	2340	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL



APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
BC WQG FWAL			n/a	n/a	n/a	0.001-0.03 <sup>a</sup>	0.0009-0.01 <sup>a</sup>	0.025-0.15 <sup>b</sup>	n/a	2	0.0001-0.003 <sup>a</sup>	0.00005-0.0015 <sup>b</sup>	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2 <sup>a</sup>	0.0075-2 <sup>a</sup>
Line Creek Operation																				
LC DCDS	LC DCDS WS Q1-2022 N	2022-01-05	-	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-01-10 N	2022-01-12	513	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-01-17 N	2022-01-19	499	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-01-24 N	2022-01-26	557	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-01-31 N	2022-02-01	516	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS MNT 2022-02-08 N	2022-02-09	552	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-02-14 N	2022-02-15	598	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-02-21 N	2022-02-22	551	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-02-28 N	2022-03-01	588	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-03-07 N	2022-03-08	527	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-03-14 N	2022-03-15	552	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-03-21 N	2022-03-23	541	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-03-28 N	2022-03-30	605	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS Q2-2022 N	2022-04-06	143	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-04-11 N	2022-04-12	301	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-04-18 N	2022-04-17	263	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-04-25 N	2022-04-24	324	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS MNT 2022-05-03 N	2022-05-03	306	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-05-09 N	2022-05-11	268	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC CC3 WS 2022-05-16 N	2022-05-17	291	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-05-23 N	2022-05-24	204	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC CC3 WS 2022-05-30 N	2022-05-31	298	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS MNT 2022-06-07 N	2022-06-07	278	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-06-13 N	2022-06-14	296	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-06-17 N	2022-06-17	326	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-06-17 NP1	2022-06-17	-	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-06-19 N	2022-06-19	-	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC CC3 WS 2022-06-20 N	2022-06-21	-	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-06-27 N	2022-06-28	234	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS Q3-2022 N	2022-07-07	278	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC CC3 WS 2022-07-11 N	2022-07-12	338	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-07-18 N	2022-07-19	358	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-07-25 N	2022-07-25	399	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC CC3 MNT 2022-08-02 N	2022-08-02	406	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-08-08 N	2022-08-09	419	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS SESMP 2022-08 N	2022-08-18	469	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-08-22 N	2022-08-23	509	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-08-29 N	2022-08-30	257	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS MNT 2022-09-06 N	2022-09-06	261	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-09-12 N	2022-09-13	566	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-09-19 N	2022-09-20	557	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-09-26 N	2022-09-27	559	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	MORTALITY PKG 8	2022-10-04	306	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS MORTALITY 2022-10-05 N	2022-10-05	570	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS MORTALITY 2022-10-06 N	2022-10-06	585	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS MORTALITY 2022-10-07 N	2022-10-07	581	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-10-10 N	2022-10-11	564	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC CC3 WS 2022-10-17 N	2022-10-18	606	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC DCDS WS 2022-10-24 N	2022-10-25	625	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC DCDS	LC SPDC WS 2022-10-31 N	2022-11-01	621	0.192	315	0.00105			0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	

< - Denotes concentration less than indicated



APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
<b>BC WQG FWAL</b> <b>Line Creek Operation</b>			n/a	n/a	n/a	0.001-0.03*	0.0009-0.01*	0.025-0.15*	n/a	2	0.0001-0.003*	0.00005-0.0015*	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2*	0.0075-2*
LC DCDS	LC CC3 WS 2022-10-31 N	2022-11-01	610	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC DCDS	LC DCDS MNT 2022-11-08 N	2022-11-08	589	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC DCDS	LC DCDS WS 2022-11-14 N	2022-11-15	610	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC DCDS	LC DCDS WS 2022-11-21 N	2022-11-22	674	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LC12	LC LC12 MNT 2022-05-03 N	2022-05-02	658	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LC12	LC LC12 WS 2022-05-09 N	2022-05-09	504	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LC12	LC LC12 WS 2022-05-16 N	2022-05-18	-	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LC12	LC LC12 WS 2022-05-23 N	2022-05-24	-	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LC12	LC LC12 WS 2022-05-30 N	2022-05-30	-	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LC12	LC LC12 MNT 2022-06-07 N	2022-06-06	-	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LC12	LC LC12 WS 2022-06-13 N	2022-06-13	284	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LC12	LC LC12 WS 2022-06-20 N	2022-06-20	-	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LC12	LC LC12 WS 2022-06-27 N	2022-06-27	-	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LC12	LC LC12 WS Q3-2022 N	2022-07-05	-	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LC12	LC LC12 WS 2022-07-11 N	2022-07-13	266	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS Q1-2022 N	2022-01-04	-	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-01-10 N	2022-01-10	536	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-01-17 N	2022-01-17	527	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-01-24 N	2022-01-25	536	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2021-01-31 N	2022-02-01	552	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC MNT 2021-02-08 N	2022-02-08	572	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2021-02-14 N	2022-02-15	554	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2021-02-18 N	2022-02-18	562	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-02-21 N	2022-02-22	613	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC CC1 WS 2022-02-28 N	2022-03-01	632	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-02-28 N	2022-03-01	627	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC MNT 2021-03-07 N	2022-03-08	-	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-03-14 N	2022-03-15	577	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-03-21 N	2022-03-22	569	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-03-28 N	2022-03-28	588	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS Q2-2022 N	2022-04-07	666	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-04-11 N	2022-04-11	566	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-04-18 N	2022-04-19	589	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-04-25 N	2022-04-25	527	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC MNT 2022-05-03 N	2022-05-04	528	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-05-09 N	2022-05-09	465	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-05-16 N	2022-05-17	341	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-05-23 N	2022-05-24	368	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-05-30 N	2022-05-31	387	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC MNT 2022-06-07 N	2022-06-06	271	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-06-13 N	2022-06-14	236	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCGSWLC WS 2022-06-20 N	2022-06-22	215	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-06-27 N	2022-06-27	265	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS Q3-2022 N	2022-07-05	252	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-07-11 N	2022-07-11	239	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-07-18 N	2022-07-19	280	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC WS 2022-07-25 N	2022-07-26	330	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b>0.0203</b>	< 0.0060			
LC LCDSSLCC	LC LCDSSLCC MNT 2022-08-02 N	2022-08-03	374	0.192	315	0.00105	0.0989	6.88	396	< 0.000020	29.3	1	0.000026	< 0.000020	< 0.00060	<b></b>				





APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
<b>BC WQG FWAL</b>			n/a	n/a	n/a	0.001-0.03 <sup>a</sup>	0.0009-0.01 <sup>a</sup>	0.025-0.15 <sup>b</sup>	n/a	2	0.0001-0.003 <sup>a</sup>	0.00005-0.0015 <sup>a</sup>	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2 <sup>a</sup>	0.0075-2 <sup>a</sup>
<b>Line Creek Operation</b>																				
LC LCDSSLCC	LC LCDSSLCC WS 2022-08-22 N	2022-08-23	438	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC CC1 WS 2022-08-22 N	2022-08-23	-	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC WS 2022-08-29 N	2022-08-30	456	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC MNT 2022-09-06 N	2022-09-06	425	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC WS 2022-09-12 N	2022-09-13	479	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC WS 2022-09-19 N	2022-09-19	469	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC CC1 WS 2022-09-19 N	2022-09-19	-	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC WS 2022-09-26 N	2022-09-29	470	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC CC2 WS Q4-2022 N	2022-10-03	474	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC WS 2022-10-10 N	2022-10-11	472	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC CC1 WS 2022-10-10 N	2022-10-11	-	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC WS 2022-10-17 N	2022-10-18	486	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC WS 2022-10-24 N	2022-10-25	465	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC WS 2022-10-31 N	2022-11-01	510	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC MNT 2022-11-08 N	2022-11-08	556	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC WS 2022-11-14 N	2022-11-14	522	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC WS 2022-11-21 N	2022-11-21	534	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC CC1 WS 2022-11-21 N	2022-11-21	-	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC WS 2022-11-28 N	2022-11-28	508	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC MNT 2022-12-05 N	2022-12-05	563	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC WS 2022-12-12 N	2022-12-12	518	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC CC1 WS 2022-12-19 N	2022-12-19	561	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC WS 2022-12-19 N	2022-12-19	544	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC LCDSSLCC	LC LCDSSLCC WS 2022-12-26 N	2022-12-28	-	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC WS Q1-2022 N	2022-01-04	569	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC WS 2022-01-10 N	2022-01-10	1510	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC MT1 WS 2022-01-17 N	2022-01-17	1420	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC CC1 WS 2022-01-17 N	2022-01-17	< 0.50	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC WS 2022-01-24 N	2022-01-25	1440	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC WS 2022-01-31 N	2022-01-31	1440	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC MT2 MNT 2021-02-08 N	2022-02-08	1590	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC CC1 WS 2022-02-14 N	2022-02-14	< 0.50	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC MT1 WS 2022-02-21 N	2022-02-23	1465	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC WS 2022-02-28 N	2022-03-01	< 0.50	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC MT1 MNT 2021-03-07 N	2022-03-08	1620	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC WS 2022-03-14 N	2022-03-14	< 0.50	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC WS 2022-03-21 N	2022-03-22	1410	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC WS 2022-03-28 N	2022-03-28	1560	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC WS Q2-2022 N	2022-04-05	1520	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC WS 2022-04-11 N	2022-04-11	1560	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC CC1 WS 2022-04-18 N	2022-04-18	1490	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC CC1 WS 2022-04-25 N	2022-04-25	1480	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC MNT 2022-05-03 N	2022-05-03	1470	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC WS 2022-05-09 N	2022-05-09	1430	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC WS 2022-05-16 N	2022-05-16	1380	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC WS 2022-05-23 N	2022-05-24	1360	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC MT1 WS 2022-05-30 N	2022-05-30	1320	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC MT2 MNT 2022-06-07 N	2022-06-06	< 0.50	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC CC1 WS 2022-06-13 N	2022-06-13	< 0.50	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		
LC WLC	LC WLC WS 2022-06-20 N	2022-06-22	703	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020	29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060		

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																
			Hardness	Aluminum	Antimony	Arsenic	Barium*	Beryllium*	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead		
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
							Acute	Chronic	Chronic		Chronic				Acute	Chronic		Acute	Chronic
<b>BC WQG FWAL</b>			n/a	n/a	n/a	0.005	1	0.0013	n/a	1.2	n/a	n/a	n/a	0.11	0.004	n/a	1	0.003-5.5 <sup>a</sup>	3.3-3.5 <sup>a</sup>
<b>Line Creek Operation</b>																			
LC WLC	LC WLC WS 2022-06-27 N	2022-06-27	672	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC WS Q3-2022 N	2022-07-05	744	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC CC1 WS 2022-07-11 N	2022-07-11	824	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC WS 2022-07-18 N	2022-07-19	938	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC MT1 WS 2022-07-25 N	2022-07-26	1020	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC MNT 2022-08-02 N	2022-08-03	< 0.50	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC WS 2022-08-08 N	2022-08-08	1110	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC MT1 WS 2022-08-15 N	2022-08-15	1250	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC WS 2022-08-22 N	2022-08-22	< 0.50	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC WS 2022-08-29 N	2022-08-29	1260	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC MNT 2022-09-06 N	2022-09-06	1460	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC WS 2022-09-12 N	2022-09-13	1320	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC WS 2022-09-19 N	2022-09-19	1470	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC WS 2022-09-29 N	2022-09-29	1470	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC WS Q4-2022 N	2022-10-03	1530	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC WS 2022-10-10 N	2022-10-12	1560	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC WS 2022-10-17 N	2022-10-17	1620	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC CC1 WS 2022-10-24 N	2022-10-24	1680	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC WS 2022-10-31 N	2022-10-31	1164	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC MNT 2022-11-08 N	2022-11-07	1550	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC MT1 WS 2022-11-14 N	2022-11-14	1540	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		
LC WLC	LC WLC WS 2022-11-21 N	2022-11-21	< 0.50	< 0.0060	0.0014	0.00022	0.0522	< 0.040	< 0.000100	0.03	< 0.0100	401	< 0.00020	2E-04	< 0.00100	< 0.020	< 0.000100		

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

APPENDIX C - TABLE 3: Summary of Analytical Results for Total Metals

Sample Location	Sample ID	Sample Date (mm/dd/yyyy)	Total Metals																	
			Hardness mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L		Nickel* mg/L	Potassium mg/L	Selenium µg/L	Silver mg/L		Sodium mg/L	Strontium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium* mg/L	Zinc mg/L	
						Acute	Chronic				Acute	Chronic							Acute	Chronic
<b>BC WQG FWAL</b>			n/a	n/a	n/a	0.001-0.03 <sup>a</sup>	0.0009-0.01 <sup>a</sup>	0.025-0.15 <sup>b</sup>	n/a	2	0.0001-0.003 <sup>a</sup>	0.00005-0.0015 <sup>b</sup>	n/a	n/a	n/a	n/a	n/a	0.0085	0.033-2 <sup>a</sup>	0.0075-2 <sup>a</sup>
<b>Line Creek Operation</b>																				
LC WLC	LC WLC WS 2022-06-27 N	2022-06-27	672	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC WS Q3-2022 N	2022-07-05	744	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC CC1 WS 2022-07-11 N	2022-07-11	824	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC WS 2022-07-18 N	2022-07-19	938	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC MT1 WS 2022-07-25 N	2022-07-26	1020	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC MNT 2022-08-02 N	2022-08-03	< 0.50	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC WS 2022-08-08 N	2022-08-08	1110	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC MT1 WS 2022-08-15 N	2022-08-15	1250	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC WS 2022-08-22 N	2022-08-22	< 0.50	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC WS 2022-08-29 N	2022-08-29	1260	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC MNT 2022-09-06 N	2022-09-06	1460	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC WS 2022-09-12 N	2022-09-13	1320	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC WS 2022-09-19 N	2022-09-19	1470	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC WS 2022-09-29 N	2022-09-29	1470	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC WS Q4-2022 N	2022-10-03	1530	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC WS 2022-10-10 N	2022-10-12	1560	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC WS 2022-10-17 N	2022-10-17	1620	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC CC1 WS 2022-10-24 N	2022-10-24	1680	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC WS 2022-10-31 N	2022-10-31	1164	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC MNT 2022-11-08 N	2022-11-07	1550	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC MT1 WS 2022-11-14 N	2022-11-14	1540	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	
LC WLC	LC WLC WS 2022-11-21 N	2022-11-21	< 0.50	0.192	315	0.00105		0.0989	6.88	<b>396</b>	< 0.000020		29.3	1	0.000026	< 0.00020	< 0.00060	<b>0.0203</b>	< 0.0060	

< Denotes concentration less than indicated detection limit  
 - Denotes analysis not conducted  
 n/a denotes no applicable standard

**BOLD ITALIC** Concentrate greater than the chronic (30-Day average) BCWQG for FWAL  
**BOLD ITALIC SHADED** Concentrate greater than the acute (short term) BCWQG for FWAL

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## **Appendix D      Mann-Kendall Summary Tables**

**Appendix F: Mann-Kendall Summary Tables**

Parameter Site ID	Dissolved Cadmium	Nitrate-N	Dissolved Selenium	Sulfate	Field pH	Dissolved Antimony	Dissolved Cobalt	Dissolved Nickel	Nitrite-N	Dissolved Uranium	TDS
FR_HENSEEP3	Stable	Stable	Decreasing	No Trend	No Trend	Stable	-	Decreasing	Stable	No Trend	Stable
FR_HENSSEEP1	-	Increasing	No Trend	Prob. Increasing	-	Stable	-	Stable	-	Prob. Increasing	Prob. Increasing
FR_TURNSEEP1	Decreasing	Stable	No Trend	No Trend	-	Decreasing	-	Decreasing	Prob. Decreasing	Stable	Stable
FR_TBWSEEP1	Decreasing	Stable	Prob. Increasing	Increasing	No Trend	Stable	-	Decreasing	-	Prob. Increasing	No Trend
FR_TURNSEEP2	No Trend	Stable	Increasing	Increasing	Prob. Decreasing	Decreasing	-	Stable	-	Prob. Increasing	No Trend
FR_FCSEEP2	No Trend	Stable	Stable	Stable	Stable	-	-	-	-	No Trend	No Trend
FR_CCSEEP1	No Trend	Increasing	Increasing	Increasing	Prob. Increasing	Stable	Increasing	Increasing	-	Increasing	Increasing
FR_CCSEEPSE1	Stable	Stable	Decreasing	Prob. Decreasing	Decreasing	Stable	No Trend	No Trend	-	No Trend	Stable
FR_LMCWSEEP5	Prob. Increasing	No Trend	No Trend	No Trend	Decreasing	No Trend	-	Prob. Increasing	-	No Trend	No Trend
FR_EAGLENORTH	No Trend	No Trend	Decreasing	Stable	Prob. Decreasing	Stable	-	Decreasing	-	Stable	Prob. Decreasing
FR_ASPSEEP1	No Trend	Prob. Decreasing	Decreasing	No Trend	No Trend	Decreasing	-	No Trend	-	Prob. Decreasing	No Trend
FR_DOKASEEP1	-	-	-	-	-	-	-	-	-	-	-
FR_FSEAMSEEP7	Stable	Decreasing	Decreasing	Stable	-	Stable	Prob. Decreasing	Stable	-	Stable	Stable
FR_SPRWSEEP1	Stable	No Trend	No Trend	Decreasing	No Trend	Stable	-	Decreasing	-	Stable	Prob. Decreasing
FR_BLAKESEEP1	-	No Trend	No Trend	No Trend	No Trend	Decreasing	Stable	No Trend	-	Stable	No Trend
FR_FRVWSEEP3	Prob. Increasing	No Trend	Increasing	Stable	Stable	Prob. Increasing	-	Stable	-	Stable	Stable
FR_STPNSEEP	Decreasing	Stable	No Trend	Stable	No Trend	Stable	-	-	-	Stable	Stable
FR_BLAINESEEP1	Prob. Increasing	Prob. Decreasing	Stable	Stable	No Trend	Stable	-	Decreasing	-	Stable	Decreasing
FR_STPWSEEP	Decreasing	No Trend	No Trend	Decreasing	No Trend	-	Decreasing	Decreasing	-	Decreasing	Decreasing
FR_STPSWSEEP	Decreasing	No Trend	No Trend	Decreasing	Stable	-	Decreasing	Decreasing	-	Stable	Decreasing
FR_BLAINESEEP5	Stable	Stable	No Trend	Prob. Decreasing	No Trend	No Trend	-	Stable	Stable	Stable	Decreasing
FR_SCRDSEEP1	Increasing	Increasing	Prob. Increasing	Increasing	No Trend	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing

**Appendix F: Mann-Kendall Summary Tables**

Site ID	Parameter	Dissolved Cadmium	Nitrate-N	Dissolved Selenium	Sulfate	Field pH	Dissolved Antimony	Dissolved Cobalt	Dissolved Nickel	Nitrite-N	Dissolved Uranium	TDS
GH_SEEP_12		Stable	-	Stable	Stable	Prob. Decreasing	-	-	No Trend	-	Stable	-
GH_SEEP_76		No Trend	Decreasing	No Trend	Increasing	No Trend	Prob. Decreasing	Stable	No Trend	Decreasing	Increasing	Decreasing
GH_SEEP_77		Prob. Decreasing	Stable	Stable	Stable	No Trend	Stable	Stable	No Trend	Stable	Prob. Decreasing	Stable
GH_SEEP_50		-	-	-	-	-	-	-	-	-	-	-
GH_SEEP_5		No Trend	Increasing	Increasing	Increasing	-	Stable	Decreasing	Stable	-	No Trend	Prob. Increasing
GH_SEEP_46		-	-	-	-	-	-	-	-	-	-	-
GH_SEEP_60		-	-	-	-	-	-	-	-	-	-	-
GH_SEEP_79		-	Stable	Stable	No Trend	Stable	Stable	-	-	-	No Trend	Prob. Increasing
GH_SEEP_15		-	-	-	-	-	-	-	-	-	-	-
GH_SEEP_30		-	-	-	-	-	-	-	-	-	-	-
GH_WTDS		Decreasing	Prob. Decreasing	Stable	Decreasing	Stable	Stable	Decreasing	Decreasing	-	Decreasing	Decreasing
GH_SEEP_16		-	-	Decreasing	Stable	-	Stable	-	Stable	-	Decreasing	Prob. Decreasing
GH_SEEP_21		Stable	Stable	Decreasing	Stable	No Trend	-	-	Stable	-	Stable	No Trend
GH_SEEP_22		Decreasing	Stable	Decreasing	Stable	Stable	-	-	No Trend	-	Decreasing	Stable
GH_E3		Stable	Stable	Decreasing	No Trend	Prob. Decreasing	Decreasing	Stable	No Trend	-	Stable	Prob. Increasing
GH_W-SEEP		-	-	No Trend	Prob. Decreasing	No Trend	-	-	-	-	Decreasing	Prob. Decreasing
GH_SEEP_26		-	-	-	-	-	-	-	-	-	-	-
GH_E1		Prob. Increasing	No Trend	No Trend	Stable	Stable	Stable	Decreasing	Decreasing	-	Prob. Increasing	Prob. Decreasing
GH_SEEP_98		-	-	-	-	-	-	-	-	-	-	-
RG_ERSP3		-	-	-	-	-	-	-	-	-	-	-

**Appendix F: Mann-Kendall Summary Tables**

Site ID \ Parameter	Dissolved Cadmium	Nitrate-N	Dissolved Selenium	Sulfate	Field pH	Dissolved Antimony	Dissolved Cobalt	Dissolved Nickel	Nitrite-N	Dissolved Uranium	TDS
LC_UDHP	No Trend	No Trend	No Trend	No Trend	Stable	Increasing	-	Prob. Increasing	-	Increasing	Prob. Increasing
LC_UDP1	Stable	No Trend	Stable	Stable	Stable	No Trend	-	-	-	Stable	Prob. Increasing
LC_SEEP8	No Trend	-	Stable	-	-	Stable	-	No Trend	-	Stable	No Trend
LC_SEEP19	No Trend	Stable	No Trend	No Trend	Stable	No Trend	-	Stable	-	No Trend	No Trend
LC_3KM	Decreasing	Prob. Decreasing	Decreasing	Stable	No Trend	Stable	-	Decreasing	Stable	Increasing	Stable
LC_SEEP1	-	-	Decreasing	Stable	No Trend	Stable	-	No Trend	-	Increasing	No Trend
LC_WLC_LOT2	Stable	Prob. Decreasing	Stable	Prob. Increasing	-	-	-	Stable	-	No Trend	Prob. Increasing
LC_SEEP2	No Trend	No Trend	Stable	Stable	Stable	-	-	-	-	No Trend	No Trend
LC_SEEP15	-	Decreasing	Decreasing	Stable	Stable	-	-	-	-	Stable	Stable
LC_SEEP14	Decreasing	-	No Trend	No Trend	-	Stable	-	-	-	No Trend	No Trend
LC_SEEP10	Prob. Decreasing	No Trend	Stable	No Trend	Prob. Decreasing	-	Stable	No Trend	-	Prob. Increasing	No Trend
LC_SEEP11	No Trend	Stable	No Trend	No Trend	Decreasing	-	-	-	-	Stable	Prob. Decreasing

**Appendix F: Mann-Kendall Summary Tables**

Parameter Site ID	Dissolved Cadmium	Nitrate-N	Dissolved Selenium	Sulfate	Field pH	Dissolved Antimony	Dissolved Cobalt	Dissolved Nickel	Nitrite-N	Dissolved Uranium	TDS
EV_SEEP_ERICKSON1	No Trend	-	-	Prob. Increasing	Stable	-	No Trend	No Trend	-	No Trend	No Trend
EV_SEEP_ERICKSON2	Stable	Prob. Decreasing	No Trend	Stable	No Trend	No Trend	-	Decreasing	-	Prob. Decreasing	Decreasing
EV_SEEP_SOUTHPI6	No Trend	No Trend	Decreasing	No Trend	Stable	Stable	-	Stable	-	Stable	Stable
EV_SEEP_SOUTHPI3	Stable	-	Decreasing	No Trend	No Trend	No Trend	-	No Trend	-	Stable	No Trend
EV_SEEP_SOUTHPI4	-	-	No Trend	No Trend	Stable	-	-	-	-	Prob. Decreasing	No Trend
EV_SEEP_HOPPER2	No Trend	Stable	No Trend	No Trend	Prob. Decreasing	Stable	Stable	Decreasing	Stable	No Trend	Stable
EV_SEEP_TURCON1	-	No Trend	No Trend	Stable	No Trend	-	-	-	-	Prob. Increasing	Stable
EV_SEEP_PLANT10	-	-	No Trend	No Trend	Stable	-	-	-	-	No Trend	Stable
EV_SEEP_PLANT1	No Trend	-	No Trend	Stable	Prob. Increasing	-	-	-	-	No Trend	Stable
EV_SEEP_PLANT11	No Trend	-	Stable	No Trend	No Trend	-	-	Stable	-	Stable	Stable
EV_SEEP_BREAKERLAKE	Stable	Stable	Stable	No Trend	Stable	Stable	No Trend	Stable	No Trend	No Trend	Stable
EV_SEEP_PLANT23	Stable	No Trend	No Trend	Stable	Prob. Increasing	No Trend	-	Prob. Decreasing	-	No Trend	Stable
EV_WLAGC	-	Prob. Increasing	-	Stable	No Trend	-	No Trend	Stable	-	No Trend	Stable
EV_CN1	No Trend	Stable	Increasing	No Trend	Stable	Stable	-	No Trend	-	Increasing	No Trend
EV_SEEP_10MILE5	No Trend	Stable	No Trend	Stable	Stable	-	-	Stable	-	Increasing	Decreasing
EV_SEEP_10MILE9	Prob. Increasing	No Trend	No Trend	Increasing	Stable	-	No Trend	No Trend	-	Increasing	No Trend
EV_SEEP_CFI1	-	No Trend	Stable	-	No Trend	-	No Trend	Stable	-	Stable	Stable
EV_SEEP_CFI2	-	-	-	-	-	-	-	-	-	-	-
EV_SEEP_CFI3	-	-	-	-	-	-	-	-	-	-	-
EV_SPR1B	No Trend	No Trend	No Trend	Stable	No Trend	Stable	-	Decreasing	-	Stable	Stable



**Appendix F: Mann-Kendall Summary Tables**

Site ID	Parameter	Dissolved Cadmium	Nitrate-N	Dissolved Selenium	Sulfate	Field pH	Dissolved Antimony	Dissolved Cobalt	Dissolved Nickel	Nitrite-N	Dissolved Uranium	TDS
CM_CS1		Prob. Increasing	No Trend	No Trend	No Trend	Stable	-	-	Stable	-	Stable	No Trend
CM_CCDS		-	-	-	-	-	-	-	-	-	-	-
CM_37PIT-SEEP-E		Stable	Stable	No Trend	Decreasing	Prob. Increasing	-	Decreasing	Decreasing	-	Decreasing	Decreasing
CM_37PIT-SEEP-W		Decreasing	No Trend	No Trend	Decreasing	Increasing	-	Decreasing	Decreasing	-	Decreasing	Decreasing
CM_WD4		No Trend	Stable	Stable	No Trend	Stable	Stable	-	Prob. Decreasing	-	Decreasing	Stable
CM_WD7		Stable	No Trend	Stable	No Trend	No Trend	Stable	-	Stable	-	No Trend	No Trend
CM_WD15		Prob. Decreasing	Decreasing	Prob. Decreasing	No Trend	Stable	-	-	Prob. Decreasing	-	Stable	No Trend
CM_WD15-SOURCE		-	-	-	-	-	-	-	-	-	-	-
CM_WD18		No Trend	No Trend	Stable	Stable	No Trend	-	-	Stable	-	No Trend	No Trend
CM_WD19		Stable	Stable	Stable	No Trend	No Trend	-	Stable	Decreasing	-	No Trend	No Trend
CM_PLANT-SEEP1		-	-	Stable	Decreasing	No Trend	-	Stable	Stable	-	No Trend	Stable
CM_MM-SEEP1		Prob. Increasing	Stable	Stable	Stable	No Trend	Stable	-	Stable	-	No Trend	No Trend
CM_NS4		Stable	Stable	Prob. Decreasing	Stable	Stable	Stable	-	Prob. Decreasing	-	Prob. Increasing	Stable
CM_NS7		Stable	No Trend	No Trend	No Trend	No Trend	Stable	No Trend	Stable	-	Stable	Stable
CM_NS1		Decreasing	No Trend	No Trend	No Trend	No Trend	Decreasing	-	Decreasing	-	Stable	Stable
CM_MM-SEEP3		-	-	Stable	Stable	No Trend	-	Stable	Decreasing	-	Stable	Stable
CM_MM-SEEP5		-	-	-	-	-	-	-	-	-	-	-

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**Appendix E      High Flow Seep Survey QAQC Memo**

DRAFT

# Memo

<b>To</b>	Cam Jaeger	<b>Project</b>	CAPR002058
<b>From</b>	Anne Day	<b>Reg. No.</b>	EGBC 1003655
<b>Cc</b>	Shauna Litke (SRK) Stephen Day (SRK) Nathaniel Barnes (Teck)	<b>Date</b>	August 26, 2022
<b>Client</b>	Teck Coal Limited		
<b>Subject</b>	Elk Valley Regional Seep Monitoring: 2022 High Flow Sampling QA/QC Review Results		

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## 1 Introduction

This memo discusses the results of the 2022 high flow seep sampling Quality Assurance and Quality Control (QA/QC) review for Teck's Elk Valley Regional Seep Monitoring Program (RSMP).

## 2 Summary

- The target number of QA/QC samples was attained during 2022 high flow seep sampling.
- All field blank and trip blank samples passed QA/QC.
- Field duplicate pairs from FRO seep sites indicate field heterogeneity, most likely related to suspended sediment. A review of potential sources of this heterogeneity should be conducted.
- The following lab re-checks should be conducted:
  - Dissolved and total copper concentrations reported for sample FR\_FSEAMSEEP7\_SEEP\_2022-04-11\_NP
  - Dissolved and total cadmium and iron concentrations reported for sample FR\_STPSWSEEP\_SEEP\_2022-04-11\_NP
  - Total kjeldahl nitrogen (TKN) concentration reported for sample GH\_SEEP\_98\_WS\_2022-06-07\_NP
  - Dissolved sulfur concentration reported for sample FR\_ASPSEEP1\_WS\_2022-06-03\_NP

## 3 Methods

### 3.1 Teck Data Quality Objectives

The RSMP includes the following data quality objectives (DQOs) for screening duplicate samples:

- Category 1 – relative percent difference (RPD) less than 20%, or RPD greater than 20% and results less than five times the detection limit. Samples pass screening with no further action required.
- Category 2 – RPD greater than 20% and less than 50% with results greater than five times the detection limit. Analyte should be monitored in future RPD analysis to determine trend of variance. If variance of 20 to 50% persists, a follow-up with the lab should be conducted.
- Category 3 – RPD greater than 50% with results greater than five times the detection limit. The sample fails screening and is not suitable for quantitative use. If variance greater than 50% continues, follow-up with the lab is required to investigate.

### 3.2 SRK QA/QC Procedures

In addition to the QA/QC procedures established in the Plan, SRK applied the following QA/QC procedures, which were used to evaluate data quality:

- Differences between field and lab pH – corresponding values should be within one pH unit.
- Difference between field and lab conductivity – samples should have an RPD of less than 30%.
- Difference between total and dissolved metals – for parameters greater than ten times the detection limit, RPD should be  $\pm 30\%$ .
- Ion balances – for electrical conductivity (EC) greater than 100 micro siemens per centimetre ( $\mu\text{S}/\text{cm}$ ), the percent difference should be  $\pm 10\%$ .

## 4 Results

QAQC compliance sampling was achieved during 2022 high flow sampling. During high flow sampling, there were ten paired field duplicates and eight field blank samples, representing 21% of all samples collected compared to the 10% target. A summary of the QA/QC samples collected during the 2022 RSMP high flow surveys is provided in Table 1.

**Table 1: QA/QC sample summary by operation**

Operation <sup>1</sup>	Total Samples	Field Duplicates		Field Blanks	
		Number	% of Samples	Number	% of Samples
FRO	22	3	14	1	5
GHO	15	2	13	2	13
LCO	12	1	8	1	8
EVO	18	2	11	2	11
CMm	17	2	12	2	12
Total	84	10	12	8	10

Sources:

[https://srk.sharepoint.com/sites/NACAPR002058/Internal/020\\_Project\\_Data/020\\_Client/CAPR002058\\_SeepSampleAccount\\_r0\\_amd.xlsx](https://srk.sharepoint.com/sites/NACAPR002058/Internal/020_Project_Data/020_Client/CAPR002058_SeepSampleAccount_r0_amd.xlsx)

<sup>1</sup> FRO = Fording River Operation, GHO = Greenhills Creek Operation, LCO = Line Creek Operation, EVO = Elkveiw Operation, CMm = Coal Mountain Mine

A summary of the QAQC results is provided in Table 2, Table 3, and Table 4.

**Table 2: Summary of 2022 Field Blanks and Duplicates QA/QC Review**

QC Test	n	QC Criteria	Parameters	Results
<b>Fording River Operation (FRO)</b>				
Field Blank	1	<5x DL	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	All passed.
Paired Field Duplicates	3	For samples >X10DL, <30% RPD	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	1 sample pair failed for Mo-T, TSS, and total kjedahl nitrogen 1 sample pair failed for T-Al, T-As, T-Be, T-Cd, C-Cr, T-Co, T-Cu, D-Cu, T-Fe, T-Pb, T-Mn, T-Hg, T-Ni, Ammonia-N, T-P, T-Ag, T-Ti, TOC, TSS, Turbidity, T-V, and T-Zn. 1 sample pair failed for T- and D-Cd, T- and D-Fe, T-Mn, and Nitrate-N All parent samples accepted, see Section 4.2 below.
<b>Greenhills Operation (GHO)</b>				
Field Blank	2	<5x DL	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	All passed.
Paired Field Duplicates	2	For samples >X10DL, <30% RPD	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	1 sample pair failed for total kjeldahl nitrogen. Parent sample accepted, see Section 4.2 below.
<b>Line Creek Operation (LCO)</b>				
Field Blank	1	<5x DL	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	All passed.
Paired Field Duplicates	1	For samples >X10DL, <30% RPD	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	All passed.
<b>Elkview Operation (EVO)</b>				
Field Blank	2	<5x DL	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	All passed.
Paired Field Duplicates	2	For samples >X10DL, <30% RPD	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	1 sample pair failed for D-Al and ortho-phosphate. Parent sample not accepted, see Section 4.2 below. 1 sample pair failed for DOC. Parent sample accepted, see Section 4.2 below.
<b>Coal Mountain Mine (CMm)</b>				
Field Blank	2	<5x DL	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	All passed.
Paired Field Duplicates	2	For samples >X10DL, <30% RPD	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	All passed.

Sources: [https://srk.sharepoint.com/sites/NACAPR002058/Internal/Task%20100%20-%20QAQC/CAPR002058\\_SeepsWQ\\_HF2022\\_QAQC\\_aml.xlsx](https://srk.sharepoint.com/sites/NACAPR002058/Internal/Task%20100%20-%20QAQC/CAPR002058_SeepsWQ_HF2022_QAQC_aml.xlsx)

## 4.1 Field Blank and Trip Blanks

All field blank and trip blank samples passed QA/QC.

## 4.2 Field Duplicates

Six of ten paired field duplicate samples failed reproducibility for at least one parameter.

Three paired duplicates at FRO failed:

- FR\_EAGLENORTH sampled on May 16, 2022, for Mo-T, TSS, and total kjeldahl nitrogen (TKN).  
The failed reproducibility for TSS may indicate heterogeneity in suspended sediments at the sampling location. Results were accepted as all dissolved metal concentrations passed QA/QC. TKN result not accepted, duplicate sample is significantly higher compared to parent sample which reported TKN at below the detection limit (0.05 mg/L).
- FR\_FSEAMSEEP7 sampled on May 16, 2022, for Al-T, As-T, Be-T, Cd-T, Cr-T, Co-T, Cu-T and -D, Fe-T, Pb-T, Mn-T, Hg-T, Ni-T, ammonia-N, P-T, Ag-T, Ti-T, TOC, TSS, Turbidity, V-T, and Zn-T.  
The failed reproducibility for TSS and turbidity may indicate heterogeneity in suspended sediments at this sampling location. Results were accepted as all dissolved metal concentrations (except copper) passed QA/QC. The copper concentrations are not accepted and should be re-checked with the lab.
- FR\_STPSWSEEP sampled on May 19, 2022, for Cd-T and -D, Fe-T and -D, Mn-T, and nitrate-N.  
All dissolved metal concentrations passed for this sample. This may indicate heterogeneity in suspended sediments at these seeps. However, the iron and cadmium concentrations have not been accepted should be re-checked with the lab. All other results were accepted.

The failed reproducibility of samples at FRO generally seems to be related to suspended sediment heterogeneity. Dissolved metal concentration results were generally consistent with previous results and interpretation is not expected to be affected.

One paired duplicate at GHO failed:

- GH\_SEEP\_98 sampled on June 29, 2022, for total kjeldahl nitrogen (TKN)  
Without a total nitrogen lab result, it is not possible to verify the sample's nitrogen balance. In 2021, TKN at this seep was reported to be 0.374 mg/L on June 6, 2021, and 0.329 mg/L on July 6, 2021. The parent sample in 2022 reported TKN at 0.321 mg/L and the duplicate at 0.865 mg/L. The parent sample data is accepted and will be used in future analyses. Confirmation with the lab should be completed regarding the duplicate sample.

Two paired duplicates at EVO failed:

- EV\_SEEP\_SOUTHPI3 was sampled on July 13, 2022, for Al-D and ortho-phosphate.

Al-D has historically been reported below the detection limit (DL = 0.001 mg/L), in 2021 0.0014 mg/L of Al-D was reported at this seep. The 2022 parent sample reported Al-D at 0.0052 mg/L, and the duplicate sample at below the 0.001 mg/L detection limit. Ortho-phosphate has historically been reported between 0.0112 and 0.0173 mg/L. The 2022 parent sample reported ortho-phosphate at 0.0175 mg/L and the duplicate sample at 0.0094 mg/L. Due to the discrepancy between the parent sample and duplicate sample for these two parameters, the parent sample data should not be accepted and should be removed from the EQulS database.

- EV\_SEEP\_TURCON1 was sampled on July 8, 2022, for dissolved organic carbon (DOC).

DOC has historically been reported between 0.5 and 1.2 mg/L. The 2022 parent sample reported DOC at 1.65 mg/L and the duplicate at 36.5 mg/L. No other parameters are showing similar discrepancies and the elevated DOC of the duplicate may be due to contamination. The parent sample data is accepted and will be used in future analyses.



**Table 3: Summary of 2022 Samples Results QA/QC Review**

QC Test	n	QC Criteria	Parameters	Results	Data Accepted
<b>FRO</b>					
Lab vs. Field pH	122	Difference should not be greater than 1 pH unit	pH	3 failed.	Samples not accepted. See Section 4.3.
Lab vs. Field Conductivity	88	<30% RPD	Conductivity	4 failed.	See Section 4.4
Total vs. Dissolved Metals	157	For >10XDL, <30% RPD	Total and Dissolved Metals	1 sample failed for Cu-D 3 samples failed for Mo-D 2 samples failed for Se-D 1 sample failed for S-D	See Section 4.5.
Ion Balance	157	For EC>100 µS/cm, within ±10%	Cations and Anions	All passed.	Yes.
<b>GHO</b>					
Lab vs. Field pH	33	Difference should not be greater than 1 pH unit	pH	All passed.	Yes.
Lab vs. Field Conductivity	33	<30% RPD	Conductivity	All passed.	Yes.
Total vs. Dissolved Metals	33	For >10XDL, <30% RPD	Total and Dissolved Metals	2 samples failed for Se-D	See Section 4.5.
Ion Balance	33	For EC>100 µS/cm, within ±10%	Cations and Anions	All passed.	Yes.
<b>LCO</b>					
Lab vs. Field pH	12	Difference should not be greater than 1 pH unit	pH	2 failed.	1 sample accepted, 1 sample not accepted. See Section 4.3.
Lab vs. Field Conductivity	12	<30% RPD	Conductivity	All passed.	Yes.
Total vs. Dissolved Metals	12	For >10XDL, <30% RPD	Total and Dissolved Metals	All passed.	Yes.
Ion Balance	12	For EC>100 µS/cm, within ±10%	Cations and Anions	All passed.	Yes.
<b>EVO</b>					
Lab vs. Field pH	26	Difference should not be greater than 1 pH unit	pH	2 failed.	1 sample accepted, 1 sample not accepted. See Section 4.3.
Lab vs. Field Conductivity	26	<30% RPD	Conductivity	1 failed.	See Section 4.4
Total vs. Dissolved Metals	26	For >10XDL, <30% RPD	Total and Dissolved Metals	1 sample failed for Se-D	See Section 4.5.

QC Test	n	QC Criteria	Parameters	Results	Data Accepted
Ion Balance	26	For EC>100 µS/cm, within ±10%	Cations and Anions	All passed.	Yes.
<b>CMm</b>					
Lab vs. Field pH	17	Difference should not be greater than 1 pH unit	pH	All passed.	Yes.
Lab vs. Field Conductivity	17	<30% RPD	Conductivity	All passed.	Yes.
Total vs. Dissolved Metals	17	For >10XDL, <30% RPD	Total and Dissolved Metals	All passed.	Yes.
Ion Balance	17	For EC>100 µS/cm, within ±10%	Cations and Anions	All passed.	Yes.

Sources: [https://srk.sharepoint.com/sites/NACAPR002058/Internal/Task%20100%20-%20QAQC/CAPR002058\\_SeepsWQ\\_HF2022\\_QAQC\\_amd.xlsx](https://srk.sharepoint.com/sites/NACAPR002058/Internal/Task%20100%20-%20QAQC/CAPR002058_SeepsWQ_HF2022_QAQC_amd.xlsx)

### 4.3 Field vs. Lab pH

Due to short hold times, field pH is generally considered more reliable than laboratory pH and some degree of difference between the two measurements is expected. Seven of 211 samples reviewed had a difference between field and laboratory pH greater than 1 pH unit. Two of these samples reported laboratory pH measurements between 1.0 and 1.2 pH units higher than the field measurements. This could be due to the off-gassing of CO<sub>2</sub> during travel and these results were considered acceptable.

- **EV\_SEEP\_10MILE9** (Field pH has ranged from 5.9 to 7.9 with an average of 6.7 from 2018 to 2021. Laboratory pH has ranged from 6.8 to 8.3 with an average of 7.6 from 2018 to 2021):
  - Sampled on June 29, 2022. Field pH: 6.4, Lab pH: 7.8. Sample accepted, field and lab pH both within the historical range.
  - Sampled on July 14, 2022. Field pH: 6.5, Lab pH: 8.4. Sample accepted, field and lab pH within or close to the historical range.
- **FR\_ASPSEEP1** (Field pH has ranged from 6.8 to 7.6 with an average of 7.3 from 2018 to 2021. Laboratory pH has ranged from 7.3 to 8.5 with an average of 7.9 from 2018 to 2021):
  - Sampled on February 1, 2022. Field pH: 10.4, Lab pH: 7.9. Sample not accepted.
  - Sampled on March 1, 2022. Field pH: 6.2, Lab pH: 7.9. Sample not accepted.
  - Sampled on May 18, 2022. Field pH: 9.2, Lab pH: 7.6. Sample not accepted.
- **LC\_SEEP1** (Field pH has ranged from 7.9 to 8.2 with an average of 8.0 from 2018 to 2021. Laboratory pH has ranged from 5.8 to 8.6 with an average of 8.1 from 2018 to 2021):
  - Sampled on July 8, 2022. Field pH: 6.8, Lab pH: 7.9. Sample not accepted.
- **LC\_SEEP11** (Field pH has ranged from 7.0 to 8.0 with an average of 7.4 from 2018 to 2021. Laboratory pH has ranged from 8.0 to 8.3 with an average of 8.1 from 2018 to 2021):
  - Sampled on July 8, 2022. Field pH: 7.0, Lab pH: 8.1. Sample accepted, field and lab pH both within the historical range.

### 4.4 Field vs. Lab Conductivity

Five of 177 samples reviewed had a difference between laboratory and field conductivity greater than 30% RPD.

- One sample at EV\_SEEP\_10MILE9 on July 14, 2022 (RPD of 34%). Field conductivity: 553 µS/cm. Lab conductivity: 783 µS/cm. Historically lab conductivity has ranged between 273 to 542 µS/cm, and field conductivity has ranged between 218 and 564 µS/cm. The field conductivity is accepted, and the lab conductivity is not accepted.
- Three samples at FR\_ASPSEEP1. Field conductivity historically ranged between 1,039 and 1,929 µS/cm. Lab conductivity historically ranged between 1,120 and 1,920 µS/cm.

- May 22, 2022 (RPD of 190 %). Field conductivity: 36.1 µS/cm. Lab conductivity: 1,380 µS/cm,
- May 31, 2022 (RPD of 69%). Field conductivity: 647 µS/cm. Lab conductivity: 1,330 µS/cm,
- June 27, 2022 (RPD of 66%). Field conductivity: 582 µS/cm. Lab conductivity: 1,160 µS/cm

Field conductivity measurements are not accepted due to low values. Lab conductivity values accepted.

- One sample at FR\_STPNSEEP on July 15, 2022 (RPD of 58%). Field conductivity: 951 µS/cm. Lab conductivity: 523 µS/cm. Field conductivity at this location has previously ranged from 460 to 820 mg/L with an average of 650 mg/L between 2018 and 2021. The field conductivity measurement is not accepted due to a higher-than-average value. The lab conductivity value is accepted.

## 4.5 Total vs. Dissolved Metals

Thirteen out of 354 samples had an RPD greater than 30% for the difference between dissolved and total metal concentrations for parameters greater than ten times the detection limit where the dissolved concentration was reported as higher than the total concentration. This could indicate potential contamination during field filtration for field filtered samples. Potentially anomalous dissolved metal concentrations identified are summarized in Table 4.

**Table 4: Potentially Anomalous Dissolved Metal Concentrations Identified**

Seep ID	Sample Date	Parameter	Dissolved Concentration (mg/L)	Total Concentration (mg/L)	Comment
EV_SEEP_TURCON1	2022-07-08	Selenium	0.00292	0.00165	Possible contamination. Use total concentration for dissolved
FR_ASPSEEP1	2022-08-03	Copper	0.00428	0.00096	
FR_ASPSEEP1	2022-02-10	Molybdenum	0.00587	0.0025	
FR_ASPSEEP1	2022-02-28	Molybdenum	0.00535	0.00197	
FR_ASPSEEP1	2022-03-31	Selenium	0.00137	0.00101	
FR_ASPSEEP1	2022-05-05	Selenium	0.00182	0.00132	
FR_ASPSEEP1	2022-06-03	Sulfur	1020	174	Dissolved concentration no accepted
FR_FSEAMSEEP7	2022-05-16	Molybdenum	0.0128	0.0077	Possible contamination. Use total concentration for dissolved
GH_E3	2022-01-24	Selenium	0.00554	0.00219	
GH_E3	2022-07-08	Selenium	0.0019	0.00131	

Sources: [https://srk.sharepoint.com/sites/NACAPR002058/Internal/Task%20100%20-%20QAQC/CAPR002058\\_SeepsWQ\\_HF2022\\_QAQC\\_amd.xlsx](https://srk.sharepoint.com/sites/NACAPR002058/Internal/Task%20100%20-%20QAQC/CAPR002058_SeepsWQ_HF2022_QAQC_amd.xlsx)

The sulfate concentration reported for the FR\_ASPSEEP1 June 3, 2022 sample is 469 mg/L. Therefore, the total sulfur concentration reported is more likely to be correct and should be accepted. The dissolved sulfur concentration report should be re-checked with the lab.

## 4.6 Ion Balance

All samples with EC greater than 100  $\mu\text{S}/\text{cm}$  had a percent difference of  $\pm 10\%$  and passed.

Regards,  
SRK Consulting (Canada) Inc.

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**Appendix F      Low Flow Seep Survey QAQC Memo**

DRAFT

# Memo

<b>To</b>	Cam Jaeger	<b>Project</b>	CAPR002058
<b>From</b>	Anne Day	<b>Reg. No.</b>	EGBC 1003655
<b>Cc</b>	Shauna Litke (SRK) Stephen Day (SRK) Nathaniel Barnes (Teck)	<b>Date</b>	October 31, 2022
<b>Client</b>	Teck Coal Limited		
<b>Subject</b>	Elk Valley Regional Seep Monitoring: 2022 Low Flow Sampling QAQC Review Results		

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## 1 Introduction

This memo discusses the results of the 2022 low flow seep sampling Quality Assurance and Quality Control (QA/QC) review for Teck's Elk Valley Regional Seep Monitoring Program (RSMP).

## 2 Summary

- The target number of QA/QC samples was attained during 2022 low flow seep sampling.
- All field blank and trip blank samples passed QA/QC.
- The following lab re-checks should be conducted:
  - Total kjeldahl nitrogen (TKN) report for sample FR\_LMCWSEEP5\_SEEP\_2022-09-22\_NP
  - Dissolved and total manganese concentrations reported for sample GH\_SEEP\_12\_WS\_2022-09-06\_NP
  - Dissolved and total aluminum concentrations reported for sample CM\_CS1\_WS\_2022-09-02\_NP
  - Dissolved and total aluminum concentrations reported for sample CM\_WD4\_WS\_2022-09-02\_NP

## 3 Methods

### 3.1 Teck Data Quality Objectives

The RSMP includes the following data quality objectives (DQOs) for screening duplicate samples:



- Category 1 – relative percent difference (RPD) less than 20%, or RPD greater than 20% and results less than five times the detection limit. Samples pass screening with no further action required.
- Category 2 – RPD greater than 20% and less than 50% with results greater than five times the detection limit. Analyte should be monitored in future RPD analysis to determine trend of variance. If variance of 20 to 50% persists, a follow-up with the lab should be conducted.
- Category 3 – RPD greater than 50% with results greater than five times the detection limit. The sample fails screening and is not suitable for quantitative use. If variance greater than 50% continues, follow-up with the lab is required to investigate.

### 3.2 SRK QA/QC Procedures

In addition to the QA/QC procedures established in the Plan, SRK applied the following QA/QC procedures, which were used to evaluate data quality:

- Differences between field and lab pH – corresponding values should be within one pH unit.
- Difference between field and lab conductivity – samples should have an RPD of less than 30%.
- Difference between total and dissolved metals – for parameters greater than ten times the detection limit, RPD should be  $\pm 30\%$ .
- Ion balances – for electrical conductivity (EC) greater than 100 micro siemens per centimetre ( $\mu\text{S}/\text{cm}$ ), the percent difference should be  $\pm 10\%$ .
- Field duplicates – corresponding values greater than 10 times the detection limit should have RPD  $< 30\%$ .
- Field blanks and Trip blanks – minimum criterion is less than 2 times detection limit, will accept less than 5 times detection limit.

## 4 Results

### 4.1 Overview

QA/QC compliance sampling was achieved during 2022 low flow sampling. During high flow sampling, there were eight paired field duplicates and six field blank samples, representing 19% of all samples collected compared to the 10% target. A summary of the QA/QC samples collected during the 2022 RSMP low flow surveys is provided in Table 1.

**Table 1: QA/QC sample summary by mine site**

Mine Site <sup>1</sup>	Total Samples	Field Duplicates		Field Blanks	
		Number	% of Samples	Number	% of Samples
FRO	18	3	17%	1	6%
GHO	13	1	8%	1	8%
LCO	11	1	9%	1	9%
EVO	17	1	6%	1	6%
CMm	16	2	13%	2	13%
Total	75	8	11%	6	8%

Sources: [https://srk.sharepoint.com/sites/NACAPR002058/Internal/020\\_Project\\_Data/020\\_Client/CAPR002058\\_SeepSampleAccount\\_r0\\_aml.xlsx](https://srk.sharepoint.com/sites/NACAPR002058/Internal/020_Project_Data/020_Client/CAPR002058_SeepSampleAccount_r0_aml.xlsx)

<sup>1</sup> FRO = Fording River Operation, GHO = Greenhills Creek Operation, LCO = Line Creek Operation, EVO = Elkveiv Operation, CMm = Coal Mountain Mine

A summary of the QA/QC results are described in the following subsections.

### 4.2 Field Blank and Trip Blanks

All field blank and trip blank samples passed QA/QC (Table 2).

### 4.3 Field Duplicates

Six of ten paired field duplicate samples failed reproducibility for at least one parameter (Table 2).

Three paired duplicates at FRO failed:

- FR\_BLAINESEEP5 sampled on September 26, 2022, for dissolved organic carbon (DOC).  
 DOC and total organic carbon (TOC) in the duplicate sample was reported at 6.37 mg/L and 13.2 mg/L, respectively. DOC and TOC in the parent sample was reported at 2.36 mg/L and 12.4 mg/L, respectively. Historical DOC concentrations range from 2.32 to 11 mg/L, averaging 4.44 mg/L. Historical TOC concentrations range from 2.47 to 59.8 mg/L, averaging 12.7 mg/L. The duplicate DOC was not accepted because it is significantly higher compared to the parent sample and above the historically observed DOC range.

- FR\_LMCWSEEP5 sampled on September 22, 2022, for total phosphorus and total kjeldahl nitrogen (TKN).

Without a total nitrogen lab result, it is not possible to verify the sample's nitrogen balance. The parent sample reported TKN at 0.409 mg/L and the duplicate at 0.074 mg/L. Historical TKN values at FR\_LMCWSEEP5 have ranged from 0.05 (DL) to 0.365 mg/L, averaging 0.19 mg/L. Both samples have been accepted. Confirmation with the lab should be completed regarding both samples.

- FR\_SCRDSEEP1 sampled on September 21, 2022, for Mn-D, Se-D, ortho-phosphate, phosphorus, TKN, total suspended solids (TSS), and turbidity.

The failed reproducibility for TSS and turbidity may indicate heterogeneity in suspended sediments at this sampling location. Due to the discrepancy between the parent sample and duplicate sample for these two parameters, the parent sample data should not be accepted and should be removed from the EQulS database.

One paired duplicate at GHO failed:

- GH\_SEEP\_12 sampled on September 20, 2022, for Al-T, Cd-T, Chloride, Fe-T, Mn-T, Mn-D, and Zn-T.

All results except manganese were accepted as their respective dissolved metal concentrations passed QA/QC. The manganese concentrations are not accepted and should be re-checked with the lab.

One paired duplicate at LCO failed:

- LC\_SEEP10 was sampled on September 16, 2022, for DOC and TSS.

The failed reproducibility for TSS may indicate heterogeneity in suspended sediments at this sampling location. DOC and TOC in the duplicate sample was reported at 1.57 mg/L and 1.61 mg/L, respectively. DOC and TOC in the parent sample was reported at 2.98 mg/L and 1.83 mg/L, respectively. Historical DOC concentrations range from 0.5 (DL) to 2.6 mg/L, averaging 1.5 mg/L. Historical TOC concentrations range from 0.5 (DL) to 2.69 mg/L, averaging 1.7 mg/L. The parent DOC was not accepted because it is higher compared to the duplicate sample and above the historically observed DOC range.

One paired duplicate at EVO failed:

- EV\_SEEP\_CFI1 was sampled on September 26, 2022, for TSS.

The failed reproducibility for TSS may indicate heterogeneity in suspended sediments at this sampling location. As no other parameters failed reproducibility, the results have been accepted.

Two paired duplicates at CMm failed:

- CM\_CS1 was sampled on September 15, 2022, for Al-D and -T, Fe-T, and Mn-T.

All results except aluminum were accepted as their respective dissolved metal concentrations (except aluminum) passed QA/QC. The aluminum concentrations are not accepted and should be re-checked with the lab.

- CM\_WD4 was sampled on September 14, 2022, for Al-D.

Al-D has historically been reported between 0.0019 and 0.006 mg/L, averaging 0.004 mg/L. The 2022 low flow parent sample reported Al-D at 0.0657 mg/L, and the duplicate sample at 0.002 mg/L. The dissolved aluminum concentrations are not accepted and should be re-checked with the lab. The remaining results for this sample have been accepted.

**Table 2: Summary of 2022 Field Blanks and Duplicates QA/QC Review**

QC Test	n	QC Criteria	Parameters	Results
Fording River Operation (FRO)				
Field Blank	1	<5x DL	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	All passed.
Paired Field Duplicates	3	For samples >X10DL, <30% RPD	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	1 sample pair failed for DOC 1 sample pair failed for total phosphorus and TKN 1 sample pair failed for Mn-D, ortho-phosphate, total phosphorus, Se-D, TKN, TSS, and turbidity. FR_SCRDSEEP1 parent sample not accepted, see Section 4.3 below.
Greenhills Operation (GHO)				
Field Blank	2	<5x DL	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	All passed.
Paired Field Duplicates	2	For samples >X10DL, <30% RPD	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	1 sample pair failed for Al-T, Cd-T, chloride, Fe-T, Mn-D and -T, Zn-T. Parent sample accepted except for Mn-D, see Section 4.3 below.
Line Creek Operation (LCO)				
Field Blank	1	<5x DL	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	All passed.
Paired Field Duplicates	1	For samples >X10DL, <30% RPD	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	1 sample pair failed for DOC and TSS. Parent sample accepted except for DOC, see Section 4.3 below.
Elkview Operation (EVO)				
Field Blank	2	<5x DL	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	All passed.
Paired Field Duplicates	2	For samples >X10DL, <30% RPD	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	1 sample pair failed for TSS. Parent sample not accepted, see Section 4.3 below.
Coal Mountain Mine (CMm)				
Field Blank	2	<5x DL	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	All passed.
Paired Field Duplicates	2	For samples >X10DL, <30% RPD	Physical Parameters, Major Anions and Nutrients, Organic Carbon, Dissolved Metals	1 sample pair failed for Al-D and -T, Fe-T, and Mn-T 1 sample pair failed for Al-D. Parent samples accepted except for Al-D, see Section 4.3 below.

Sources: [https://srk.sharepoint.com/sites/NACAPR002058/Internal/Task%20100%20-%20QAQC/CAPR002058\\_SeepsWQ\\_HF2022\\_QAQC\\_aml.xlsx](https://srk.sharepoint.com/sites/NACAPR002058/Internal/Task%20100%20-%20QAQC/CAPR002058_SeepsWQ_HF2022_QAQC_aml.xlsx)

## 4.4 Field vs. Lab pH

Due to short hold times, field pH is generally considered more reliable than laboratory pH and some degree of difference between the two measurements is expected. Five of 63 samples reviewed had a difference between field and laboratory pH greater than 1 pH unit (Table 4). Four of these samples reported laboratory pH measurements between 1.0 and 1.2 pH units higher than the field measurements. This could be due to the off-gassing of CO<sub>2</sub> during travel and these results were considered acceptable.

- **LC\_3KM** (Field pH has ranged from 7.7 to 8.5 with an average of 8.2 from 2018 to Spring 2022. Laboratory pH has ranged from 8.3 to 8.6 with an average of 8.5 from 2018 to Spring 2022):
  - Sampled on September 26, 2022. Field pH: 6.6, Lab pH: 8.5. Field pH reading not accepted.

## 4.5 Field vs. Lab Conductivity

No samples reviewed had a difference between laboratory and field conductivity greater than 30% RPD (Table 4).

## 4.6 Total vs. Dissolved Metals

Nineteen out of 99 samples had an RPD greater than 30% for the difference between dissolved and total metal concentrations for parameters greater than ten times the detection limit where the dissolved concentration was reported as higher than the total concentration (Table 4). This could indicate potential contamination during field filtration for field filtered samples. Potentially anomalous dissolved metal concentrations identified are summarized in Table 3.

**Table 3: Potentially Anomalous Dissolved Metal Concentrations Identified**

Seep ID	Sample Date	Parameter	Dissolved Concentration (mg/L)	Total Concentration (mg/L)	Comment
CM_CS1	2022-09-15	Selenium	5.15	3.6	
CM_MM-SEEP1	2022-09-15	Selenium	2.49	1.67	
CM_WD4	2022-09-14	Aluminum	0.0657	0.0104	
CM_WD4	2022-09-14	Zinc	0.0109	0.008	
EV_SEEP_SOUTHPI3	2022-09-30	Potassium	0.675	0.365	
EV_SEEP_SOUTHPI3	2022-09-30	Cadmium	0.000105	0.000028	
EV_SEEP_TURCON1	2022-09-29	Selenium	7.09	0.142	
GH_SEEP_16	2022-09-20	Manganese	0.0286	0.00316	Possible contamination. Use total concentration for dissolved. Dissolved concentration no accepted.
GH_SEEP_22	2022-09-20	Selenium	0.00428	0.00286	
GH_SEEP_79	2022-09-27	Molybdenum	0.00351	0.00205	
GH_SEEP_98	2022-09-28	Manganese	0.00826	0.00485	
GH_WTDS	2022-09-20	Selenium	0.00866	0.00628	
GH_WTDS	2022-09-20	Manganese	0.00266	0.00189	
GH_WTDS	2022-09-20	Zinc	0.0102	0.0034	
GH_WTDS	2022-09-20	Cadmium	0.00024	0.000057	
LC_SEEP8	2022-09-20	Molybdenum	0.00987	0.00596	
LC_UDHP	2022-09-26	Selenium	0.105	0.0772	
LC_UDP1	2022-09-26	Selenium	0.0032	0.00227	

Sources: [https://srk.sharepoint.com/sites/NACAPR002058/Internal/Task%20100%20-%20QAQC/CAPR002058\\_SeepsWQ\\_HF2022\\_QAQC\\_amd.xlsx](https://srk.sharepoint.com/sites/NACAPR002058/Internal/Task%20100%20-%20QAQC/CAPR002058_SeepsWQ_HF2022_QAQC_amd.xlsx)

## 4.7 Ion Balance

All samples with EC greater than 100 µS/cm had a percent difference of less than ±10% and passed (Table 4).

**Table 4: Summary of 2022 Samples Results QA/QC Review**

QC Test	n	QC Criteria	Parameters	Results	Data Accepted
<b>FRO</b>					
Lab vs. Field pH	122	Difference should not be greater than 1 pH unit	pH	All passed.	Samples not accepted. See Section 4.4.
Lab vs. Field Conductivity	88	<30% RPD	Conductivity	All passed.	See Section 4.5
Total vs. Dissolved Metals	157	For >10XDL, <30% RPD	Total and Dissolved Metals	All passed.	See Section 4.6.
Ion Balance	157	For EC>100 µS/cm, within ±10%	Cations and Anions	All passed.	Yes.
<b>GHO</b>					
Lab vs. Field pH	33	Difference should not be greater than 1 pH unit	pH	All passed.	Yes.
Lab vs. Field Conductivity	33	<30% RPD	Conductivity	All passed.	Yes.
Total vs. Dissolved Metals	33	For >10XDL, <30% RPD	Total and Dissolved Metals	3 samples failed for Mn-D 2 samples failed for Se-D 1 sample failed for Mo-D 1 sample failed for Zn-D 1 sampled failed for Cd-D	See Section 4.6.
Ion Balance	33	For EC>100 µS/cm, within ±10%	Cations and Anions	All passed.	Yes.
<b>LCO</b>					
Lab vs. Field pH	12	Difference should not be greater than 1 pH unit	pH	1 failed.	1 sample accepted, 1 sample not accepted. See Section 4.4.
Lab vs. Field Conductivity	12	<30% RPD	Conductivity	All passed.	Yes.
Total vs. Dissolved Metals	12	For >10XDL, <30% RPD	Total and Dissolved Metals	2 samples failed for Se-D 1 sample failed for Mo-D	Yes.
Ion Balance	12	For EC>100 µS/cm, within ±10%	Cations and Anions	All passed.	Yes.
<b>EVO</b>					
Lab vs. Field pH	26	Difference should not be greater than 1 pH unit	pH	All passed.	1 sample accepted, 1 sample not accepted. See Section 4.4.
Lab vs. Field Conductivity	26	<30% RPD	Conductivity	All passed.	See Section 4.5
Total vs. Dissolved Metals	26	For >10XDL, <30% RPD	Total and Dissolved Metals	1 sample failed for K-D 1 sample failed for Cd-D 1 sample failed for Se-D	See Section 4.6.
Ion Balance	26	For EC>100 µS/cm, within ±10%	Cations and Anions	All passed.	Yes.
<b>CMm</b>					
Lab vs. Field pH	17	Difference should not be greater than 1 pH unit	pH	All passed.	Yes.
Lab vs. Field Conductivity	17	<30% RPD	Conductivity	All passed.	Yes.
Total vs. Dissolved Metals	17	For >10XDL, <30% RPD	Total and Dissolved Metals	2 samples failed for Se-D 1 sample failed for Zn-D 1 sample failed for Al-D	Yes.
Ion Balance	17	For EC>100 µS/cm, within ±10%	Cations and Anions	All passed.	Yes.

Sources: [https://srk.sharepoint.com/sites/NACAPR002058/Internal/Task%20100%20-%20QAQC/CAPR002058\\_SeepsWQ\\_HF2022\\_QAQC\\_amd.xlsx](https://srk.sharepoint.com/sites/NACAPR002058/Internal/Task%20100%20-%20QAQC/CAPR002058_SeepsWQ_HF2022_QAQC_amd.xlsx)



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