Appendix A

PEACE RIVER HYDRO PARTNERS

Site C Clean Energy Project

Acid Rock Drainage and Metal Leachate Management 2022 Annual Report

Project No. A416-1
March 21, 2023

LORAX ENVIRONMENTAL

Executive Summary

PEACE RIVER
HYDRO PARTNERS

Executive Summary

This report summarizes the results of acid rock drainage and metal leachate (ARD/ML) monitoring undertaken in 2022 as part of the Main Civil Works Contract for the Site C Clean Energy Project ('the Project'). This report has been prepared for Peace River Hydro Partners (PRHP), which holds the Main Civil Works Contract, by Lorax Environmental Services Ltd. (Lorax), PRHP's Qualified Professional (QP) for ARD/ML.

This report is intended to summarize the results of monitoring undertaken by PRHP to meet the requirements of the ARD/ML Management Plan prepared by BC Hydro for the Project (BC Hydro, 2022a), which is included as Appendix E of the Construction Environmental Management Plan (CEMP; BC Hydro, 2022b). This report has been prepared to address the annual reporting requirements, which are set out in Section 7.5 of the ARD/ML Management Plan. It describes monitoring from January 1st to December 31st, 2022.

This report summarizes:

- Site climatic conditions, construction activity, water management, sediment pond discharge rates and data management (Section 1);
- Observations and tests to assess the geochemical characteristics of bedrock that has been disturbed in the course of construction, including bedrock that has been exposed and excavated and relocated, and also crusher sediment pond and sump dredgate and sludge removed from the water treatment plant settling ponds (Section 2);
- Monitoring of surface water quality within the construction site (Section 3);
- A summary of key findings, including turbidity – TSS relationship at RSEM sediment pond discharge, onset of ARD/ML within the site, mitigation measures employed, the ML/ARD risk levels, a summary of exceedances of project-specific water quality discharge limits, and metal loads discharged to the Peace River (Section 4); and
- Conclusions and recommendations (Section 5).

Surface water quality monitoring for areas outside of PRHP's work areas, and additional monitoring in the Peace River, is undertaken by others on behalf of BC Hydro, and is reported under separate cover.

Excavations and Deposition

The CEMP states that bedrock at the Dam Site has a high potential for ARD and should be managed as potentially acid generating (PAG) or acid generating (AG) material. A total of

2,000,655 m^3 PAG bedrock was excavated in 2022. This included 1,936,824 m^3 on the Right Bank, primarily from the Approach Channel and Spillway, and 63,831 m^3 in the Earthfill Dam area, mostly from the temporary ramps and dam core blanket. The material excavated in 2022 was placed primarily in RSEM Area R5A and Zone 8 within the Earthfill Dam footprint.

PAG Bedrock Monitoring

ARD/ML monitoring is undertaken in areas where bedrock is exposed or where these materials are stored. Appropriate sampling locations are determined as construction activities proceed (rather than routinely sampling at fixed monitoring stations).

Geochemical analysis of samples collected during the monitoring program include onsite rinse pH measurements to determine surface pH, as well as acid-base accounting (ABA) and metal analysis conducted at an offsite analytical laboratory. In 2022, a total of 181 samples were collected for rinse pH analysis from various locations from the Earthfill Dam and the Left and Right Banks. Of these, approximately 15% of the samples underwent more extensive geochemical testing including ABA and metals analysis. The program was effective at identifying the onset of ARD/ML, and at identifying areas where mitigation is needed, or is likely to be required.

Any bedrock exposed or excavated as part of the Main Civil Works Contract is expected to be PAG, with most stratigraphic units expected to become acidic within one year of being exposed to the atmosphere. Geochemical monitoring undertaken to date has confirmed that this is the case in several locations on both the Earthfill Dam and the Left and Right Banks.

Left Bank samples collected from exposed surfaces in AG material were identified in RSEM Area L5 and the Left Bank Excavation (LBEX). RSEM Area L5 is mostly covered with NPAG material, which restricts widespread ARD development from facility. However, the final reconfiguration of the RSEM and placement of cover material is yet to be completed.

Rinse pH monitoring in Zone 8 of the Earthfill Dam indicated that the proportion of acidic rinse pH samples from this area increased as the year progressed. Although there was exposed weathered bedrock in Q4 2022, there were no significant precipitation events that produced acidic runoff prior to onset of winter and freezing conditions.

On the Right Bank, AG material was identified in the bedrock exposures within the RSEM Area R5B catchment, RSEM Area R5A and the temporary stockpile at the west end of the Approach Channel. Maintenance of the water management systems in RSEM Area R5A

and the R5B catchment mitigated risk through 2022. The temporary stockpile in the Approach Channel was removed and relocated to permanent storage locations in Q4 2022.

Surface Water Quality Monitoring

Surface water quality sampling was undertaken at a total of 56 stations in 2022, including 11 stations on the Left Bank, 8 stations on the Earthfill Dam and river and 37 stations on the Right Bank. The program was effective in identifying trends and anticipating areas where mitigation is required.

In addition, instruments and dataloggers were installed and record continuous *in situ* measurements of surface water quality (pH, conductivity, and turbidity) in the RSEM Area L5, R5A and R6 sediment ponds during times that the ponds were managed to discharge. Field measurements of these parameters were also obtained at the RSEM ponds and other locations to provide insight into conditions across the site.

End-of-pipe (EOP) discharge limits from RSEM sediment ponds for pH, TSS, Al, As, Cd, Co, Cu, Fe, Mn and Zn are set out in Table 2 in the BC Hydro ARD/ML Management Plan (BC Hydro, 2016b and 2022a). On April 6 2022, the BC Hydro (2022a) EOP limits came into effect replacing those specified in BC Hydro (2016b). The revision includes the addition of dissolved Al and Cd, and total As, Fe and Mn as well as modified limits for total Cu and Zn. RSEM EOP limits for TSS, pH and total Co remain unchanged. Any exceedance of these limits in water discharged from RSEM sediment ponds to the Peace River is reported within 24 hours of receiving analytical results from the laboratory, and all exceedances in RSEM sediment ponds, whether discharged or not, are noted in weekly reports. PAG-contact water discharges are also authorized from the Earthfill Dam and the Area 30 sediment pond but these discharges are required to meet the short-term BC Water Quality Guidelines for the Protection of Aquatic Life. The exceedance of the selenium long-term BC WQG in the Area 30 sediment pond triggered additional monitoring in the adjacent beaver pond.

There were occasions where water discharged to the Peace River from PAG-containing RSEM sediment ponds had water quality that was reported to have exceeded EOP discharge limits in 2022. There were four events including: (1) three-days of elevated T-Zn from the RSEM Area R6W in mid-January; (2) a single-day exceedance of T-Cd from the RSEM Area L5E pond on February 11th; (3) a single-day discharge of turbid water with elevated T-Cu, T-Cd and T-Zn from the RSEM Area R6E pond on March 17th; and (4) a multi-day discharge with elevated T-Cu, T-Zn and T-Cd from RSEM Area sediment control ponds A and B in March. Only the one-day February discharge from RSEM L5E and March discharges from RSEM R5A are attributed to ARD/ML.

Mitigation

Mitigation measures that are being implemented to minimize exceedances of EOP discharge limits due to ARD/ML include material management (excavating or covering bedrock exposures), water management to contain water that may be influenced by ARD/ML, and water treatment to neutralize pH and remove total and dissolved metals.

Material management is the primary ARD/ML mitigation strategy to limit the exposure of AG material and the generation of PAG contact water that may trigger the implementation of additional water management. Weathered material that has been exposed for several months and is becoming acidic is monitored to determine when mitigation is required. In addition, material that is placed in RSEM disposal areas is monitored, and weathered material is covered with recently excavated bedrock or overburden.

Material management is the primary ARD/ML mitigation strategy that has been implemented on site since 2016. In Q1 2022, a large area of weathered PAG bedrock was excavated from the Approach Channel. A temporary stockpile in the Approach Channel was removed and relocated to permanent storage in Q4 2022. PAG rock exposed in Zone 8 within the Earthfill Dam and RSEM Area R5A was partially mitigated through the placement of additional fresh PAG to cover and limit the exposure of weathered material. A portion of the weathered PAG rock in RSEM Area R5A was relocated within the RSEM area to the West Expansion and Central Expansion areas in Q4 2022. However, at the end of 2022, weathered PAG remained exposed in RSEM Area R5A and Zone 8 within the Earthfill Dam.

Water management is a secondary mitigation strategy. Surface water quality is monitored and the results used to inform water transfers within and between Project area catchments to ensure contact waters are routed appropriately prior to discharge. PAG contact water is generally contained within the site, or directed to RSEM sediment ponds, from which it is discharged to the Peace River. The construction of two pipelines to facilitate the pumping of R5B Phase 2 Sump water to RSEM R5A Pond A, the RSEM R6 ponds or to the water treatment plant (WTP) greatly improved the water management system at site and decreased the risk of discharging non-compliant water to the Peace River.

Water treatment is the tertiary management strategy. Contact water that is not anticipated to meet EOP discharge limits is conveyed to a water treatment facility. On July 8th, 2022, the mobile water treatment facility (MWTF) operated by Ensero Solutions was replaced by the WTP metal precipitation facility operated by PRHP. The MWTF and WTP effectively treated water to remove dissolved metals and produced RSEM EOP effluent that met the Discharge Limits in 2022.

The implementation of various erosion and sediment control measures at site has reduced the frequency of TSS-related exceedance of EOP discharge limits from RSEM Area sediment ponds since the monitoring program was initiated in autumn 2016.

Elevated pH primarily due to cement and shotcrete contact waters was mitigated by sparging these waters with CO_2 to lower pH within EOP discharge limits. Sparging was implemented in the RSEM Area L5 sediment ponds, and at Cell 3 of the MWTF sludge pond.

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Acronyms

PEACE RIVER
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Acronyms

ABA	Acid-Base Accounting
ACA	Average Crustal Abundance
ACDC	Approach Channel Drainage Channel
AG	Acid Generating
AP	Acid Potential
ARD/ML	Acid Rock Drainage and Metal Leachate
asl	Above Sea Level
BV	Bureau Veritas Laboratories, Burnaby, Canada
CALA	Canadian Association for Laboratory Accreditation
CBE	Charge Balance Error
CCME	Canadian Council of Ministers of the Environment
CEMP	Construction Environmental Management Plan
CoA	Certificate of Analysis
CSR	B.C. Contaminated Sites Regulation
CVC	Conventional Vibrated Concrete
DI	De-ionized Water
DIC	Diversion Inlet Cofferdam
DOC	Diversion Outlet Cofferdam
DQO	Data Quality Objective
DTIP	Diversion Tunnel Inlet Portal
DTOP	Diversion Tunnel Outlet Portal
EOP	End-of-Pipe
FLNRO	B.C. Ministry of Forests, Lands and Natural Resource Operations
IDZ	Initial Dilution Zone
IEM	Independent Environmental Monitor
LBEX	Left Bank Excavation
MDL	Method Detection Limit
MOE	B.C. Ministry of Environment

MWTF	Mobile Water Treatment Facility operated by Ensero
NP	Neutralization Potential
NPAG	Not Potentially Acid Generating
NPR	Net Potential Ratio
PAG	Potentially Acid Generating
PRHP	Peace River Hydro Partners
QA/QC	Quality Assurance / Quality Control
QP	Qualified Professional
RBCD	Right Bank Cofferdam
RBCT	Right Bank Core Trench
RBDT	Right Bank Drainage Tunnel
RCC	Roller Compacted Concrete
RDL	Reported Detection Limit
RPD	Relative Percent Difference
RSEM	Relocated Surplus Excavated Material
SBIAR	South Bank Initial Access Road
SC	Specific Conductance
SWE	Surface Water Equivalent
TPSA	Temporary PAG Stockpile Area
TDS	Total Dissolved Solids
TSS	Total Suspended Solids
WTP	Water Treatment Plant operated by PRHP
WQG	B.C. water quality guideline for the protection of aquatic life

Chemical elements are generally referred to using their one or two letter atomic symbol. Cd denotes cadmium, for example. A T- or D- preceding the symbol denotes the total or dissolved fraction, respectively (D-Cd, for example). Molecules, functional groups, or polyatomic ions may be referred to either by name (*e.g.*, sulphate) or chemical formula (*e.g.*, SO_4).

1. Introduction

PEACE RIVER
HYDRO PARTNERS

1. Introduction

This report summarizes the results of acid rock drainage and metal leaching (ARD/ML) monitoring undertaken in 2022 as part of the Main Civil Works Contract for the Site C Clean Energy Project ('the Project'). This report has been prepared for Peace River Hydro Partners (PRHP) by Lorax Environmental Services Ltd. (Lorax), the Qualified Professional (QP) for Acid Rock Drainage (ARD) for the Main Civil Works Contract.

1.1 Purpose

ARD/ML monitoring is undertaken in accordance with the requirements of the ARD/ML Management Plan for the Project. The ARD/ML Management Plan is documented in Appendix E of BC Hydro's Construction Environmental Management Plan ('CEMP'). At the start of 2022, PRHP was required to follow the ARD/ML monitoring and management requirements specified in ARD Management Plan (Revision 5.2, dated July 26, 2016; BC Hydro, 2016a) and CEMP (Rev. 4, BC Hydro, 2016b). Updates in 2022 to the ARD/ML Management Plan (Revision 6.0, dated January 17, 2022; BC Hydro, 2022a) and CEMP (Rev. 10.1, BC Hydro, 2022b) came into effect for PRHP at the Dam Site as of April 6, 2022.

In addition to the requirements outlined in the CEMP, this report is also intended to address information requirements that PRHP has received from BC Hydro to meet requests from the Independent Environmental Monitor (IEM) and B.C. Ministry of Forests, Lands and Natural Resources (FLNRO) Comptroller of Water Rights.

1.2 Scope and Outline

This report has been prepared to address the annual reporting requirements, which are set out in Section 7.5 of the ARD/ML Management Plan. It describes monitoring activities within the Main Civil Works contract work, as well as analytical results and interpretation, from January 1st to December 31st, 2022.

The ARD/ML monitoring program includes four main components:

- Observations and tests to assess the geochemical characteristics of bedrock that has been disturbed in the course of construction, including bedrock that has been exposed and excavated and relocated (Section 2).
- Monitoring of surface water quality within PRHP work areas (Section 3).

- Compiling and reviewing this information to assess the onset of ARD/ML, the effectiveness of mitigation measures including water treatment, surface water quality exceedances, and metal loads discharged to the Peace River (Section 4).
- Identifying relevant conclusions and recommendations (Section 5).

More specifically, this report includes a summary of:

- Monitoring of rinse pH and Acid Base Accounting (ABA) of acid generating (AG) and potentially acid generating (PAG) material excavated, and placed in RSEM areas, in accordance with Section 5.2.1.2 of the BC Hydro ARD/ML Management Plan (Appendix E of the CEMP).
- Water quality monitoring results in RSEM area sumps and sediment ponds, which receive water that has contacted PAG material. This monitoring is required pursuant to Sections 7.3.2 and 7.5.2 of the BC Hydro ARD/ML Management Plan.
- Monitoring at Dam Site road cuts in accordance with Section 5.2.1.7 of the BC Hydro ARD/ML Management Plan.
- Work conducted in 2022 in support of the planning, management, and implementation of a progressive water treatment program, based on the results of rinse pH testing and contact water quality monitoring, in accordance with Section 5.2.1.2 of the BC Hydro ARD/ML Management Plan.

This report summarizes the results of surface water quality monitoring that is undertaken by PRHP upstream and downstream of the Earthfill Dam, since PRHP starting discharging water directly from this area in July 2021 through May 2022. The results of other monitoring in the Peace River may also be noted or summarized to provide context for exceedance of discharge limits and estimated metal loading from RSEM area sediment ponds.

This report does not include the results of any other monitoring undertaken in the Peace River, or any surface water quality monitoring that is undertaken by PRHP or others for purposes other than ARD/ML management. Other monitoring programs and reporting for the Project are undertaken by PRHP, and by others, on behalf of BC Hydro.

Information on geochemical monitoring is provided in Section 2, and the results of surface water quality monitoring are discussed in Section 0. In addition, this report includes in Section 4:

- The relationship that has been established between turbidity (as measured using portable instruments in RSEM area PAG-contact sediment ponds) and total suspended solids (TSS), as determined from laboratory analysis of water quality samples (Section 4.1).

- The status in 2022 of the onset of ARD/ML (Section 4.2).
- A summary of work conducted to mitigate ARD/ML, including water management, an evaluation of water treatment requirements, and a summary of water treatment undertaken (Section 4.3).
- A comparison of measured and predicted metal concentrations at RSEM Area Pond discharges and an evaluation of ML/ARD risk levels (Section 4.4).
- A summary of any exceedances of end-of-pipe (EOP) discharge limits in water discharged from PAG-contact RSEM area sediment ponds, and information on any exceedances of applicable B.C. water quality guidelines for the protection of freshwater aquatic life (WQG) at other discharge locations (Section 4.5).
- An estimation of metal loads discharged from the construction site to the Peace River, from all discharge points on both the Left Bank and Right Bank, and a comparison with metal loads carried by the Peace River (Section 4.6).

Section 5 summarizes conclusions related to the geochemical monitoring program (Section 5.1), the water quality monitoring program (Section 5.2), and mitigation (Section 5.3). Recommendations are outlined in Section 5.4.

1.3 Site Conditions

Weather conditions are relevant to the ARD/ML monitoring program. Weather affects the timing, volume and dilution of ARD/ML products that are generated and rinsed from bedrock.

In general, Site C experiences four distinct seasons, during which relatively consistent conditions occur:

- Winter – the site is mostly frozen from December until mid-March, and a snowpack accumulates. Ice accumulates over open water, except on the Peace River which does not entirely freeze over. Intermittent thaws often occur (usually only lasting a few days) that diminish the snowpack.
- Spring – snow and ice melt from roughly mid-March to mid-April (the timing and duration vary from year to year). Precipitation may occur as snow until early to mid-May in some years. Relatively large rain events may also occur.
- Summer – infrequent, relatively intense rainstorms occur, contrasting with otherwise warm and dry weather. These relatively large rain events often account for a large proportion of annual precipitation at Site C.
- Autumn – infrequent storms occur. This season may include colder weather (with or without precipitation) that may result in the development of a thin snowpack,

alternating with warmer weather that may result in melting of accumulated snow. Surface water freezes with the onset of cold weather in November or December, except the Peace River which does not freeze, as noted above.

The area in which the Project is located is relatively dry, with average annual precipitation of 444.7 mm, based on Canadian Climate Normals from 1981-2010 (Government of Canada, 2017) at the Fort St. John Airport (FSJA) weather station. This station is located approximately 11 km ENE of Site C, at an elevation of 695 m asl. A weather station has also been installed on the Left Bank at Site C (*i.e.*, the North Camp station), near the ATCO Two Rivers Lodge, at an elevation of 583 m asl (Figure 1-1).

1.3.1 Temperature

Daily temperature maximum and minimum values are recorded at the Site C weather station. Monthly average, maximum and minimum temperatures for 2022 are presented in Table 1-1 below. Daily maximum and minimum temperature values for 2022 are also shown in Figure 1-2.

Table 1-1:
Comparison of 2022 Average, Minimum and Maximum Temperatures at Site C Weather Station to Minimum and Maximum Temperatures at Fort St. John Airport (FSJA) Weather Station and Canadian Climate Normals at FSJA

	2022 Daily Average Temperature at Site C Station (°C)		2022 Daily Average Temperature at FSJA Station (°C)		Long-Term (1981-2010) Average Temperature at FSJA Station (°C)	
Month	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
January	-4.2	-11.6	-6.9	-15.7	-8.7	-16.9
February	-2.8	-11.7	-3.4	-13.1	-5.1	-14.0
March	4.0	-5.5	2.8	-7.0	0.1	-9.2
April	5.7	-2.8	4.9	-4.2	9.1	-1.3
May	13.9	4.1	13.1	2.7	15.5	4.0
June	21.0	10.2	20.0	9.1	19.6	8.6
July	24.0	13.1	23.3	12.0	21.7	10.7
August	25.7	13.5	24.8	12.4	20.5	9.2
September	20.6	7.8	19.5	6.8	15.2	4.9
October	13.7	4.1	13.5	2.4	7.7	-0.6
November	-3.0	-10.1	-3.3	-11.5	-2.9	-10.2
December	-15.5	-22.6	-15.2	-23.3	-7.4	-15.3

In general, monthly average temperatures are a bit warmer at Site C than at FSJA. This was true of both the daily average maximum and minimum temperatures in every month in 2022 except for the average maximum temperature in December. Comparing 2022 monthly

average minimum and maximum temperatures at FSJA with the long-term average, January through March were warmer than normal, while April and May were cooler, August through October were significantly warmer, while December was much colder.

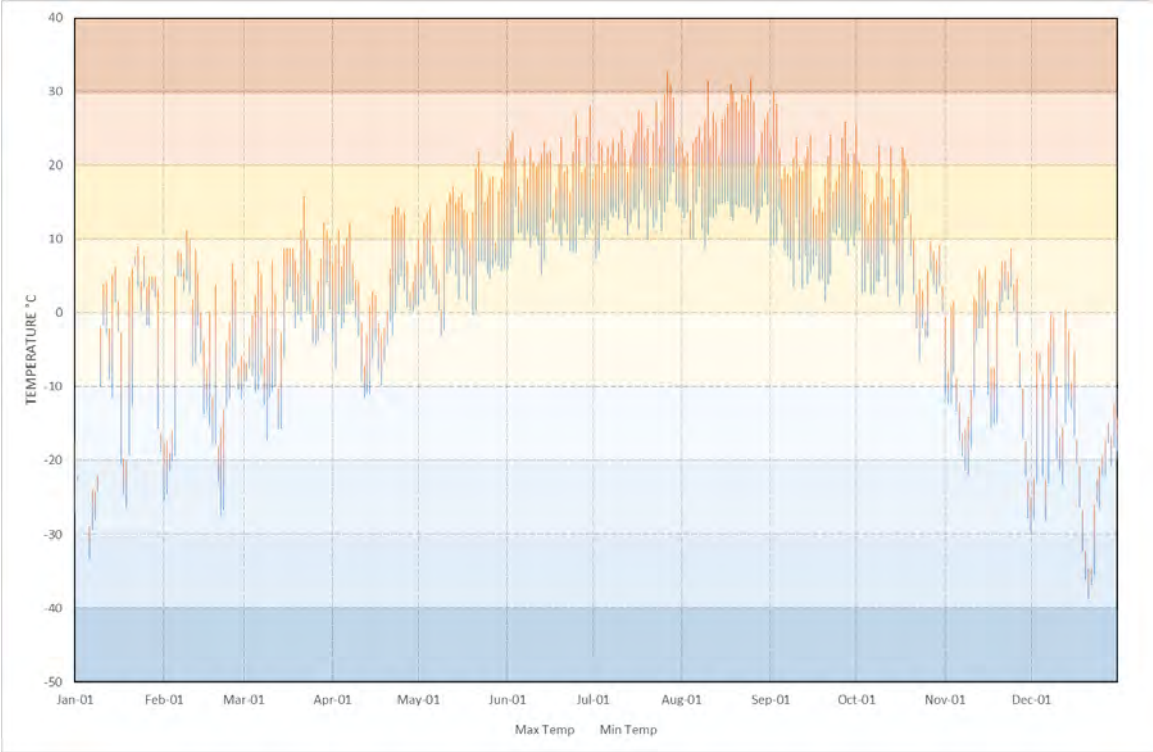
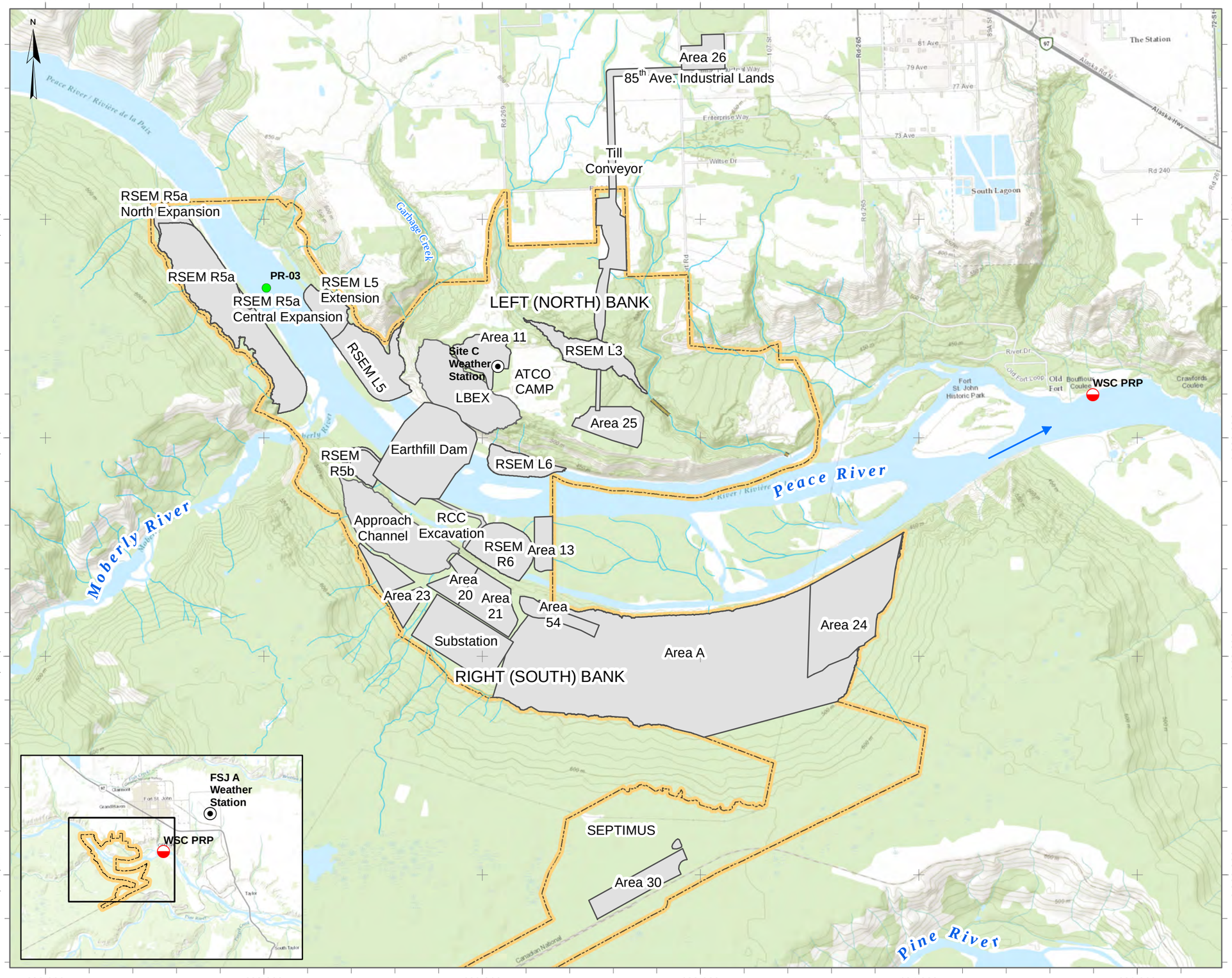


Figure 1-1: Daily Temperature Range at Site C – 2022

Daily temperature ranges indicate that temperatures were intermittently cold and relatively warm (above 0°C) from early January through late March. Temperatures were consistently warm (between 10 and 30°C) from early July to early September and remained relatively warm (above freezing with daytime highs frequently above 20°C) from early September to late October. Temperatures were exceptionally cold in December, with a period of very cold weather in the second half of the month.



Legend

- Site C Boundary
- Work Area
- Water Survey of Canada, Peace River @ Pine Hydrometric Station
- Weather Station
- Water Quality Station

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CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project ARD/ML 2022 Annual Report

TITLE:

Site Map of Site C Main Civil Works Area

PROJECT #: A416-1

FIGURE: 1-2

Coordinate System: *NAD 1983 UTM Zone 10N* ***Datum:*** *North American 1983* ***Units:*** *Meter*

Path: *P:\@Drafting\SiteC\Drafting Figures\MXD\2022_Annual Report\Fig 1_1_Overall_SiteMap_20230131.mxd*

1.3.2 Precipitation

Precipitation affected the timing and magnitude of surface water runoff that rinsed ARD/ML products from acid-generating rock in 2022. The snowpack, daily precipitation, as measured at both FSJA and Site C weather stations, and maximum temperature recorded at Site C are shown in Figure 1-3 below. Snow accumulated during freezing periods and melted during brief thaws. The FSJA weather station was snow-free from early May until late October. The snowpack and magnitude of precipitation events is shown in Figure 1-4 (January through April), Figure 1-5 (May through August), and Figure 1-6 (September through December) below.

Figure 1-3: Maximum Temperature at Site C; Daily Precipitation – FSJA and Site C; and Snow on Ground at FSJA – 2022

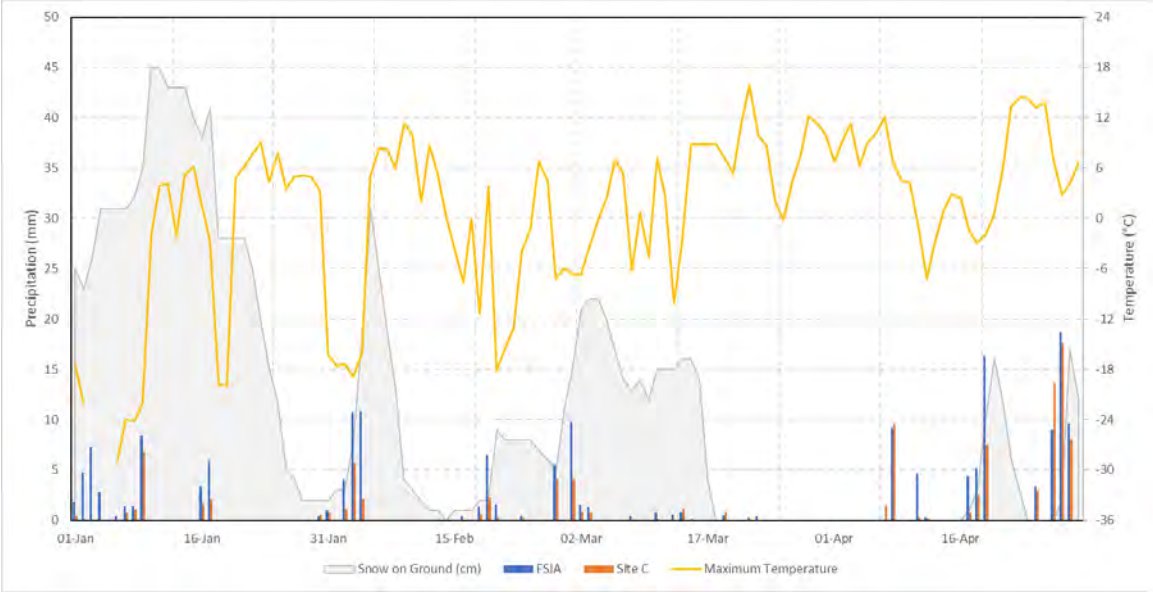


Figure 1-4: Maximum Temperature at Site C; Daily Precipitation – FSJA and Site C; and Snow on Ground at FSJA – January through April 2022

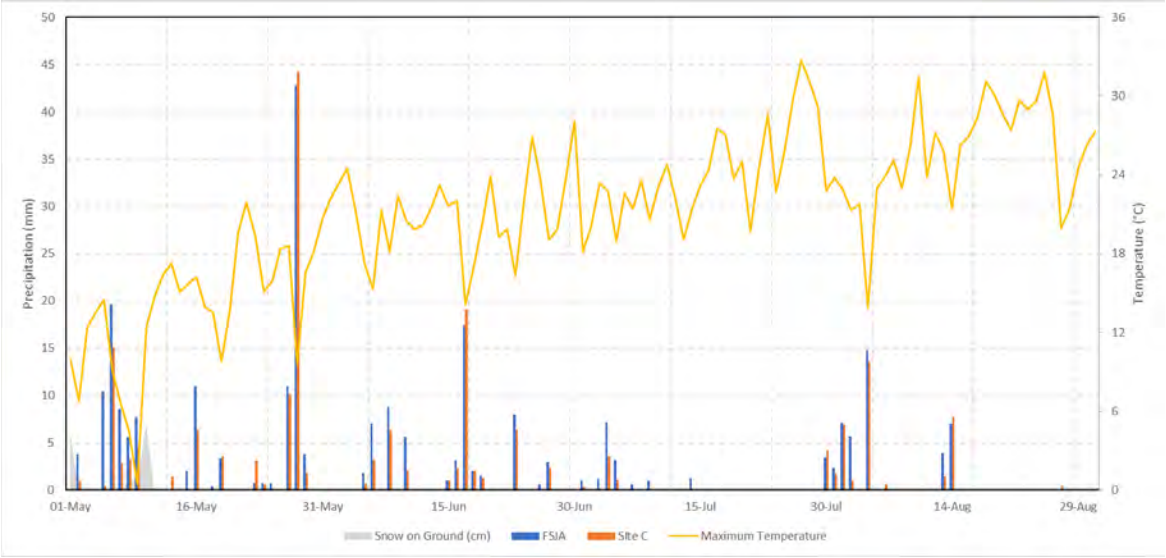


Figure 1-5: Maximum Temperature at Site C; Daily Precipitation – FSJA and Site C; and Snow on Ground at FSJA – May through August 2022

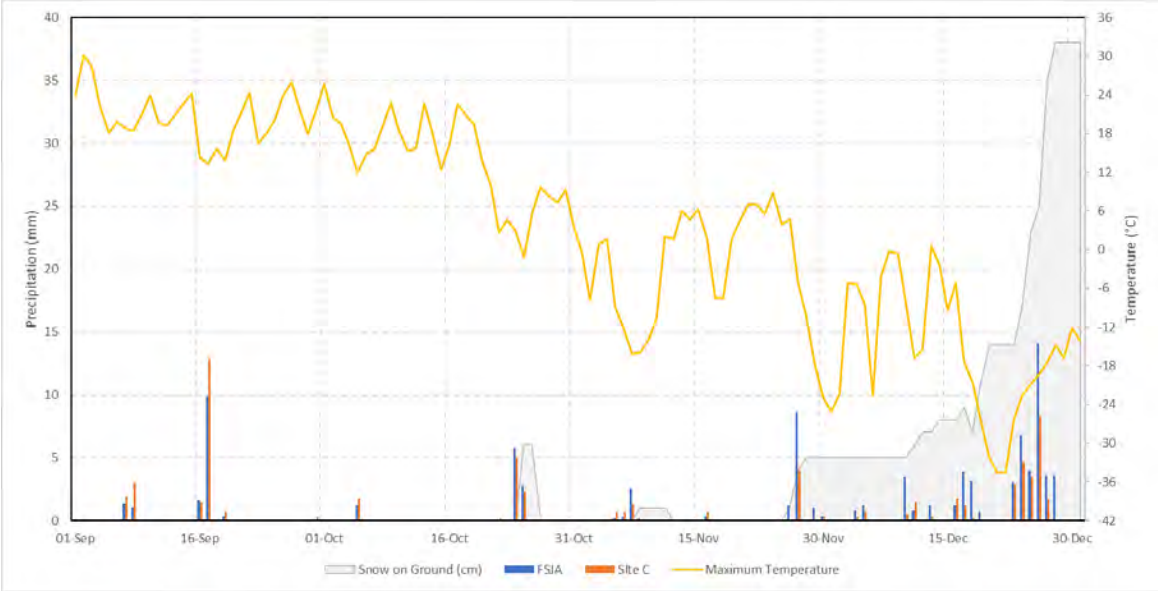


Figure 1-6: Maximum Temperature at Site C; Daily Precipitation – FSJA and Site C; and Snow on Ground at FSJA – September through December 2022

Periods of rapid snowmelt and heavy rain typically generate ARD/ML and can result in exceedances of end-of-pipe limits if the water management system does not have adequate storage at the time that these events occur.

The snowpack reached a maximum depth of 45cm at FSJA in mid-January and then almost completely melted in the second half of the month. It was restored to a depth of approximately 30 cm in early February but again melted completely by mid-February. It recovered to a depth of about 15 cm in the first half of March, and again melted completely by the middle of the month. Approximately 15 cm of snow accumulated and rapidly melted from two successive storm systems in the second half of April. There were minor accumulations which rapidly melted in early May.

These melting events were measured at FSJA. The snowpack is generally less at Site C. Therefore, the magnitude of the snowmelt was likely less at Site C. However, the timing and relative proportion of the snowpack that melted is expected to be similar.

There were several periods of heavier precipitation (>10 mm) from early April through late September. These included a total of 11 events, six in Q2 and five in Q3. The largest events (>30 mm) occurred in late April, late May and late August. There was also a large storm event in late December. These events are summarized in Table 1-2 below.

Table 1-2:
Major Precipitation Events (>10 mm) Recorded at Site C Weather Station - 2022

Q2		Q3		Q4	
Date	**Precipitation (mm)**	**Date**	**Precipitation (mm)**	**Date**	**Precipitation (mm)**
April 7-8	11.1	July 29-Aug 2	13.9	Dec. 23-27	21.1
April 17-19	10.8	July 4	13.6		
April 27-28	31.2	Sep. 16-17	14.4		
May 6-9	25.8	August 20-23	38.0		
May 27-29	56.1	Sep. 26-27	11.0		
June 16-19	24.7				

Based on temperature records, the precipitation event on April 7-8 fell as rain at Site C, while the event from April 17-19 fell as snowfall and quickly melted. The large precipitation events (>10 mm) accounted for a total of 250 mm, or 70% of the total of 356 mm of precipitation recorded at Site C in 2022.

There were exceedances of applicable end-of-pile limits or BC Water Quality Guidelines in the first half of January which were associated with very cold weather, and in mid-February and mid-March, which were associated with rapid snowmelt. These are discussed in more detail in Section 4.4 below.

A snowpack began to accumulate again from late October. It reached a maximum depth of more than 35 cm following significant snowfall from December 23-27.

Monthly precipitation totals recorded at the FSJA and Site C weather stations are shown in Figure 1-7 below, along with the FSJA long-term monthly average precipitation from the 1981-2010 Canadian Climate Normals.

Total monthly precipitation measured at Site C and FSJA in 2022 varied from the Canadian Climate Normals in most months. More specifically:

- Precipitation measured at FSJA in January and February (which fell as snow) significantly exceeded the long-term average, while March was drier than normal;
- April and May were much wetter than normal at both Site C and FSJA;
- July through November were much drier than normal at both Site C and FJSA; and
- There was more precipitation (snowfall) than normal in December at both Site C and FSJA.

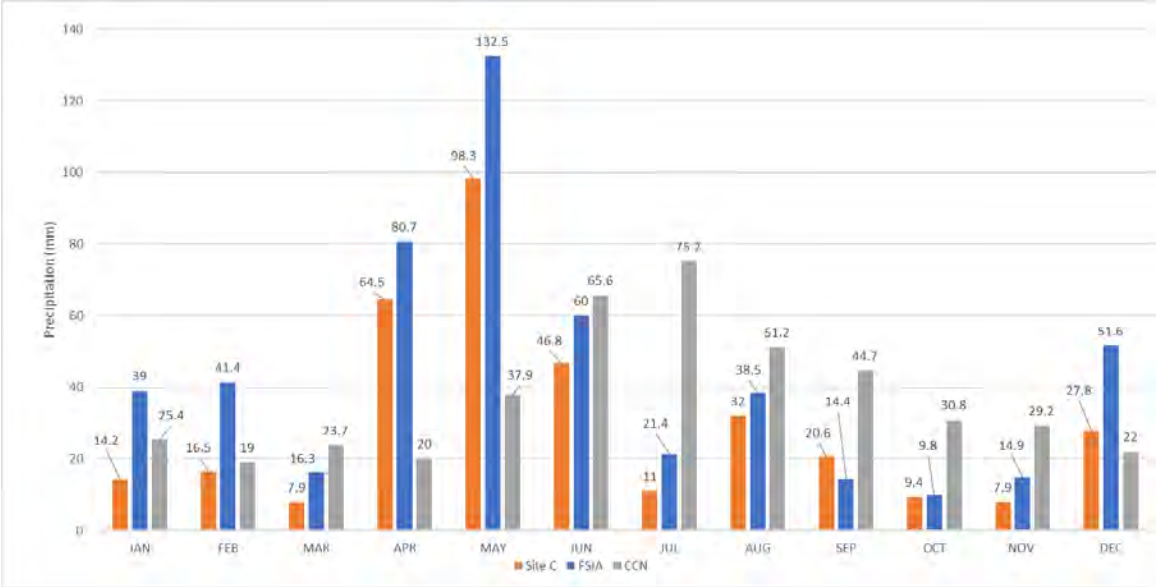


Figure 1-7: Monthly Precipitation at FSJA, Canadian Climate Normals for FSJA and Monthly Precipitation at Site C – 2022

Overall, the total precipitation at FSJA (520 mm) was about 17% above the long-term average of 444.7 mm. The total precipitation measured at Site C (356 mm) was well below the FSJA long-term average although the two stations are not directly comparable, as further discussed below.

Measurements of precipitation vary between the Site C and FSJA stations. In general, less precipitation is measured at Site C. The discrepancy may be due to three potential factors:

- The difference in elevation between the two sites. The lower elevation of the Site C station is expected to generally result in less precipitation at that station, due to the orographic effect.
- The localized nature of summer rain events, which may result in more or less rainfall at Site C as compared with FJSA. Significantly higher precipitation is evident at both Site C and FSJA at from individual rain events (Figure 1-2) and for specific months in summer (Figure 1-3).
- Differences in the methodology employed at the two stations to measure snowfall. It is measured independently and converted to precipitation at a ratio of 10:1 at the FSJA station, while snowfall is melted and converted to surface water equivalent (SWE) at Site C.

1.3.3 Peace River Flow

The flow in the Peace River determines available assimilative capacity and is managed by BC Hydro primarily in response to energy demand (BC Hydro, 2009). The average daily

flow in the Peace River at the Water Survey of Canada Station on the Peace River near Taylor (Station 07FD002) is shown in Figure 1-8 below (daily data is not tabulated in this report). Precipitation at FSJA is also shown for reference.

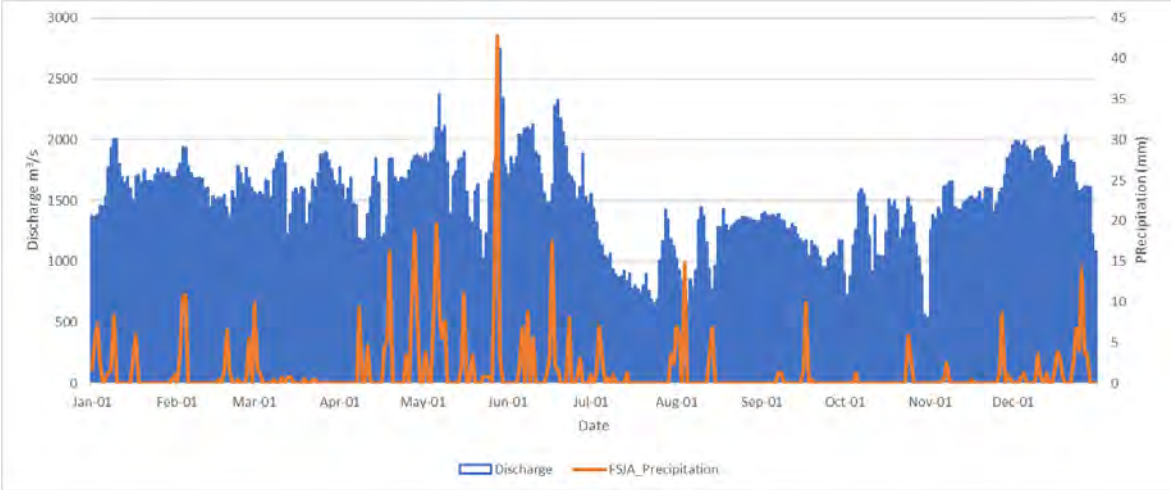


Figure 1-8: Average Daily Flow Rate at Peace River Near Taylor, Station 07FD002 (from Water Survey of Canada, 2022) and Daily Precipitation at FSJA

The discharge values varied through the year. More specifically:

- The flow in the Peace River was relatively consistent in the first half of the year at around 1,500 m^3/s, with three exceptions:
  - A brief period of discharge exceeding 2,000 m^3/s in mid-May. This followed periods of heavy precipitation at FSJA starting on April 17, April 27-28 (over 30 mm in 2 days) and May 6-9 (over 25 mm in 4 days). The increase in discharge may have been associated with precipitation if it was widespread, although the Peace River at Taylor has a very large catchment area. Alternatively, the discharge may have been related to other factors.
  - A brief period of discharge exceeding 2,500 m^3/s at the end of May. This followed heavy precipitation of more than 50 mm at FSJA from May 27-29.
  - Periods in early and mid-June when discharge exceeded 2,000 m^3/s. These coincide with heavy precipitation from June 5-8 (just over 10mm measured at both Site C and FSJA over 4 days) and June 16-19 (over 20 mm measured at both stations).
- The flow dropped significantly in early July and remained relatively low, below 1,500 m3/s, until early November. This is consistent with a similar reduction in discharge measured in summer 2021.

- The flow increased to a range generally between 1,500 – 2,000 m^3/s in December.

Mixing within the IDZ for each sediment pond discharge occurs with only a portion of the total flow in the Peace River. Mixing in IDZs has been assessed by Ecofish Research Ltd. (Ganshorn *et al*., 2017a, 2017b, 2019) on behalf of BC Hydro. Water quality monitoring in the Peace River is also undertaken by Ecofish and reported monthly.

1.4 Construction Activity

Construction of the Site C Clean Energy Project was initiated by BC Hydro in July 2015 and is scheduled to be completed in 2024. The general progression of construction has involved site preparation and construction of access roads, preparation of RSEM disposal areas and excavations on both banks of the river, and excavation of twin diversion tunnels on the left bank.

The river was diverted through the diversion tunnels as scheduled in Q3 2020, the isolated section of the river channel was dewatered, and the dam core was placed, compacted and reached an elevation of 445 masl in 2022. Once the dam core is in place to its final elevation, the dam, generating station, and spillways will be completed. More information is available from BC Hydro at https://www.sitecproject.com/construction-activities.

RSEM areas are designated for disposal of excavated materials that are unsuitable for use in construction. Minimizing potential ARD/ML from this material is an important environmental protection measure for the project, as discussed in Section 5.0 of the CEMP (BC Hydro, 2016b). During construction, sediment ponds established within each RSEM area capture surface water runoff that contacts PAG or acid generating (AG) material. This water is then sampled, and treated if necessary, prior to discharge.

The majority of PAG and AG material will be stored within the future reservoir footprint. This is to slow reaction rates, and ARD/ML to minimal levels, once the material is permanently submerged in the reservoir.

A brief summary of construction activity and ARD/ML monitoring undertaken in 2022 is provided below. The volumes of PAG material excavated are discussed in Section 2.2. A plan showing the construction site and the main areas within it is included as Figure 1-2.

There was no new excavation on the Left Bank in 2022. A cumulative total of just over 1.6M m^3 of material has been placed on the Left Bank, of which more than 1.5M m^3 (more than 90%) has been placed in RSEM L5 and the RSEM L5 Extension.

A total of just over 63,000 m^3 of PAG material was excavated from the Earthfill Dam in 2022. A total of more than 1.6M m^3 was placed in Zone 8, and just over 100,000 m^3 has been placed in the Dam Core Temporary Blanket through the end of 2022.

On the Right Bank, almost 2M m^3 of PAG material was excavated, mostly from the Approach Channel and Spillway (just under 1.89M) in 2022. Relatively minor quantities were excavated from the Right Bank Drainage Tunnel (330 m^3), RSEM Area R5B (240 m^3) and Right Bank Foundation Enhancement (RBFE) Area and Tailrace (47,175 m^3). A total of more than 7.8M m^3 of PAG material has been placed on the Right Bank. The majority of PAG placed in 2022 was temporarily stockpiled on top of RSEM Area R5A. In Q4 2022, 636,778 m^3 of this material was relocated to the RSEM Area R5A Central and Western Expansion areas Additional PAG rock movement within RSEM Area R5A is scheduled for 2023. RSEM Area R5B received approximately 0.36M m^3 of PAG rock, with minor amounts placed in the Approach Channel West Temporary Stockpile (0.03M m^3).

1.5 Water Management

The water management system is continuously adapted as earthworks are undertaken. The site is subdivided into a series of catchment areas for the purpose of water management. Surface water runoff and other contact water from these areas is collected and conveyed to a series of RSEM area sediment ponds (Figure 1-9). Water is transferred to the Mobile Water Treatment Facility (MWTF) for treatment, as needed. Transfers between catchments are also occasionally undertaken to improve water management efficiency and ensure contact waters are routed through an RSEM sediment control pond prior to discharge.

1.5.1 Left Bank

There are two large and one smaller catchment areas on the Left Bank. Contact water catchments on the Left Bank are:

- The RSEM Area L5 catchment area contact water is conveyed to the RSEM Area L5 Phase 2 sediment control ponds;
- The Left Bank Excavation (LBEX) catchment area contact water is directed through a pipeline to the RSEM Area L5 East sediment control pond. Contact water from exposed AG bedrock exposed on Bench 0 is directed to the MWTF;
- The small RSEM Area L6, from which contact water is generally conveyed to the RSEM Area L6 sediment pond.

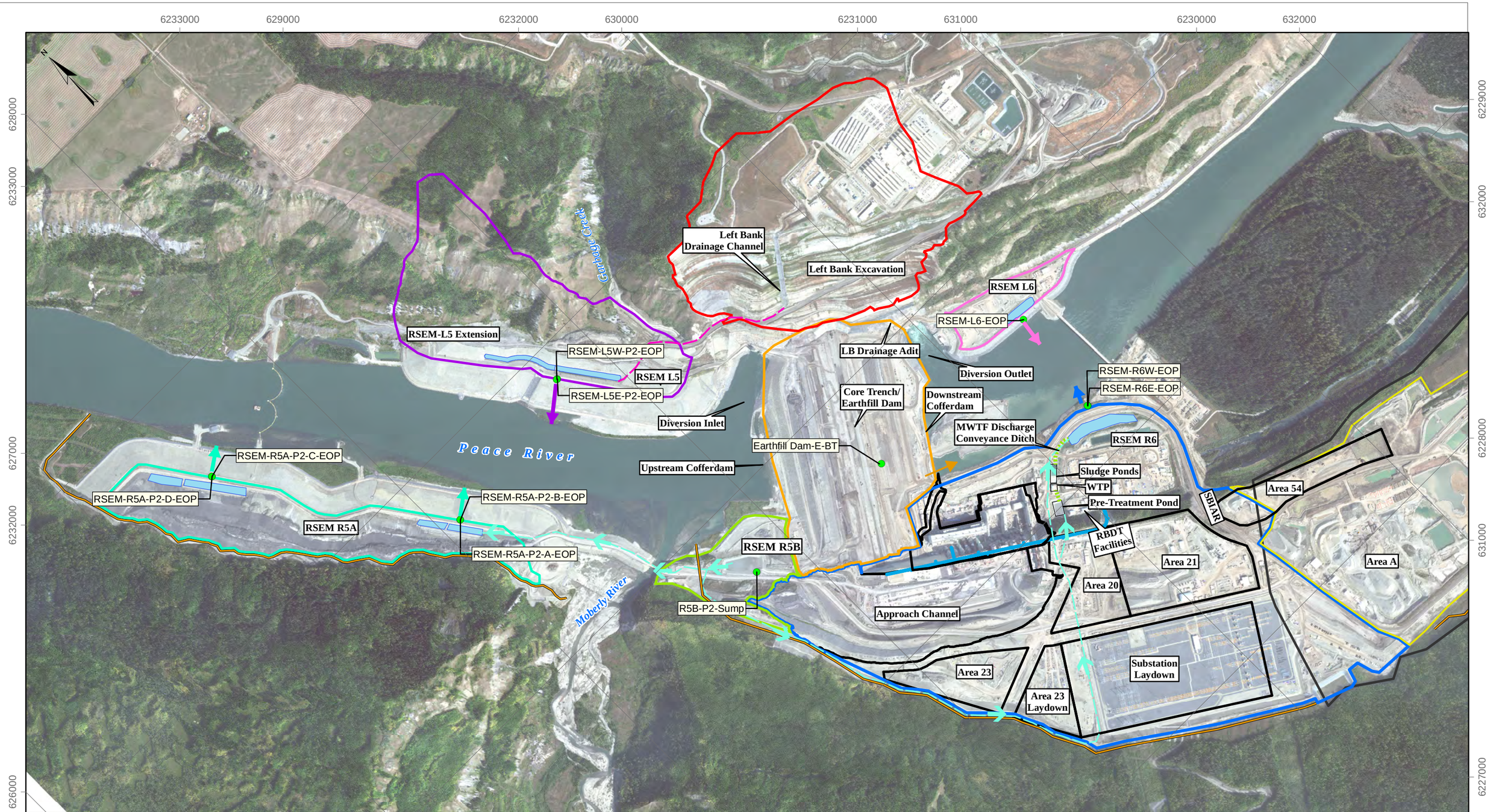
The Diversion Inlet and Diversion Outlet Tunnels are complete, and the Peace River is diverted through the tunnels. Garbage Creek water is diverted through the construction site via lined ditches and pipes. RSEM Area L3 that contains non-PAG material is managed by BC Hydro.

1.5.2 Earthfill Dam

Water management within the Earthfill Dam footprint included the collection of runoff and river seepage water. Monitoring water levels in vertical standpipes (wells) upstream and downstream of the Dam Core was conducted to ensure the Core Trench remained dewatered. The following water management measures were carried out through May 2022:

- The upstream wells were dewatered to the WTP;
- The downstream wells were dewatered to the river over the downstream Cofferdam via Earthfill-Dam-BT and Earthfill Dam-DS-Out; and
- The Isolation Zone contains river water seepage that is isolated in the thalweg between upstream and downstream coffer dams. This area was dewatered to the river over the Downstream Cofferdam via Earthfill Dam-DS-Out.

Subsequent to the decommissioning of the upstream and downstream wells in May, water management within the Earthfill Dam was focussed on Zone 8 to ensure runoff water was in ditches adjacent to the exposed PAG that allowed for monitoring and trucking to the WTP, if required.



Legend

- Water Quality Sampling Location
- WTP Discharge Channel
- Pipelines from R5B Sump to RSEM Areas R5A and R6
- Non-Contact Diversion
- RSEM-L6 Catchment
- Earthfill Dam
- Left Bank Excavation
- RSEM-L5-P2 Catchment
- RSEM-R5A-P2 Catchment
- RSEM-R5B Catchment
- RSEM-R6 Catchment
- Area A Catchment
- Sediment Pond

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Coordinate System: *NAD 1983 UTM Zone 10N*
Projection: *Transverse Mercator*
Datum: *North American 1983*
Units: *Meter*

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CLIENT: PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT: **Site C Clean Energy Project ARDML 2022 Annual Report**

TITLE: RSEM Sediment Control Pond Catchment Areas

PROJECT #: A416-1

FIGURE: 1-9

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1.5.3 Right Bank

Non-contact water is diverted away from the Right Bank construction areas by two diversion ditches (Figure 1-9). Non-contact water above RSEM Area R5A is diverted to the Moberly River in the east and the Peace River in the west end of the area by the R5A Diversion Ditch. Non-contact water upstream of the Substation Laydown, Approach Channel and RSEM Area R5B is diverted in the Right Bank Diversion Ditch to the Moberly River confluence with the Peace River adjacent to RSEM Area R5B.

Below the diversion ditches, there are five catchment areas within the construction site on the Right Bank.

- Area A is a large area to the east of the SBIAR in which aggregates are being extracted for use at the construction site. Contact water from the western portion of the area, including Area 54, was directed to North ditch and transferred to the R6 sediment control ponds or crusher. as needed. Groundwater intercepted in the eastern portion of Area A (which includes Area 24) was dewatered to vegetation or passively channelled to an unamed water course to the Peace River side channel..
- RSEM Area R6 (which includes Area 20/21, the RBDT and associated facilities to the south, and Earthfill Dam, as well as the Approach Channel above it), from which contact water is conveyed to the RSEM Area R6 sediment ponds.
- RSEM Area R5A (which includes the area where the majority of excavated PAG material will be deposited on the west side of the Moberly River), from which contact water is conveyed to the RSEM Area R5A sediment ponds. Water is periodically pumped between the ponds to minimize discharge.
- The RSEM Area R5B sediment pond was decommissioned and backfilled. The majority of water that previously reported to the RSEM R5B sediment pond is now conveyed to the RSEM R6 ponds. Contact water that runsoff from areas immediately south of RSEM Area R5B and the western extents of the Approach Channel accumulate in the RSEM Area R5B Phase 2 Sump, which is pumped to either the WTP or RSEM Area R6 West Pond. A new pumping / piping system became operational in mid July 2022 to dewater the RSEM Area R5B Phase 2 Sump. The system has 2” to 4” water lines that extend from the Phase 2 Sump along the Right Bank Diversion Ditch to the west end of the Substation Laydown and then extends north to the WTP pre-treatment pond and RSEM Area R6 West sediment control pond. A separate pumping system is used to pump water from the R5b Phase 2 Sump to RSEM R5A ponds when required.

- Area 30 sediment pond – Runoff from the stockpiled aggregates in Area 30 accumulate in the Area 30 sediment control pond. The pond discharges to the adjacent wetlands through a riprap lined channel.

1.6 RSEM Area Sediment Pond Discharge

1.6.1 Left Bank

Flow records indicate 17,981 m^3 of water was discharged from the Left Bank in 2022. The majority of discharge, 11,270 m^3, was from the RSEM Area L5 East Phase 2 sediment control pond January through May, and from the RSEM L5 West Phase 2 pond and the RSEM L6 pond in April to June (3,596 m^3 and 3,114 m^3, respectively). The RSEM L6 pond was also dewatered to Peace River in October prior to winter freeze-up. The total volumes discharged from the Left Bank ponds are shown in Table 1-3 below, and the daily volumes for each pond are presented in Appendix 1-A.

RSEM L5E discharged intermittently from January through May, with peak discharge (greater than 10 L/s) occurring on January 23 and for a few days following heavy rain in mid-April and late May. The daily discharge from RSEM L5E is shown in Figure 1-10 below.

Table 1-3:
Total Volume of PAG Contact Water Discharged (m^3) from the Left Bank - 2022

Month	RSEM-L5E	RSEM-L5W	RSEM-L6
January	1,382	0	0
February	173	0	0
March	61	26	0
April	6,803	0	1,553
May	2,851	3,570	783
June	0	0	475
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	304
November	0	0	0
December	0	0	0
TOTAL	**11,270**	**3,596**	**3,114**

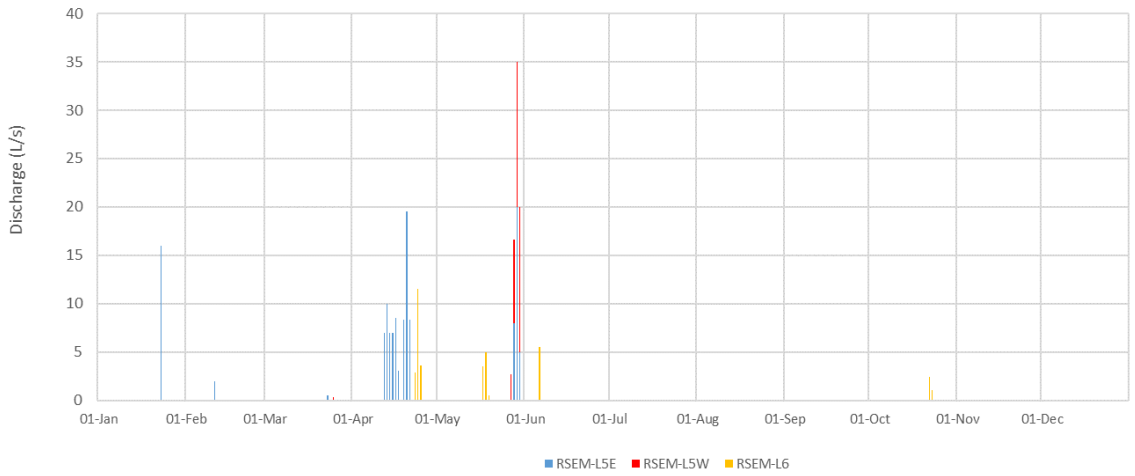

Figure 1-10: Average Daily Discharge from Left Bank (RSEM-L5E, RSEM-L5W) Sediment Control Ponds – 2022

1.6.2 Right Bank

A measured volume of 839,661 m^3 of water was discharged from the Right Bank in 2022. This included 393,215 m^3 from the RSEM Area R6 East sediment control pond and 406,251m^3 from the RSEM Area R6 West sediment control pond (RSEM R6E and RSEM R6W). A relatively smaller volume of 40,195 m^3 discharged from the RSEM-R5A Phase 2 sediment control pond from March through October.

The total volumes discharged from the sediment control ponds on the Right Bank in 2022 are shown in Table 1-4 below. Daily volumes for each pond are presented in Appendix 1-A.

Table 1-4:
Total Volume of PAG Contact Water Discharged (m^3) from Right Bank - 2022

Month	RSEM-R5A	RSEM R6E	RSEM R6W
January	0	1,364	6,983
February	0	7,932	24,936
March	3,370	6,050	42,892
April	432	17,220	18,047
May	3,672	35,522	38,518
June	14,524	38,870	21,426
July	6,998	34,864	20,560
August	1,825	33,766	21,461
September	6,178	79,695	25,150
October	3,197	107,283	33,910
November	0	30,649	77,119
December	0	0	75,250
TOTAL	**40,195**	**393,215**	**406,251**

The RSEM R6 East sediment control pond discharged predominantly April to November, with the highest flows observed September through November due to the dewatering inflows from the upgradient Areas 20, 21 and 54. As freezing conditions established in November, the surface runoff into the RSME R6 East was significantly reduced and the pond did not discharge in December. Discharges from the RSEM R6 West sediment control pond were generally dominated by inflows from the WTP, with additional flows contributed from the dewatering of the Earthfill Dam area and the groundwater wells in the AFDE controlled RCC area. The R5B Phase 2 Sump water was generally directed to RSEM R5A sediment control pond A and accounted for the primary source of water discharged from RSEM Area R5A.

Overall, the total discharge was sporadic in Q1, with higher discharge coinciding with periods of snowmelt. The discharge was moderate (generally between 10 and 30 L/s) from late April through September and rose to higher levels (greater than 30 L/s) from September through mid-December. The individual and total average daily discharge rates to the Peace River from the Right Bank (RSEM R6E, R6W and R5A ponds) in 2022 are shown in Figure 1-11.

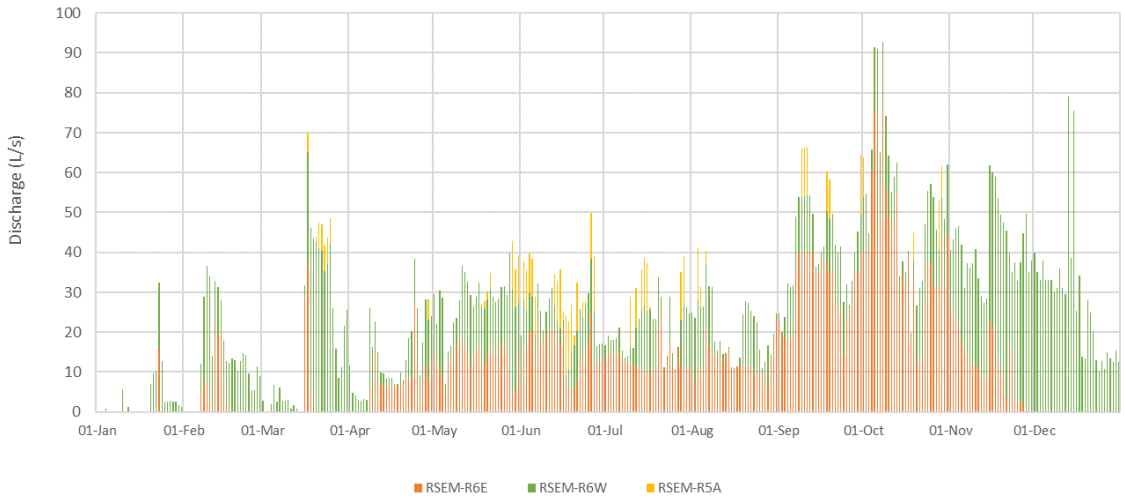

Figure 1-11: Total of Average Daily Discharge Rates (L/s) from Right Bank (RSEM-R6E, RSEM-R6W, RSEM-R5A) Sediment Control Ponds – 2022

Note: Graph shows combined flow from RSEM-R6E, RSEM-R6W and RSEM-R5A (stacked bars) on days when there was discharge from more than one of these ponds.

1.7 Data Management

A large volume of monitoring data has been compiled since the ARD/ML monitoring program was initiated in autumn 2016. An integrated system stores field monitoring results and laboratory data in a unified database.

1.7.1 Field Monitoring

A customized data entry program called CERES, was developed by Lorax using Microsoft Access software for the Site C Project. It allows multiple PRHP staff to simultaneously enter field water quality, flow measurements and sample metadata while scrutinizing the data for potential transcription errors.

1.7.2 Laboratory Results

Laboratory results from the Bureau Veritas (BV, formerly Maxxam Analytics) laboratory in Burnaby, B.C. are provided in database-ready Electronic Data Deliverable (EDD) format to streamline data entry and minimize potential data entry errors. A customized water quality EDD format was developed by BV to include data for early detection of QA/QC issues.

1.7.3 EQWin Database

The CERES data and EDDs are imported directly into a proprietary database system called EQWin that is capable of efficient data retrieval and reporting, and erroneous or invalid data detection. This provides an aggregated database of laboratory analytical and field water quality data. Both solid phase (ARD/ML analytical results, including the results of rinse pH, ABA and metals analyses) and surface water quality results (both field and laboratory measurements) are stored in the EQWin database.

2. PAG Bedrock Monitoring

PEACE RIVER
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2. PAG Bedrock Monitoring

2.1 Purpose and Objectives

PRHP is required to monitor AG and PAG rock exposures and excavations in areas affected by work undertaken as part of the Main Civil Works Contract in accordance with the BC Hydro and PRHP Acid Rock Drainage and Metal Leaching Management Plans (Appendix E of the CEMP; BC Hydro, 2022a and Appendix A of EMP; Rev. 9, PRHP, 2017a, respectively). The specific objectives of this monitoring program are to:

- Confirm that the ARD/ML potential of bedrock is consistent with the original geochemical characterization work undertaken for the project that was used as the basis for the Environmental Assessment and water quality predictions;
- Monitor PAG rock exposures to provide early warning of any that have become acidic;
- Provide continuous geochemical characterization of excavated material disposed in various RSEM facilities; and
- Monitor the effectiveness of mitigation measures that have been implemented.

The baseline geochemical characterization of bedrock determined that all bedrock units that will be disturbed by dam site construction activities are PAG (KCB, 2015). This report specifies that bedrock should be assumed to be PAG or AG, unless direct sampling and analyses determine otherwise. ARD/ML monitoring is recommended for areas where bedrock is excavated and where these materials are stored. A summary of the material excavated and disposed in 2022 is included in Section 2.2.

2.2 Material Balance

Bedrock material excavation and disposal was tracked throughout 2022. A total of 2,000,655 m^3 PAG bedrock was excavated in 2022. This included 1,936,824 m^3 on the Right Bank, primarily from the Approach Channel and Spillway, and 63,831 m^3 in the Earthfill Dam area, mostly from the temporary ramps and dam core blanket. On the Right Bank, most of the material was placed in RSEM Area R5A. Material from the Earthfill Dam area was typically placed in Zone 8. No excavation occurred and no additional PAG material was stockpiled on the Left Bank. The locations of site facilities where excavation and monitoring have occurred are illustrated in Figure 2-1.

627,000 628,000 629,000 630,000 631,000

6,232,000 6,231,000 6,230,000 6,229,000

RSEM R5a
North Expansion

RSEM R5a
Central Expansion

RSEM Area
L5 Extension

RSEM Area R5A

RSEM Area L5

Excavation (0.6 k m^3)
Temporary Ramps (41 k m^3)
Temporary Blanket (22 k m^3)
Deposited in Zone 8, R5B Temporary Stockpile, and RSEM R5A

R5B Stockpile (0.2 k m^3)
-Deposited in RSEM R5A

Zone 8

RSEM Area R5B

Earthfill Dam

RSEM Area L6

Right Bank Foundation Enhancement Area (47 k m^3)
-Deposited in RSEM R5A

Approach Channel temporary stockpile

RBDT (0.3 k m^3)
-Deposited in RSEM R5A

Approach Channel and
Spillway (1,889 k m^3)
-Deposited in RSEM Area R5A and temporary stockpiles

N

LEGEND

- Excavation Area
- Deposition Area

Coordinate System: *NAD 1983 UTM Zone 10N*
Projection: *Transverse Mercator*
Datum: *North American 1983*
Units: *Meter*

1:15,000

0 200 400 Meters

DATE SAVED:	Feb 01, 2023
DRAWN BY:	AL
REVIEWED:	NM
VERSION:	1

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project
ARD/ML 2022 Annual Report

TITLE:

PAG Excavation and Deposition Areas

PROJECT #: A416-1 *FIGURE:* 2-1

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2.2.1 Left Bank

No excavation occurred and no additional PAG material was stockpiled on the Left Bank in 2022. PAG material continues to be stored in RSEM Area L5, the RSEM Area L5 Extension, L5 Garbage Creek, the RSEM Area L5 Starter Dyke, the Left Bank Dam Core, and RSEM Area L6 (Table 2-1).

Table 2-1:
Summary of cumulative volumes of PAG material in Left Bank stockpiles in 2022

Stockpile	Cumulative Volume Stockpiled (m^3)
RSEM Area L5	1,017,124
RSEM Area L5 Extension	495,792
RSEM Area L6	64,345
L5 Garbage Creek	24,240
Left Bank Dam Core	12,345
RSEM Area L5 Starter Dyke	4,869
Cumulative total	*1,618,715*

Note: Due to the frequency of data tabulation, 2022 totals include stockpiled volumes from January 2, 2022 to January 7, 2023.

2.2.2 Earthfill Dam

Excavations in the Earthfill Dam in 2022 amounted to a total of 63,831 m^3 of PAG bedrock (Table 2-2). The majority of the PAG material originated from the excavation of the Temporary Ramps (41,272 m^3) and the Dam Core Temporary Blanket (21,968 m^3). All PAG material that was used to construct the Temporary Ramps and the Dam Core Temporary Blanket in 2021, was excavated and removed by the end of Q2 2022. An additional 591 m^3 was removed from the main excavation in Q3 2022.

Throughout 2022, material excavated from the Earthfill Dam was placed in Zone 8, RSEM Area R5A, or temporarily stockpiled in RSEM Area R5B. Zone 8 is an area within the upstream side of the Earthfill Dam approved for the placement of PAG material. The majority of PAG material placement in this area occurred in Q1 2022. PAG material from the Approach Channel and Spillway and RSEM Area R5B was also placed in Zone 8. At the end of 2022, Zone 8 contained 1,613,992 m^3 of PAG bedrock (Table 2-3). In Q4 2022, PAG material was also placed in the Dam Core Temporary Blanket (39,617 m^3) to insulate and prevent freezing of the Dam Core during the winter months.

Table 2-2:
Summary of excavated PAG volumes in Earthfill Dam area in 2022

Excavation Site	Material Excavated (m^3)				
	Q1	**Q2**	**Q3**	**Q4**	**Total**
Earthfill Dam Excavation	0	0	591	0	*591*
Earthfill Dam Temporary Ramps	39,897	1,375	0	0	*41,272*
Earthfill Dam Core Temporary Blanket	13,296	8,672	0	0	*21,968*
Total	***53,193***	***10,047***	***591***	***0***	***63,831***

Note: Due to the frequency of data tabulation, "Q1" includes volumes excavated from January 2 to April 2, 2022, "Q2" includes volumes excavated from April 3 to August 13, 2022, "Q3" includes volumes excavated from August 14 to October 1, 2022, and "Q4" includes volumes excavated from October 2, 2021 to January 7, 2023.

Table 2-3:
Summary of cumulative volumes of PAG material in Zone 8 and Dam Core at the end of each quarter in 2022

Stockpile	Cumulative Volume Stockpiled (m^3)			
	Q1	**Q2**	**Q3**	**Q4**
Zone 8	1,456,307	1,521,945	1,532,427	1,613,992
Earthfill Dam Temporary Ramps	0	0	0	0
Earthfill Dam Core Temporary Blanket	64,382	0	0	39,617
Cumulative total	1,520,689	1,521,945	1,532,427	1,653,609

Note: Due to the frequency of data tabulation, "Q1" includes volumes from January 2 to April 2, 2022, "Q2" includes volumes from April 3 to August 13, 2022, "Q3" includes volumes from August 14 to October 1, 2022, and "Q4" includes volumes from October 2, 2021 to January 7, 2023.

2.2.3 Right Bank

Excavations on the Right Bank in 2022 amounted to a total of 1,936,824 m^3 of PAG bedrock. Much of this material was produced from excavations in the Approach Channel and Spillway (1,889,079 m^3) that included the removal of the AC West Temporary Stockpile in Q4 2022 (Table 2-4). The remaining volume was excavated from the Right Bank Foundation Enhancement (RBFE) Area and Tailrace (47, 175 m^3), the Right Bank Drainage Tunnel (RBDT; 330 m^3), and RSEM Area R5B (240 m^3).

Most of the material excavated on the Right Bank was deposited in RSEM Area R5A which, at the end of 2022, contained 7,423,703 m^3 of PAG rock (Table 2-5). In Q4 2022, 636,778 m^3 of PAG material was relocated from within the RSEM Area R5A to the West and Central Expansion areas. Additional PAG material was placed at the RSEM Area R5B, which contained 363,847 m^3, and in the Approach Channel West Temporary Stockpile, which contained 31,748 m^3, in Q3 2022 and subsequently removed for permanent storage in the Earthfill Dam and RSEM R5A in Q4 2022.

Table 2-4:
Summary of excavated PAG volumes on the Right Bank in 2022

Excavation Site	Material Excavated (m^3)				
	Q1	**Q2**	**Q3**	**Q4**	**Total**
Approach Channel and Spillway	1,531,480	36,495	145,532	175,572	*1,889,079*
Right Bank Drainage Tunnel (RBDT)	0	330	0	0	*330*
RSEM Area R5B	0	0	0	240	*240*
Right Bank Foundation Enhancement (RBFE) Area and Tailrace	0	30,645	11,730	4,800	*47,175*
Total	***1,531,480***	***67,470***	***157,262***	***180,612***	***1,936,824***

Note: Due to the frequency of data tabulation, "Q1" includes volumes excavated from January 2 to April 2, 2022, "Q2" includes volumes excavated from April 3 to August 13, 2022, "Q3" includes volumes excavated from August 14 to October 1, 2022, and "Q4" includes volumes excavated from October 2, 2021 to January 7, 2023.

Table 2-5:
Summary of cumulative volume of PAG material in the Right Bank stockpiles at the end of each quarter in 2022

Stockpile	Cumulative Volume Stockpiled (m^3)			
	Q1	**Q2**	**Q3**	**Q4**
RSEM Area R5A	7,149,432	7,258,827*	7,364,273	7,423,703
RSEM Area R5A Starter Dyke	57,540	57,540	57,540	57,540
RSEM Area R5B	363,728	363,847	363,847	363,847
AC West Temporary Stockpile	31,748	31,748	31,748	0
Cumulative total	*7,602,448*	*7,711,962*	*7,817,408*	*7,876,838*

Note: Due to the frequency of data tabulation, "Q1" includes volumes from January 2 to April 2, 2022, "Q2" includes volumes from April 3 to August 13, 2022, "Q3" includes volumes from August 14 to October 1, 2022, and "Q4" includes volumes from October 2, 2021 to January 7, 2023.

*Bulk material balances from AFDE are included in Q2 stockpiled volumes; however total stockpiled volumes represent volumes from April through June 2022 from the Approach Channel and Spillway (78,420 m^3) and from September 2021 through May 2022 from the RDFE (30,645 m^3).

2.3 Monitoring Program Summary

ARD/ML monitoring is undertaken in areas where bedrock is excavated or where these materials are deposited. Appropriate sampling locations are determined as construction activities proceed rather than routinely sampling at fixed monitoring stations.

Geochemical analysis of samples collected during the monitoring program include rinse pH measurements to determine surface pH, as well as acid-base accounting (ABA) and solid phase metals analysis. Rinse pH monitoring is generally focussed where samples were previously identified to produce circumneutral to alkaline drainage (rinse pH > 5.5). Where

acidic drainage is prevalent, ARD mitigation strategies are identified and recommended. The original monitoring framework is described in PRHP's Acid Rock Drainage and Metal Leachate Management Plan (PRHP, 2017b) which is Appendix A of PRHP's Environmental Management Plan (PRHP, 2017a).

The management plan specifies that an annual ARD/ML Sampling Plan be developed by Lorax in the first quarter of each calendar year based on current site conditions and the additional operational experience gained in the previous year. The 2022 sampling plan recommends that new and confirmatory samples are collected from the major active and inactive excavation sites, RSEM deposition areas, and temporary PAG stockpiles (Lorax, 2022a). This sampling will direct water management and material handling and storage strategies such as the placement of a cover or fresh PAG within RSEM areas. Additional recommendations were provided to PRHP in support of Q3 and Q4 sampling.

In 2022, geochemical sampling was completed by PRHP personnel with guidance provided by Lorax. The majority of the sampling occurred during three rounds of sampling which took place in May, August, and October. Additional samples were also collected from Earthfill Dam – Zone 8 in June (n = 7). In total, 181 samples were analyzed for rinse pH (Table 2-6). Of these, 27 samples underwent more extensive geochemical testing including ABA and metals analysis.

Table 2-6:
Overview of Sample Distribution and Analyses Conducted

Location	Rinse pH	ABA and Metals
Left Bank		
RSEM Area L5	29	3
Left Bank Excavation	11	2
Earthfill Dam		
Zone 8	31	3
Right Bank		
RSEM Area R5A	75	16
RSEM Area R5B West exposure	14	2
Approach Channel and Auxiliary Spillway	0	0
Approach Channel Temporary Stockpile	21	1
Total	**181**	**27**

2.3.1 Sample Collection

The recommended sample collection methods vary depending on the type of material being sampled. Samples collected from excavation sites were collected as linear trench samples,

where a pick or hammer was used to excavate an approximately 1 m cut into the excavation face perpendicular to the bedding plane. Samples collected from the surface of PAG stockpiles and other graded or compacted areas were collected from shallow trenches, approximately 1 to 2 cm in depth. Trenches were dug with a pick. A sample was collected from the entire length of the trench (ranging from about 20–100 cm) at each location.

2.3.2 Analytical Methods

The surface rinse pH is conducted on the <2 mm particle size fraction (sorted by dry sieve) with no particle comminution. The procedure is based on that described in the Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials (Price, 2009). The rinse pH analyses were conducted on site by PRHP personnel.

ABA and metals analyses are conducted at BV Labs as follows:

- Neutralization potential (NP) is determined using a Modified Neutralization Potential method, following the method outlined in Marchant and Lawrence (1991).
- Total sulphur (S) is determined using a LECO furnace.
- Sulphate-S and sulphide-S are determined by the procedure outlined in ASTM D2492-02, *Standard Test Method for Forms of Sulphur in Coal*. Sulphate-S is the HCl extractable S and sulphide-S is the HNO_3 extractable S.
- Non-Extractable S is determined by difference (Total S – Sulphate S – Sulphide S).
- Solid phase metals analyses are conducted on pulverized samples by digesting 0.50 g in *aqua regia* at 95°C for one hour. The extract is then diluted to 10.0 mL and analyzed for metals by inductively coupled plasma mass spectrometry (ICP- MS).

2.3.3 Classification of ARD Potential

The ARD potential of different geologic materials was defined prior to the start of construction, to facilitate effective material management. The criteria for determining the ARD potential of geologic materials that are excavated at the Project are defined by its Technical Specifications (IET, 2015). The acid generating potential of overburden and bedrock is also defined in Appendix E of BC Hydro's CEMP (BC Hydro, 2016a).

ABA criteria for classifying excavated material as PAG or NPAG were defined by the ratio of NP to acid potential (AP) as per IET, 2015. The NP/AP ratio, or net potential ratio (NPR), was used to identify PAG and NPAG mine rock. It is calculated from modified NP and total S AP, and is defined as:

- PAG: Material with an NPR ≤ 2; and

- NPAG: Material with an NPR > 2.

In addition to the above ABA criteria, a sample is considered AG that has a pH < 5.5 when tested using standard paste or rinse pH methods.

The potential for ARD from various geologic materials disturbed at the Project site has been assessed by a variety of geochemical test work (KCB, 2015). These initial analyses show that the shale bedrock units are PAG, while the overburden materials are NPAG. Since site excavations have been initiated, additional refinement was required for material types that cannot be readily classified as 'bedrock' or 'overburden'. These material types are largely restricted to the area around the Left Bank Excavation (LBEX) and include:

- Bedrock colluvium;
- Overburden colluvium;
- Weathered bedrock; and
- The transition zone between bedrock and overburden.

The ARD/ML designation of these materials was not included in Appendix E of BC Hydro's CEMP (BC Hydro, 2016a) or geochemical baseline studies (KCB, 2015). Based on ARD/ML monitoring data, classifications have since been developed by Lorax, which are shown in Table 2-7 below. A more detailed description of the rationale and details of the classification system is provided in the *Field Classification of Potentially Acid Generating Materials* (Lorax, 2017).

Table 2-7:
Acid Rock Drainage Classification for Different Geologic Material Types

Material Type	ARD Classification
Overburden[1]	NPAG
Overburden Colluvium[2]	NPAG
Transition Zone (<15% shale)[1]	NPAG
Transition Zone (>15% shale)[1]	PAG or AG*
Bedrock Colluvium[2]	AG
Weathered Bedrock[2]	AG
Fresh Bedrock[1]	PAG

[1] Defined in CEMP (BC Hydro, 2016b)
[2] Defined in LBEX (Lorax, 2017)
*Classified as AG or NPAG depending on weathered shale content.

2.3.4 Quality Assurance and Quality Control

The quality assurance and quality control (QA/QC) program for ABA and metals analyses involves a variety of internal laboratory protocols. These protocols involve duplicate samples and analytical standard analysis. About one duplicate was measured for every 10 samples at BV Labs. Internal laboratory quality control at BV Labs adheres to a precision specification of ±20% for metals and ±30% for sulphur and carbon species.

Neutralization potential precision specifications at BV Labs vary depending on the quantity of NP:

NP > 20 kg $CaCO_3$/t = ± 15%;

NP < 20 and > 10 kg $CaCO_3$/t = ± 20%; and

NP < 10 kg $CaCO_3$/t = ± 5 kg$CaCO_3$/t.

Any laboratory duplicate result or standard that does not adhere to the precision specifications triggers a re-analysis. Complete documentation of analytical QA/QC protocols are provided in Appendix 2-A.

In order to confirm the reproducibility of results from the field rinse pH testing conducted by PRHP personnel, a duplicate from approximately 1 in 10 field samples was submitted to BV Labs for analysis. The QA/QC results generally show reasonable agreement between field rinse pH measurements and laboratory rinse pH measurements (Figure 2-2).

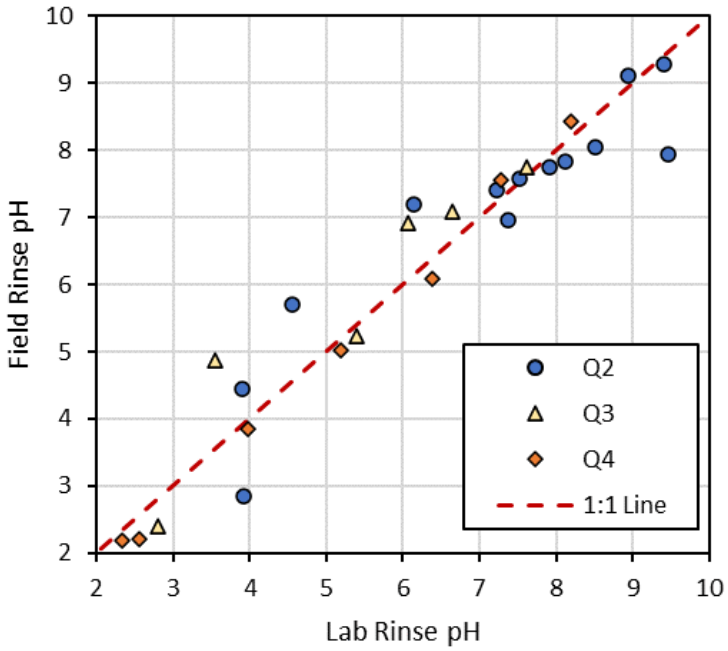


Figure 2-2: Comparison of 2022 field and laboratory rinse pH measurements

2.4 Geochemical Results

2.4.1 Rinse pH

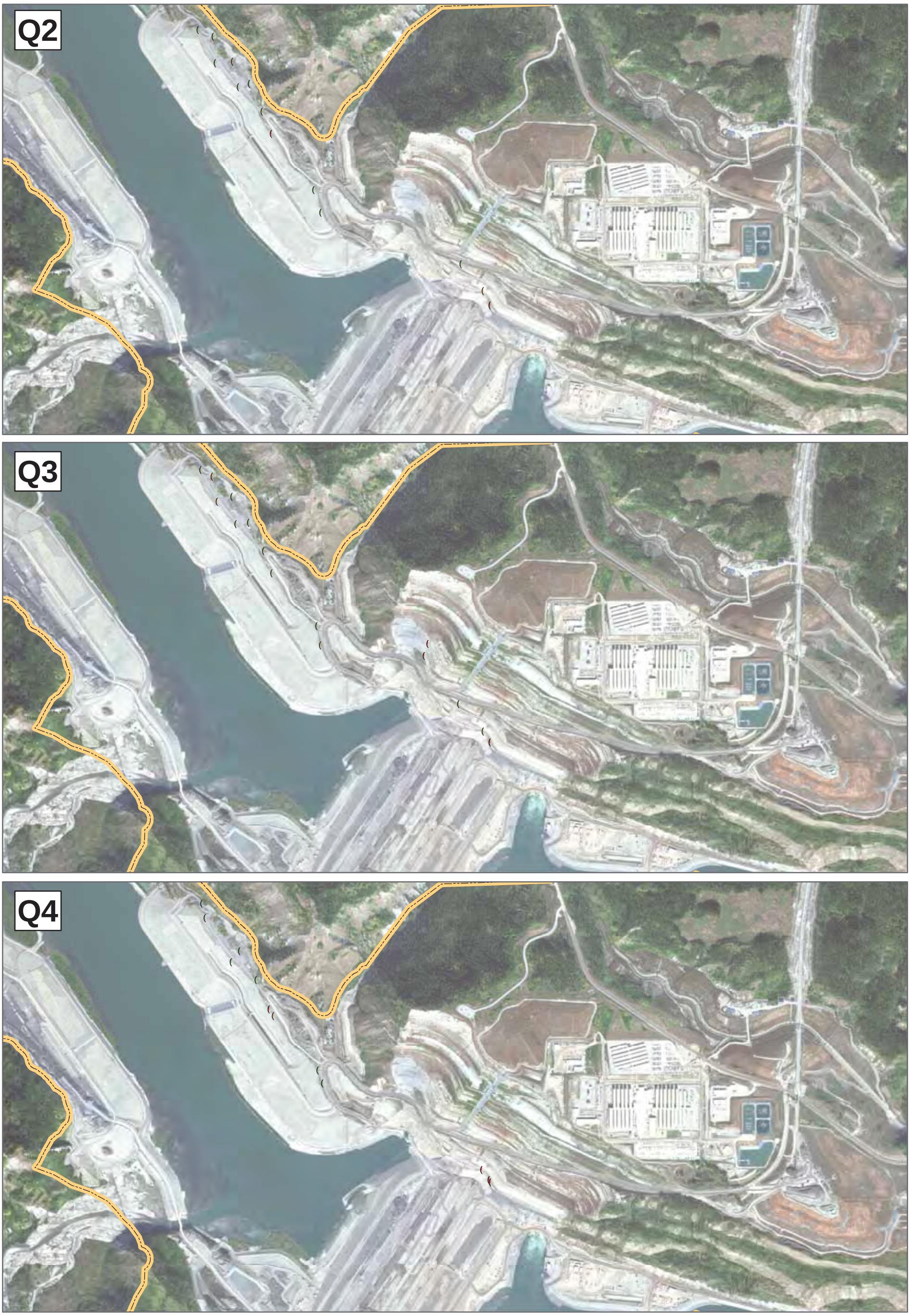
Rinse pH was identified as the primary geochemical parameter to assess whether a bedrock excavation or storage site is actively releasing net acidic drainage. The rinse pH values are used to group the samples into three categories representing neutral/alkaline (pH ≥ 7), slightly acidic/inert (5.5 < pH < 7), and acidic character (pH < 5.5). The rinse pH results are used to help inform timing and implementation of management measures. Permanent stockpiles in which acidic rock is identified require further mitigation such as covering with overburden. Management measures for excavation faces may include the collection and management of runoff or application of shotcrete. Geochemical monitoring is continued in areas where circumneutral rinse pH values are measured. The full database of rinse pH values for the 2022 samples is shown in Appendix 2-B, Table 1.

2.4.1.1 Left Bank

In 2022, samples on the Left Bank were collected at RSEM Area L5 (n = 29) and the LBEX (n = 11) (Figure 2-3 and Table 2-8). A large portion of RSEM Area L5 and the RSEM Area L5 Extension has been covered with overburden. Samples from these areas were collected from the locations where PAG material was visible at the surface. Samples were collected in Q2 through Q4 2022. Samples were generally classified as weathered bedrock or a mixture of weathered bedrock and overburden. One sample from RSEM Area L5 was classified as fresh bedrock.

The majority of samples from RSEM Area L5 (22 of 29 samples) had neutral/alkaline rinse pH. Five of the remaining samples had rinse pH between 5.5 and 7.0, while two samples had rinse pH < 5.5. The AG samples were both collected from a PAG exposure above the RSEM L5 Phase 2 West Pond. It is recommended that RSEM Area L5 and the RSEM Area L5 Extension areas are inspected in early 2023 following snow melt to identify areas where PAG material remains exposed. Continued monitoring of these areas is recommended until fully covered with overburden.

The majority of the material exposed in the LBEX is granular overburden; however, shale is exposed near the northwestern edge of the LBEX and at the base of the LBEX along Bench 0. Seven of eight samples from the LBEX that were classified as weathered bedrock were AG and the remaining sample had a rinse pH above 7.0. The overburden and transition material (0-15% shale) sampled in the LBEX in 2022 had rinse pH greater than or equal to pH 7.0. Water management will continue to be a key mitigation in the LBEX area until final mitigation can be implemented. Continued sampling of exposed bedrock in this area is recommended for 2023.



LEGEND

Rinse pH

- <5.5
- 5.5-7
- >7
- Site C Boundary

DATE SAVED:	Jan 20, 2023
DRAWN BY:	GM
REVIEWED:	JS
VERSION:	1

Coordinate System: *NAD 1983 UTM Zone 10N*
Projection: *Transverse Mercator*
Datum: *North American 1983*
Units: *Meter*

1:15,000

0 200 400 Meters

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project ARD/ML 2022 Annual Report

TITLE:

Left Bank 2022
Rinse pH Sampling Results

PROJECT #: A416-1

FIGURE: 2-3

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Table 2-8:
Statistical Overview of Rinse pH for 2022 Sampling Locations

Location	Statistic	Q2	Q3	Q4	Overall
Left Bank					
RSEM Area L5 (n = 29)	Min	4.45	5.60	3.22	3.22
	Median	8.44	7.61	7.30	7.54
	Max	8.92	8.24	8.31	8.92
Left Bank Excavation (n = 11)	Min	4.61	2.35	1.89	1.89
	Median	7.00	3.41	2.20	4.61
	Max	7.17	7.74	4.72	7.74
Earthfill Dam					
Zone 8 (n = 31)	Min	5.22	2.37	2.24	2.24
	Median	7.17	4.83	5.94	6.66
	Max	7.88	7.67	6.82	7.88
Right Bank					
RSEM Area R5A (n = 75)	Min	2.41	2.25	2.17	2.17
	Median	7.57	6.15	4.39	5.71
	Max	9.29	8.12	10.3	10.3
RSEM Area R5B West exposure (n = 14)	Min	4.53	2.50	5.02	2.50
	Median	6.38	4.28	6.04	5.33
	Max	7.91	7.10	8.09	8.09
Approach Channel Temporary Stockpile (n = 21)	Min	2.35	2.12	2.09	2.09
	Median	8.74	3.72	2.91	4.98
	Max	9.11	5.85	6.78	9.11

Note: No rinse pH sampling was conducted in 2022 Q1 due to frozen conditions

2.4.1.2 Earthfill Dam

Earthfill Dam sampling occurred in Q2 through Q4 2022 and focused on the deposition area at Zone 8 (n = 31) (Figure 2-4 and Table 2-8). The samples were classified as a mix of weathered bedrock and overburden.

In Q2, 10 of 15 samples from Zone 8 had rinse pH above 7.0 and only one sample had an acidic rinse pH < 5.5. Sampling completed in Q3 and Q4 2022 indicated that a higher proportion of material placed in Zone 8 was becoming acidic. In Q3, only one of eight samples had rinse pH above 7.0 and five samples had acidic rinse pH, while in Q4 no samples had rinse pH above 7.0 and two of eight samples had acidic rinse pH. PAG material placement in Zone 8 occurred throughout 2022; however, little to no material placement occurred in May through August 2022 which likely contributed to the lower rinse pH of the Q3 samples. Continued sampling of material placed in Zone 8 and maintenance of swales to capture contact water runoff is recommended until the final overburden cover is placed.

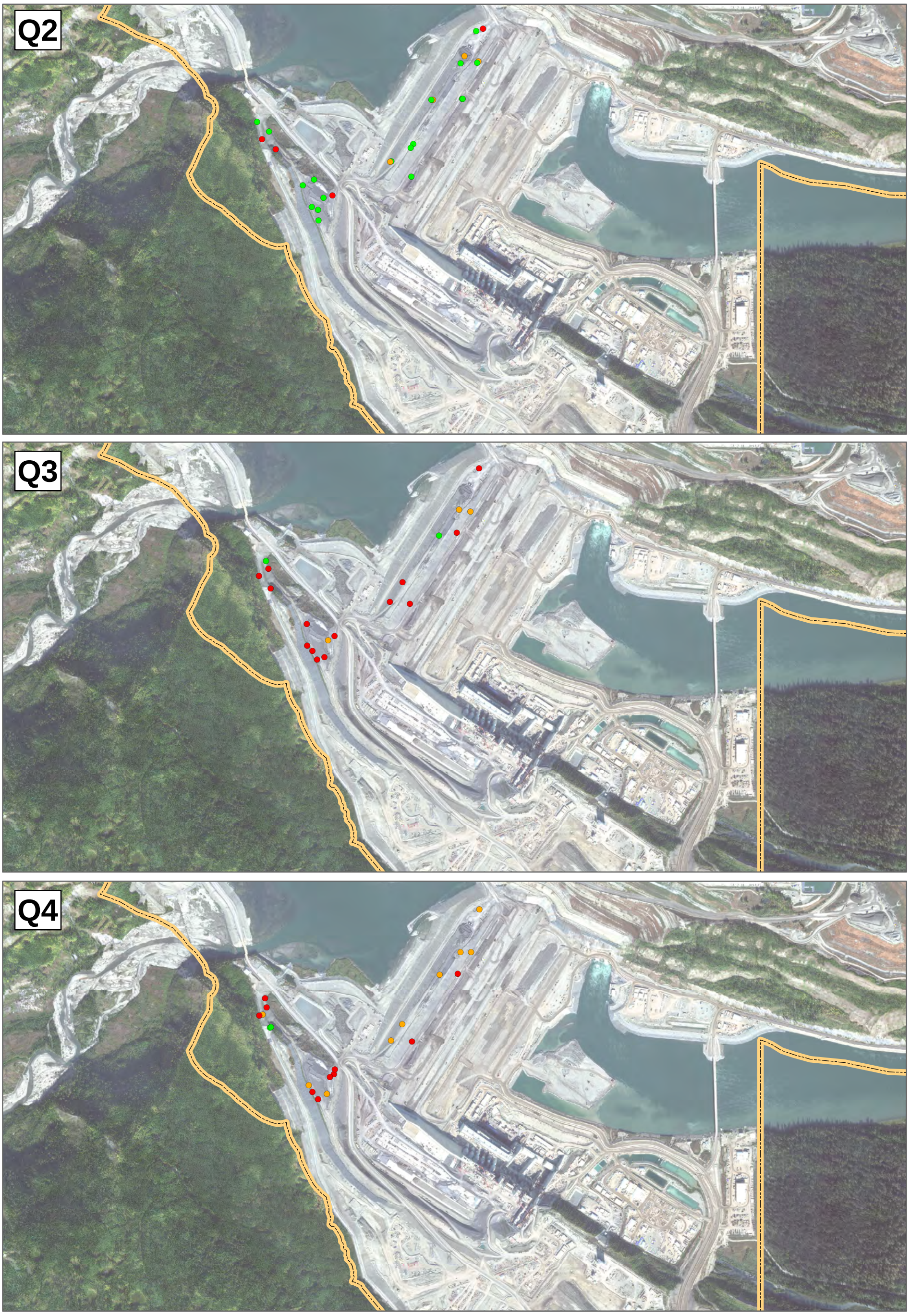
2.4.1.3 Right Bank

Right Bank sampling in 2022 focused on RSEM Area R5A (n = 75). Samples were also collected from the Approach Channel Temporary Stockpile (n = 21) and the exposure west of RSEM Area R5B (n = 14).

RSEM Area R5A was sampled in Q2 through Q4 2022 (Figure 2-5). Samples were generally classified as either fresh or weathered bedrock, although eight Q2 samples were classified as transition material (0-30% shale). Material placement in RSEM Area R5A has reduced the exposures of AG material at the surface through both placement of overburden and fresh PAG rock. However, approximately half (45% overall) of the 2022 samples were AG due to the progressive acidification of the exposed PAG rock that was placed during the first half of the year. The proportion of AG samples increased from 24% in Q2 to 43% in Q3 and 65% in Q4. The AG samples in each quarter were generally clustered at the northwestern half of the RSEM area. It is unlikely that runoff from the northwestern portion of RSEM Area R5A will meet discharge limits and water management measures will need to be implemented to prevent direct discharge to the Peace River through the sediment control ponds. Relocation of the exposed bedrock stockpiles to the West Expansion and Central Expansion areas in the RSEM area is recommended. Following placement, the final surface should be configured to the designed slopes and covered with NPAG cover material.

Management of the Approach Channel was passed from PRHP to AFDE on April 1, 2022. As such, no samples from the excavation area were collected. However, a temporary PAG stockpile was located at the northwest end of the Approach Channel area and was sampled by PRHP (Figure 2-4). In Q2 2022, the majority of the samples (6 of 7 samples) from the stockpile were neutral (rinse pH < 7.0) and the remaining sample was AG. In contrast, in Q3 and Q4 2022, sampling indicated that the PAG material stored in this stockpile was generally AG with 11 of 14 samples being classified as AG and the remaining three samples having rinse pH between 5.5 and 7.0. The material stored in the Approach Channel temporary stockpile was relocated by the end of Q4 2022.

Samples were collected from a PAG exposure along an old road located to the southwest of RSEM Area R5B in Q2 through Q4 2022. Runoff from this exposure reports to the R5B West Ditch. Eight of the samples were AG, one had a rinse pH between 5.5 and 7.0, and five were neutral. The continued excavation of the Approach Channel will include excavation of the weathered bedrock and covering of the exposed slopes above RSEM Area R5B. Continued monitoring of this area is recommended.



LEGEND

Rinse pH

- <5.5
- 5.5-7
- >7
- Site C Boundary

DATE SAVED:	Jan 20, 2023
DRAWN BY:	GM
REVIEWED:	JS
VERSION:	1

Coordinate System: *NAD 1983 UTM Zone 10N*
Projection: *Transverse Mercator*
Datum: *North American 1983*
Units: *Meter*

1:15,000

0 200 400 Meters

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project
ARD/ML 2022 Annual Report

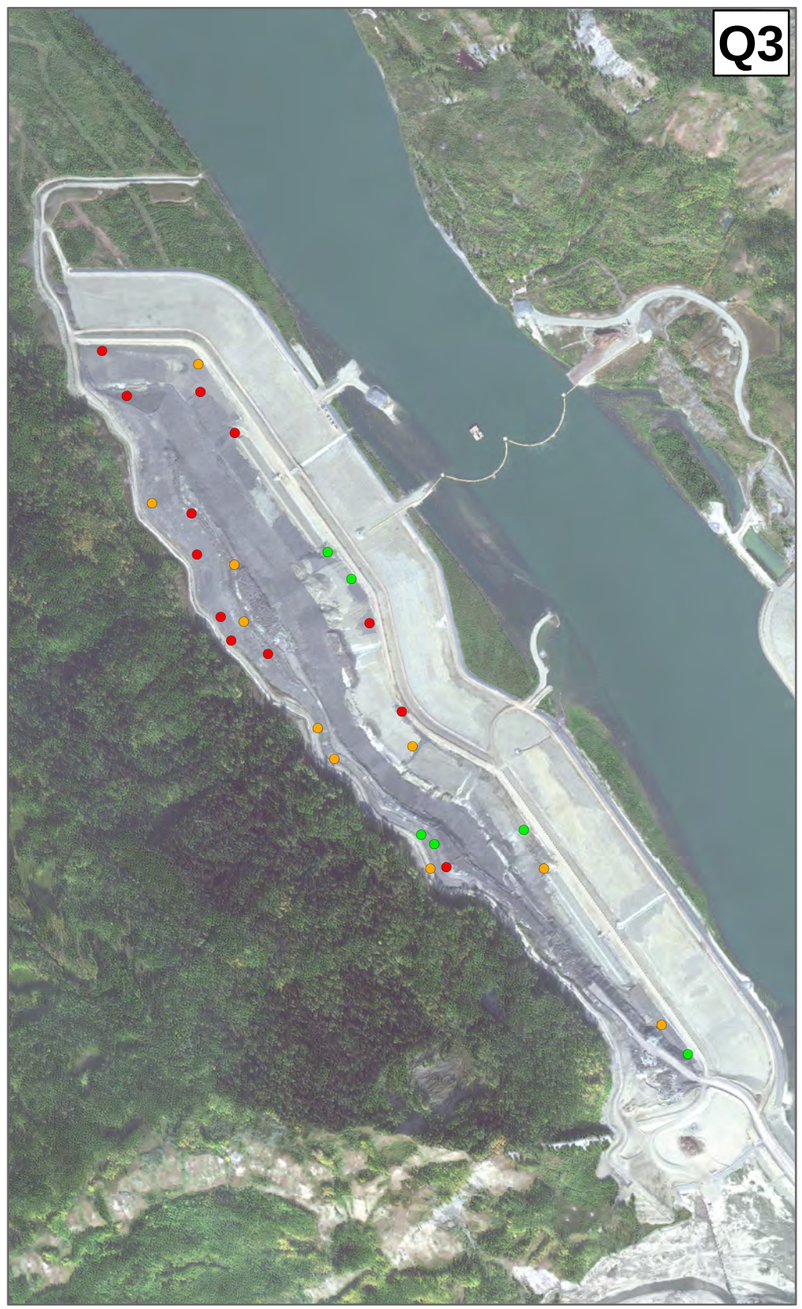
TITLE:

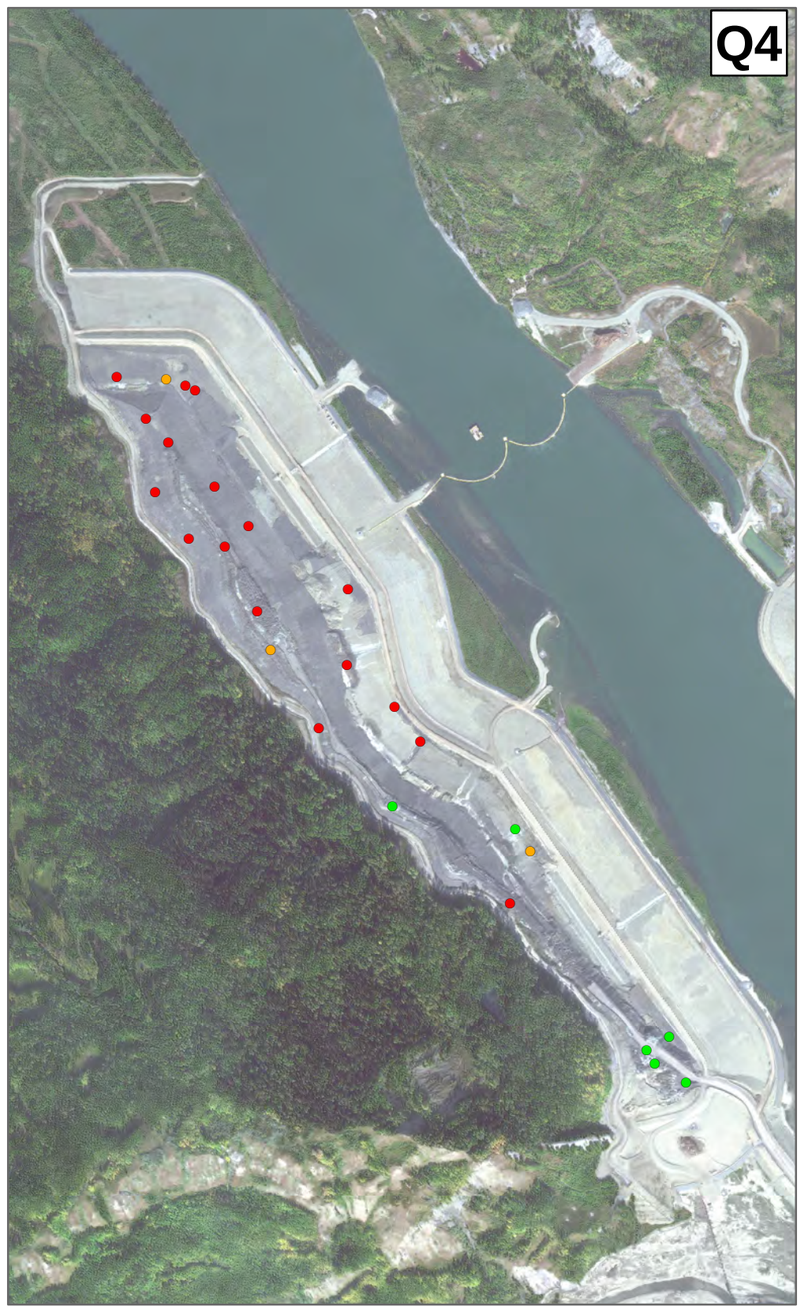
Right Bank 2022
Rinse pH Sampling Results

PROJECT #: A416-1

FIGURE: 2-4

P:\@Drafting\SiteC\Drafting Figures\MXD\2022_Annual Report\Fig_2-9_RB Rinse pH Q2-Q4.mxd





LEGEND

Rinse pH

- <5.5
- 5.5-7
- >7

Notes: No samples were collected for rinse pH testing in Q1 2022

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DRAWN BY:	GM
REVIEWED:	JO
VERSION:	1

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CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project
ARD/ML 2022 Annual Report

TITLE:

RSEM Area R5A 2022
Rinse pH Sampling Results

PROJECT #: A416-1

FIGURE: 2-5

P:\@Drafting\SiteC\Drafting Figures\MXD\2022_Annual Report\Fig_2-8_R5A Rinse pH Q2-Q4.mxd

2.4.2 Solid-Phase Geochemistry

This section presents the solid-phase geochemical results for the samples submitted for ABA and solid phase metals testing in 2022. Complete monitoring results are presented in Appendix 2-B. Total sulphur AP and modified NP are used to calculate NPR. All samples with NPR values <2 are classified as PAG, and samples with a rinse pH or paste pH <5.5 are classified as AG (Section 2.3.3). Metal enrichment is determined by comparing metal concentrations to average upper continental crustal abundance (ACA) as per Rudnick and Gao (2014) (Table 2-9).

Table 2-9:
Average upper continental crust abundance used to evaluate metal enrichment.

Element	Units	Average Continental Abundance
Ag	ppb	53
Al	%	8.15
As	ppm	4.8
Ba	ppm	628
Bi	ppm	0.16
Ca	%	2.57
Cd	ppm	0.09
Co	ppm	17.3
Cr	ppm	92
Cu	ppm	28
Fe	%	3.92
Hg	ppm	0.05
K	%	2.32
La	ppm	31
Mg	%	1.50
Mn	ppm	774
Mo	ppm	1.1
Na	%	2.43
Ni	ppm	47
P	%	0.065
Pb	ppm	17
Sb	ppm	0.4
Se	ppm	0.09
Sr	ppm	320
Th	ppm	10.5
U	ppm	2.7
Zn	ppm	67

2.4.2.1 Left Bank

Four of the 40 samples collected on the Left Bank in 2022 were submitted for further geochemical analysis, including samples from RSEM Area L5 (n = 3) and the LBEX (n = 2). Paste pH and rinse pH values are generally similar for samples collected on the Left Bank in 2022 (Table 2-10). Two of the samples collected from RSEM Area L5 had circumneutral paste and rinse pH values, while the third sample had acidic paste and rinse pH. One sample from the LBEX had circumneutral paste and rinse pH and the other had acidic paste and rinse pH. The LBEX sample with circumneutral pH was an overburden sample.

The total S for 2022 Left Bank samples ranges from 0.12 wt.% (LBEX overburden) to 2.64 wt.% (LBEX) (Table 2-10). The sulphur balance is made up of variable proportions of sulphate S, sulphide S, and non-extractable S. Sulphide S is typically an acid generating form of sulphur, whereas sulphate S and non-extractable S may be in either acid generating or non-acid generating forms. Non-extractable S is the portion of sulphur not accounted for in the HCl and HNO_3 extractions that are used to determine sulphate S and sulphide S, respectively.

The total S for the Q2 and Q3 RSEM Area L5 samples and the LBEX overburden sample is present dominantly as sulphate S with low sulphide S and non-extractable S (≤0.02 wt.%) (Figure 2-6). The total S in the high S LBEX sample is also dominantly sulphate S; however, both sulphide S and non-extractable S remain high (>0.40 wt.%). The Q4 RSEM Area L5 sample is dominantly sulphide S (0.34 wt.%) and non-extractable S (0.20 wt.%) but still contains measurable sulphate S (0.11 wt.%). The elevated sulphate S in the majority of the 2022 samples may be due to the presence of an acidic sulphate salt precipitate which forms on weathered surfaces. Due to the identification of the acidic sulphate salt precipitate in some samples previously collected at site, the total S is typically used to calculate the AP.

Modified NP was relatively low (≤27 kg $CaCO_3$/t) in all samples. Two of the RSEM Area L5 samples were classified as PAG with rinse pH > 5.5 and NPR < 2, while the remaining RSEM Area L5 sample and the weathered bedrock LBEX sample were classified as AG with rinse pH < 5.5 and NPR < 2 (Figure 2-7). The overburden LBEX sample was classified as NPAG with NPR > 2.

Table 2-10:
Summary of 2022 Left Bank ABA Results

Sample ID	Sample Date	Paste pH	Rinse pH	Total S	Sulphate S	Sulphide S	Non-Extractable S	TAP	SAP	Modified NP	NPR
Units		pH Units	pH Units	wt%	wt%	wt%	wt%	kg $CaCO_3$/t	kg $CaCO_3$/t	kg $CaCO_3$/t	(Mod NP/TAP)
RSEM Area L5											
L5-2022-MAY-12-08	12-May-22	4.59	3.90	0.62	0.60	<0.01	0.02	19.4	0.3	-6.20	-0.32
L5-2022-AUG-11-60	11-Aug-22	6.78	6.65	0.52	0.50	0.01	<0.02	16.3	0.3	2.70	0.17
L5-2022-OCT-08-59	8-Oct-22	7.73	7.27	0.65	0.11	0.34	0.20	20.3	10.6	26.3	1.3
Left Bank Excavation											
LBEX-2022-AUG-10-50	10-Aug-22	7.74	7.61	0.12	0.09	0.01	0.02	3.8	0.3	23.5	6.3
LBEX-2022-OCT-08-50	8-Oct-22	3.51	2.56	2.64	1.53	0.41	0.70	82.5	12.8	-8.40	-0.10

Notes:
SAP: Sulphide Acid Potential; TAP: Total S Acid Potential; NP: Neutralization Potential; NPR: Net Potential Ratio
All RSEM Area L5 samples submitted for ABA and the October LBEX sample submitted for ABA were classified as weathered bedrock, although filed notes for the RSEM Area L5 samples indicate that the weathered bedrock is mixed with overburden in some samples; The August LBEX sample submitted for ABA was classified as overburden.
Grey shading indicates an NPR < 2.0.

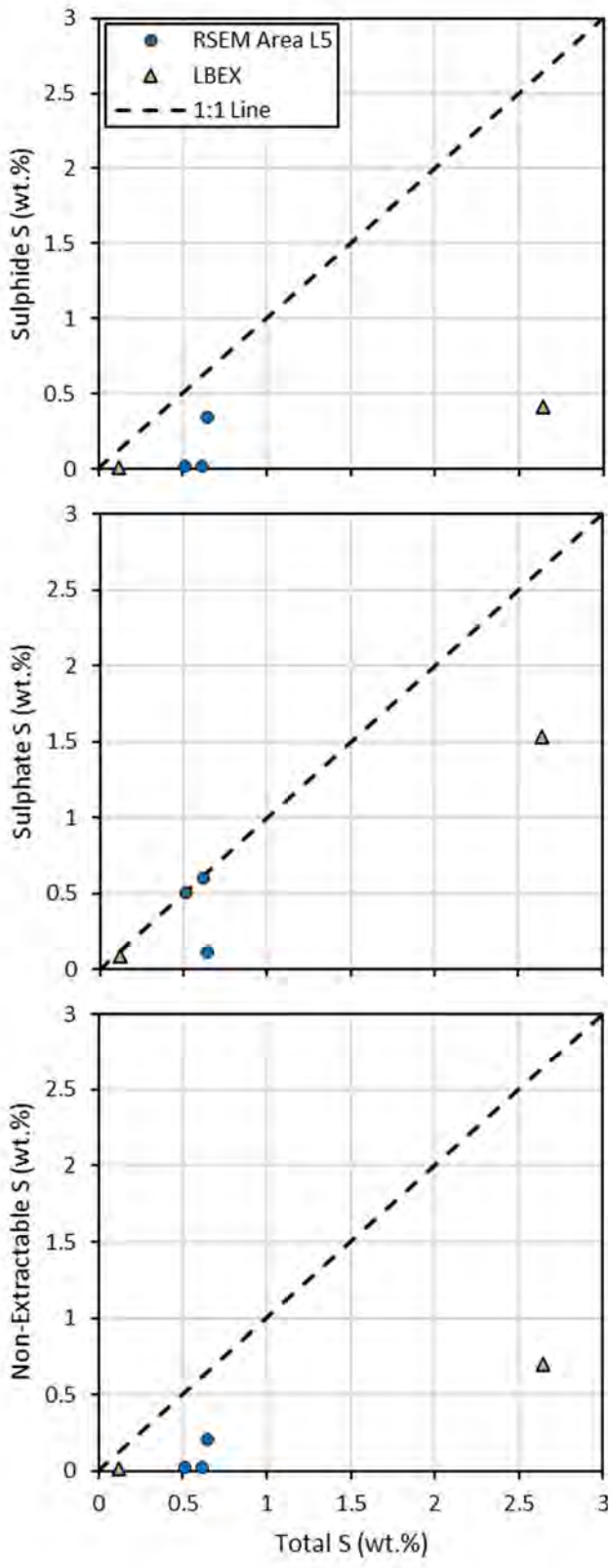


Figure 2-6: Sulphur species *versus* Total Sulphur for 2022 Left Bank samples

Metals and metalloids generally exceeding 3x the ACA give an indication of metal enrichment. Se was 10x the ACA in all five samples, Ag and Cd were above at least 3x the ACA in all five samples, and As and Mo were above at least 3x the ACA in three samples (Table 2-11). There are several factors that influence the leaching rates of elements, including the mineral association and stability, as well as the chemistry of the water in contact with the rocks. Metal enrichment does not necessarily result in metal leaching. Water quality monitoring will continue to screen for these parameters and assess the relationship between solid-phase content of a species and its concentration in drainage.

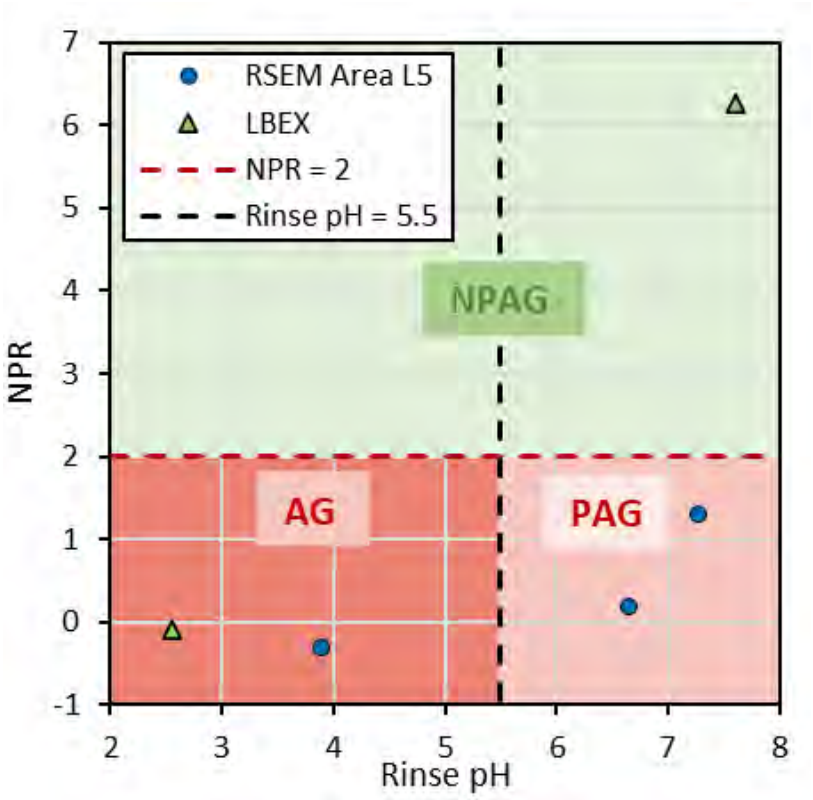


Figure 2-7: NPR *versus* Rinse pH for 2022 Left Bank samples

Note: NPAG: NPR > 2; PAG: NPR ≤ 2; AG: NPR ≤ 2 and rinse pH < 5.5.

Table 2-11:
Summary of 2022 Left Bank Solid Phase Metals Results

Parameter	Units	RSEM Area L5			LBEX	
		L5-2022-MAY-12-08	L5-2022-AUG-11-60	L5-2022-OCT-08-59	LBEX-2022-AUG-10-50	LBEX-2022-OCT-08-50
Ag	ppb	243	279	242	230	329
Al	%	1.49	2.12	1.02	1.82	0.96
As	ppm	16.6	17.9	10.8	8.0	24.4
Ba	ppm	561	738	416	573	166
Bi	ppm	0.27	0.30	0.19	0.22	0.22
Ca	%	0.43	0.62	1.23	1.00	1.29
Cd	ppm	1.16	1.46	0.29	0.47	1.05
Co	ppm	15.5	14.9	9.1	21.9	10.5
Cr	ppm	47.2	72.0	54.3	143	54.2
Cu	ppm	49.5	36.2	24.1	27.2	30.6
Fe	%	3.82	3.38	2.09	2.14	3.31
Hg	ppb	77	94	66	64	76
K	%	0.35	0.54	0.29	0.45	0.33
Mg	%	0.29	0.40	0.35	0.54	0.27
Mn	ppm	496	562	162	308	175
Mo	ppm	3.80	4.58	1.21	2.72	26.8
Na	%	0.072	0.104	0.152	0.048	0.033
Ni	ppm	49.0	54.0	25.5	46.4	38.0
P	%	0.100	0.107	0.088	0.061	0.134
Pb	ppm	14.4	16.2	11.1	12.2	13.3
Sb	ppm	0.19	0.67	0.21	0.31	0.47
Se	ppm	1.5	1.8	1.0	1.1	3.4
Sr	ppm	75.1	107	68.6	68.7	56.7
Th	ppm	5.7	6.3	4.9	4.7	4.5
Ti	%	0.002	0.002	0.002	0.006	0.001
Tl	ppm	0.26	0.38	0.10	0.17	0.39
U	ppm	2.7	1.7	1.2	1.6	5.9
V	ppm	45	61	30	53	42
W	ppm	<0.1	<0.1	<0.1	<0.1	<0.1
Zn	ppm	166	153	99.3	128	134

Notes:
Values shaded in light grey exceed 3x the ACA (Average upper continental crustal abundance; Rudnick and Gao, 2014)
Values shaded in dark grey exceed 10x the ACA.

2.4.2.2 Earthfill Dam

Three of 31 samples from Zone 8 in the Earthfill Dam were submitted for further geochemical characterization in 2022. All samples had circumneutral paste pH and two of the samples also had circumneutral rinse pH (Table 2-12). However, one sample had acidic rinse pH. The difference in paste pH and rinse pH for this sample was over 2 pH units and may indicate that there was stored neutralization potential within the grains which was released when the samples was pulverized for the paste pH test.

Total S ranges from 1.08 to 1.46 wt.% for the Earthfill Dam samples. Sulphide S and/or non-extractable S are the dominant sulphur species with sulphate comprising relatively minor proportions to the total S (Figure 2-8). Modified NP values are relatively low (≤11 kg $CaCO_3$/t). All Earthfill Dam samples had NPR values < 2 and are either classified as PAG (two samples; rinse pH > 5.5) or AG (one sample; rinse pH < 5.5) (Figure 2-9).

All samples from the Eathfill Dam area had Se values above 10x the ACA and Ag and Cd values above 3x the ACA. Other metals and metalloids were generally below 3x the ACA values, except for Mo in one sample. As described above, elevated metals do not necessarily indicate parameters that will be elevated in drainage.

Table 2-12:
Summary of 2022 Earthfill Dam ABA Results

Sample ID	Sample Date	Paste pH	Rinse pH	Total S	Sulphate S	Sulphide S	Non-Extractable S	TAP	SAP	Modified NP	NPR
Units		**pH Units**	**pH Units**	**wt%**	**wt%**	**wt%**	**wt%**	**kg $CaCO_3$/t**	**kg $CaCO_3$/t**	**kg $CaCO_3$/t**	**(Mod NP/TAP)**
Zone 8											
ZONE8-2022-MAY-12-51	12-May-22	7.13	6.14	1.41	0.12	1.10	0.19	44.1	34.4	4.00	0.09
ZONE8-2022-AUG-09-40	9-Aug-22	5.73	3.55	1.46	0.37	0.80	0.29	45.6	25.0	-0.80	-0.02
ZONE8-2022-OCT-08-40	8-Oct-22	7.28	6.39	1.08	0.29	0.35	0.44	33.8	10.9	11.3	0.3

Notes:
Modified NP – Modified Neutralization Potential, NPR – Net Potential Ratio
All Earthfill Dam samples submitted for ABA are classified as weathered bedrock, although field notes indicate that some overburden is mixed in with the weathered bedrock.
Grey shading indicates an NPR < 2.0.

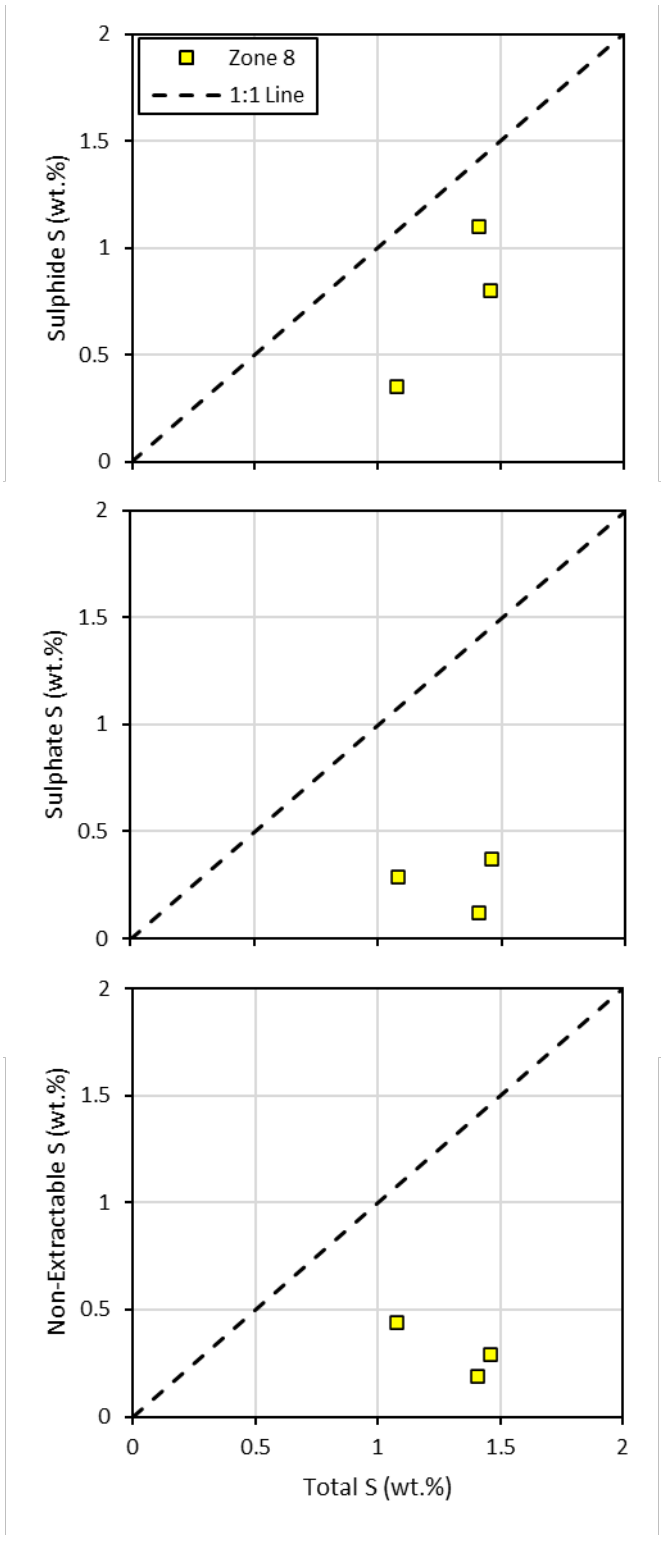


Figure 2-8: Sulphur species *versus* Total Sulphur for 2022 Earthfill Dam samples

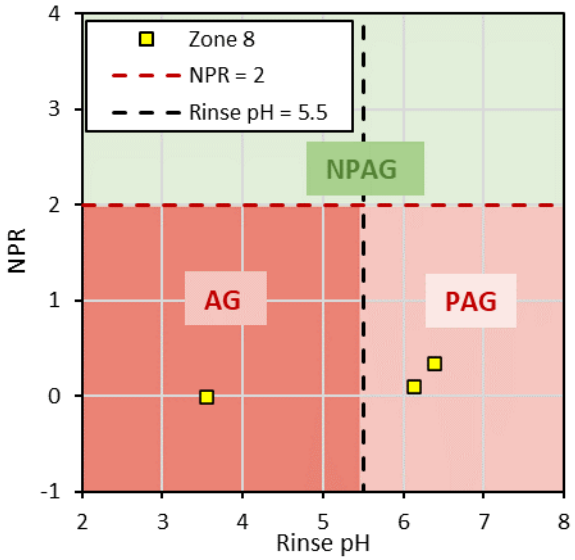


Figure 2-9: NPR *versus* Rinse pH for 2022 Earthfill Dam samples
Note: NPAG: NPR > 2; PAG: NPR ≤ 2; AG: NPR ≤ 2 and rinse pH < 5.5.

Table 2-13:
Summary of 2022 Earthfill Dam Solid Phase Metals Results

Parameter	Units	ZONE 8-2022-MAY-12-51	ZONE8-2022-AUG-09-40	ZONE8-2022-OCT-08-40
Ag	ppb	360	406	319
Al	%	1.66	1.70	1.04
As	ppm	12.3	13.8	11.4
Ba	ppm	386	480	400
Bi	ppm	0.26	0.26	0.23
Ca	%	0.35	0.43	0.80
Cd	ppm	0.45	0.55	0.41
Co	ppm	8.4	10.6	8.2
Cr	ppm	69.8	87.4	83.9
Cu	ppm	31.6	34.0	28.2
Fe	%	2.10	2.21	2.04
Hg	ppb	87	96	80
K	%	0.54	0.56	0.32
Mg	%	0.33	0.33	0.33
Mn	ppm	68	72	148
Mo	ppm	2.18	3.42	2.27
Na	%	0.174	0.148	0.184
Ni	ppm	30.9	32.9	28.2
P	%	0.069	0.078	0.069
Pb	ppm	14.1	15.2	12.9
Sb	ppm	0.06	0.17	0.19
Se	ppm	1.4	1.6	1.4
Sr	ppm	65.5	73.6	81.5
Th	ppm	5.7	5.9	5.2
Ti	%	0.001	0.001	0.002
Tl	ppm	0.11	0.23	0.14
U	ppm	1.0	1.1	1.0
V	ppm	48	49	33
W	ppm	<0.1	<0.1	<0.1
Zn	ppm	117	123	103

Notes:
Values shaded in light grey exceed 3x the ACA (Average upper continental crustal abundance; Rudnick and Gao, 2014)

Values shaded in dark grey exceed 10x the ACA.

2.4.2.3 Right Bank

Nineteen of the 110 samples collected on the Right Bank in 2022 were submitted for further geochemical analyses. This included samples from RSEM Area R5A (n = 16), RSEM Area R5B West Ditch (n = 2), and the Approach Channel Temporary Stockpile (n = 1). A summary of the geochemical results for the Right Bank samples that were submitted for the additional analyses are included in Table 2-14.

The RSEM Area R5A samples had variable rinse and paste pH values, ranging from acidic to slightly alkaline. One RSEM Area R5B West Ditch sample had circumneutral paste pH and acidic rinse pH, while the other sample had acidic paste and rinse pH. The one sample from the Approach Channel Temporary Stockpile had slightly alkaline paste and rinse pH.

In general, rinse pH and paste pH show good agreement; however, three RSEM Area R5A samples had paste pH values that were greater than 1.5 pH units above their respective rinse pH measurements, while one RSEM Area R5A sample had a paste pH value that was lower than 1.5 pH units below the rinse pH value. This may indicate stored neutralization potential or acidity within the particles that is released during pulverization of the sample for the paste pH test.

The total S content of the bedrock samples collected from shale exposures and stockpiles on the Right Bank in 2022 ranged from 0.11 wt.% to 2.09 wt.% (both samples from RSEM Area R5A) (median: 0.98 wt.%). The dominant form of sulphur in the Q2 RSEM Area R5A samples was generally sulphide S, while several of the Q3 and Q4 samples have a higher proportion of sulphate S (Figure 2-10). The sulphate S is likely related to the presence of an acidic sulphate precipitate and higher proportions of sulphate S generally indicate a more weathered sample. Sulphate S also makes up the majority of sulphur in the samples from RSEM Area R5B West Ditch, while the Temporary Stockpile sample is dominated by sulphide S. Non-extractable S makes up less than a quarter of the total S balance on average for the samples collected on the Right Bank.

Modified NP was generally low (<30 kg $CaCO_3$/t) in the 2022 Right Bank samples; however, one sample had a modified NP value of 81 kg $CaCO_3$/t. The sample with high modified NP was described as weathered bedrock. To understand the relationship between PAG and currently acidic (AG) materials, laboratory rinse pH values are plotted against NPR, calculated as the ratio of modified NP to AP (Figure 2-11). This plot illustrates that the majority of the Right Bank samples submitted for further analysis are PAG (n = 9) or AG (n = 7); however, three samples from RSEM Area R5A are considered NPAG with NPR > 2. These samples were described as transition (15-30% shale), transition (0-15% shale), and weathered bedrock.

With respect to metals and metalloids, Ag values were above 3x the ACA in 18 of 19 of the Right Bank samples and Se values were above 3x the ACA in all samples (Table 2-15). The Se values were also above 10x the ACA in 18 samples. Cd contents were above 3x the ACA in 14 of 19 samples and above 10x the ACA in one sample. Other elements that are less frequently above 3x the ACA include As (two sample) and Mo (four samples). As stated in the discussion on the Left Bank samples, metal leaching is dependent on a number of factors and metal enrichment does not necessarily imply the potential for metal leaching.

Table 2-14:
Summary of 2022 Right Bank ABA Results

Sample ID	Sample Date	Paste pH	Rinse pH	Total S	Sulphate S	Sulphide S	Non-Extractable Sulphur	TAP	SAP	Modified NP	NPR
Units		**pH Units**	**pH Units**	**wt%**	**wt%**	**wt%**	**wt%**	**kg $CaCO_3$/t**	**kg $CaCO_3$/t**	**kg $CaCO_3$/t**	**(Mod NP/TAP)**
RSEM Area R5A											
R5A-2022-MAY-12-15	12-May-22	8.47	9.40	0.42	0.01	0.35	0.06	13.1	10.9	20.1	1.5
R5A-2022-MAY-12-17	12-May-22	7.97	8.12	0.31	0.04	0.13	0.14	9.7	4.1	19.7	2.0
R5A-2022-MAY-12-19	12-May-22	4.47	3.92	1.19	0.37	0.68	0.14	37.2	21.3	-3.00	-0.08
R5A-2022-MAY-12-21	12-May-22	7.93	7.37	1.12	0.12	0.85	0.15	35.0	26.6	21.5	0.6
R5A-2022-MAY-12-23	12-May-22	6.27	4.55	1.64	0.08	1.29	0.27	51.3	40.3	1.00	0.02
R5A-2022-MAY-12-25	12-May-22	7.87	7.52	0.43	0.06	0.28	0.09	13.4	8.8	29.7	2.2
R5A-2022-MAY-12-27	12-May-22	7.84	9.47	0.84	0.04	0.66	0.14	26.3	20.6	4.80	0.18
R5A-2022-MAY-12-29	12-May-22	7.26	7.22	1.65	0.05	1.30	0.30	51.6	40.6	4.30	0.08
R5A-2022-MAY-12-31	12-May-22	7.36	6.88	1.24	0.06	1.02	0.16	38.8	31.9	5.00	0.13
R5A-2022-MAY-12-33	12-May-22	8.28	7.91	0.98	0.07	0.72	0.19	30.6	22.5	6.20	0.20
R5A-2022-MAY-12-35	12-May-22	7.72	8.51	1.25	0.05	1.04	0.16	39.1	32.5	5.70	0.15
R5A-2022-AUG-08-09	8-Aug-22	6.78	2.80	0.91	0.60	0.01	0.30	28.4	0.3	20.7	0.7
R5A-2022-AUG-09-20	9-Aug-22	6.82	6.07	1.11	0.17	0.69	0.25	34.7	21.6	2.70	0.08
R5A-2022-OCT-07-6	7-Oct-22	8.16	8.20	0.11	0.06	0.01	0.04	3.4	0.3	80.5	23.4
R5A-2022-OCT-07-10	7-Oct-22	4.40	2.34	0.98	0.72	0.01	0.25	30.6	0.3	-7.40	-0.24
R5A-2022-OCT-07-20	7-Oct-22	4.76	3.98	0.94	0.20	0.46	0.28	29.4	14.4	-0.50	-0.02
RSEM Area R5B West Ditch											
R5B-2022-AUG-09-30	9-Aug-22	6.26	5.39	0.60	0.57	0.01	0.02	18.8	0.3	0.0	0.0
R5B-2022-OCT-08-30	8-Oct-22	5.39	5.19	0.84	0.72	<0.01	0.12	26.3	0.3	11.4	0.4
Approach Channel Temporary Stockpile											
TS AC-2022-MAY-12-42	12-May-22	8.03	8.94	1.09	0.04	0.91	0.14	34.1	28.4	7.00	0.21

Notes:
Modified NP: Modified Neutralization Potential, NPR: Net Potential Ratio
RSEM Area R5A samples submitted for ABA are classified as transition samples, weathered bedrock, or fresh bedrock. The RSEM Area R5B West Ditch samples submitted for ABA are classified as weathered bedrock and the Approach Channel Temporary Stockpile sample submitted for ABA is classified as fresh bedrock.
Grey shading indicates an NPR < 2.0.

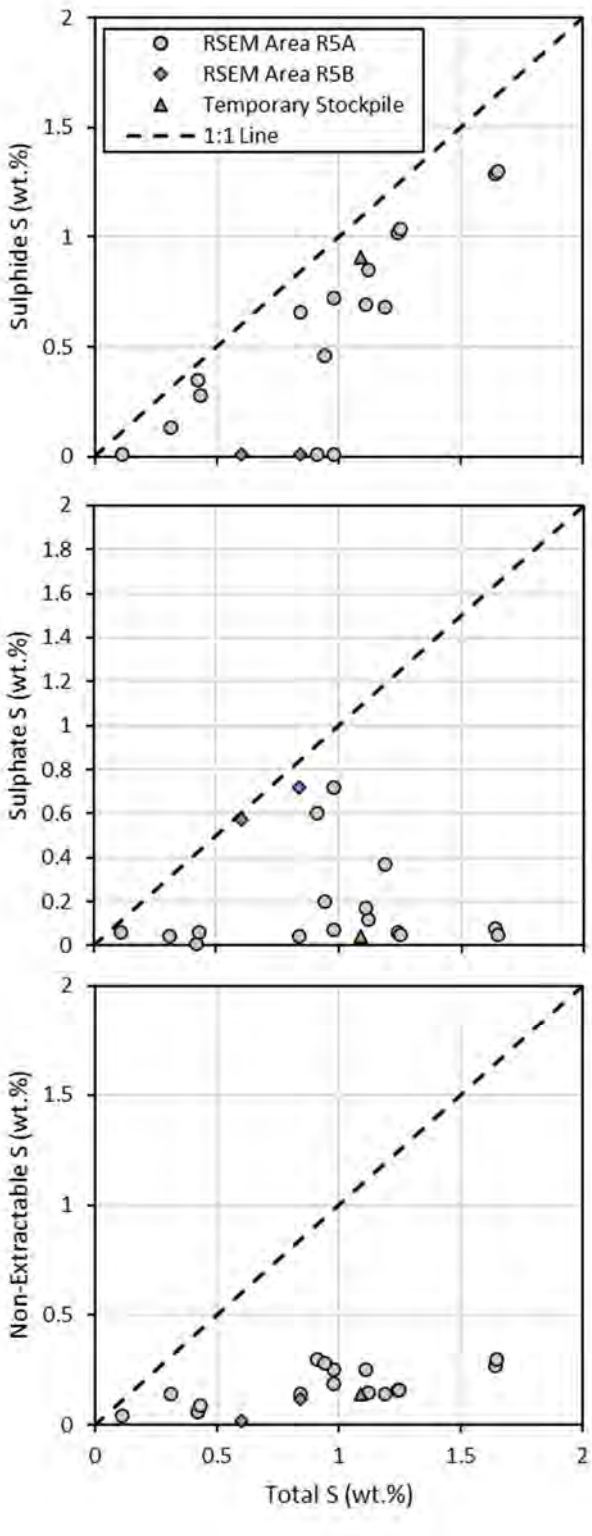


Figure 2-10: Sulphur species *versus* Total Sulphur for 2022 Right Bank samples

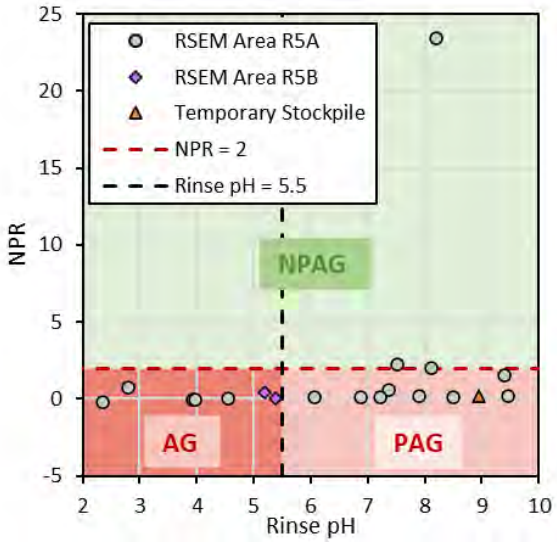


Figure 2-11: NPR *versus* Rinse pH for 2022 Right Bank samples
Note: NPAG: NPR > 2; PAG: NPR ≤ 2; AG: NPR ≤ 2 and rinse pH < 5.5.

Table 2-15:
Summary of 2022 Right Bank Solid Phase Metals Results

Parameter	Units	RSEM Area R5a (n = 16)			R5B-2022-AUG-09-30	R5B-2022-OCT-08-30	TS AC-2022-MAY-12-42
		Min	Median	Max			
Ag	ppb	158	351.5	431	400	419	364
Al	%	1.04	1.51	1.75	1.55	0.71	1.68
As	ppm	8	10.85	13.6	16.4	15.6	10.1
Ba	ppm	268	418.5	608	529	431	459
Bi	ppm	0.16	0.25	0.3	0.24	0.26	0.25
Ca	%	0.26	0.395	2.75	0.24	0.20	0.33
Cd	ppm	0.13	0.42	1.04	0.01	<0.01	0.33
Co	ppm	3	8.5	9.7	1.7	1.4	8.7
Cr	ppm	24.9	78.45	189	72.0	22.4	71.0
Cu	ppm	21.6	28.7	35.4	24.1	23.4	31.6
Fe	%	1.42	2.095	2.86	2.48	2.97	1.87
Hg	ppb	41	71	86	68	74	82
K	%	0.27	0.465	0.59	0.59	0.36	0.54
Mg	%	0.25	0.315	0.74	0.20	0.12	0.33
Mn	ppm	41	75.5	390	10	4	75
Mo	ppm	0.9	2.02	4.05	6.67	5.64	1.11
Na	%	0.016	0.077	0.243	0.130	0.175	0.196
Ni	ppm	13.2	30	33.9	6.0	3.4	29.9
P	%	0.056	0.063	0.085	0.069	0.084	0.064
Pb	ppm	9.24	13.85	15	13.9	15.3	14.0
S	%	0.12	1.005	1.59	0.63	0.90	1.06
Sb	ppm	0.05	0.095	0.65	0.18	0.19	0.06
Se	ppm	0.7	1.25	1.9	2.0	2.4	1.1
Sr	ppm	37.2	59.45	87.7	61.2	75.1	57.4
Th	ppm	3.3	5.2	6.2	6.3	7.0	5.5
Ti	%	<0.001	0.001	0.01	<0.001	<0.001	0.001
Tl	ppm	0.07	0.115	0.21	0.39	0.34	0.07
U	ppm	0.5	1	1.2	1.1	0.7	0.9
V	ppm	29	45.5	54	49	30	49
W	ppm	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zn	ppm	43.4	112.5	142	55.3	48.7	121

Notes:
Values shaded in light grey exceed 3x the ACA (Average upper continental crustal abundance; Rudnick and Gao, 2014)
Values shaded in dark grey exceed 10x the ACA.

2.5 Sediment Monitoring

The accumulated sediment at the bottom of sediment control ponds that may be removed by dredging is referred to as dredgeate. Sediment samples were collected from the AC-E-Sump, Crusher settling ponds located in Area A, and MWTF (February)/WTP (September) sludge pond located adjacent to RSEM Area R6. The geochemical characteristics and hydrocarbon content of the samples were analysed to ensure the appropriate long-term management plans are implemented for the sludge and dredgeate.

The sediment screening approach and regulatory context is discussed in Section 2.5.1. The results of chemical characterization for the AC-E-Sump dreadgeate are presented and discussed in Section 2.5.2, the crusher sediment settling pond results in Section 2.5.3 and the MWTF/WTP pond sludge results in Section 2.5.4. The laboratory Certificates of Analysis are included in Appendix 2-C.

2.5.1 Dredgeate Sediment Screening Approach

Section 7.2.4 of the Acid Rock Drainage and Metal Leachate Management Plan (BC Hydro, 2016a) addresses the testing and disposal of accumulated sediment from a PAG contact sediment control pond. It states the following:

> "If the Contractor must remove accumulated sediment from a PAG contact sediment pond, the Contractor shall test the sediment for metals and hydrocarbon to ensure it meets the regulated limits for the site where that accumulated sediment will be deposited."; and,
>
> "Prior to decommissioning or infilling of the PAG contact sediment pond, the contractor shall test the sediment for metals and hydrocarbon to ensure it meets the regulated limits."

Although the Crusher sediment and the MWTF/WTP sludge samples are not collected from PAG sediment ponds, the same approach was applied for the assessment of these materials.

The regulated limits for the site where accumulated sediment will be deposited are not explicitly stated and are inferred to be those established pursuant to the B.C. *Environmental Management Act*, as outlined by the Contaminated Site Regulation (CSR) and Hazardous Waste Regulation (HWR).

The CSR describes a risk-based approach for classifying the risk a contaminated site poses, and sets out requirements for site characterization and remediation, depending on the permitted land use. The CSR sets out numerical standards for the classification of contaminated sites based on the expected land use and exposure pathways. For the

evaluation of sediment disposal, numerical standards listed by the British Columbia CSR were used for reference as a proxy for assessing the level of environmental risk posed by RSEM area pond sediments. The lowest standard of the following three parts of CSR Schedule 3.1 was selected and used to screen the applicable parameter.

- Part 1 - Numerical Soil Standards, Column 9 Industrial (IL);
- Part 3 - Generic Numerical Soil Standards to Protect Ecological Health; Column 10 Industrial (IL); and
- Part 2 - Generic Numerical Soil Standards to Protect Human Health; Column 10 Industrial (IL).

In addition to the CSR, Section 1 of the HWR defines hazardous waste and should a material be defined as such; its disposal would be regulated by the HWR. It is possible that sediments accumulating in the ponds could contain leachable toxic waste and the Toxic Characteristic Leaching Procedure (TCLP) was conducted on the sediments and the TCLP leachate chemistry was screened against the Leachate Quality Standards listed in Schedule 4; Table 1 of the HWR.

2.5.2 AC-E-Sump Dredgeate Results

A sludge sample was collected from the AC-E-Sump on February 19, 2022, prior to decommissioning the sump. Approximately 1,000 m^3 was removed and transported to RSEM Area R5A for burial. Following sludge removal, the AC-E-Sump was backfilled.

The total metal content of the sample is screened against the lowest CSR standard for industrial lands as noted previously in Section 2.5.1. The total metal content of the samples is also screened against the range of concentrations measured in PAG bedrock and NPAG overburden. The list of metal(oid)s and the corresponding screening values for the AC-E-Sump dredgeate sample are presented in Table 2-16). Concentrations for all metals in the sample were below the applicable CSR Soil Standard, except for As and Co which slightly exceeded the CSR standards by factors of 1.1 and 1.8, respectively. The As concentration was within the concentration ranges of NPAG and PAG rock placed in RSEM Area R5A, while the Co concentration was above the maximum value observed for NPAG and PAG rock (19.1 mg/kg) by a factor of 2.3.

The hydrocarbon content of the AC-E-Sump dredgeate sample is below the CSR standards that were used to screen the sample, as shown in Table 2-18.

The leachable metal content of the AC-E-Sump dredgeate sample is summarized in Table 2-19 and the regulated metal(oid)s were below the HWR leachate standards used to screen the samples.

Table 2-16: Total Metal Content of AC-E-Sump Sludge

Parameter	Units	AC-E-Sump Sludge	PAG Material deposited in RSEM Area R5A [1]				NPAG Material (Left Bank) [2]				CSR Soil Standard [3]	CSR Notes
Date		**2022/02/19**	**n**	**Minimum**	**Median**	**Maximum**	**n**	**Minimum**	**Median**	**Maximum**		
Moisture	%	36	-	-	-	-	-	-	-	-	-	No standard in Schedule 3.1
pH	pH	8.02	137	2.31	6.7	10.6	20	7.4	8.195	8.79	-	No standard in Schedule 3.1
Total Metals												
Aluminum (Al)	mg/kg	10100	12	5,300	8,200	11,700	20	6,800	12,400	22,700	250,000	Schedule 3.1 Part 2; IL
Antimony (Sb)	mg/kg	0.87	12	0.09	0.17	0.27	20	0.46	0.735	1.32	40	Schedule 3.1 Part 3; IL
Arsenic (As)	mg/kg	**10.9**	12	9.2	11.9	22.3	20	6.3	7.9	13.9	10	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Barium (Ba)	mg/kg	304	12	237	399.5	580	20	301	347.5	655	1,500	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates
Beryllium (Be)	mg/kg	1.29	1	0.76	0.76	0.76	-	-	-	-	pH-based	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 6.5 (std = 1 mg/kg); pH6.5 - <7.0 (std=4 mg/kg); pH7 - <7.5 (std=30mg/kg); pH7.5 - <8 (std=250 mg/kg); pH >=8 (std=500 mg/kg)
Bismuth (Bi)	mg/kg	0.16	12	0.22	0.29	0.34	20	0.08	0.185	0.34	-	No standard in Schedule 3.1
Cadmium (Cd)	mg/kg	1.55	12	0.15	0.33	0.43	20	0.58	1.035	1.24	pH-based	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH <7 (1 mg/kg); pH7-<7.5 (3 mg/kg); pH7.5-<8 (20mg/kg); pH>8 (50 mg/kg)
Calcium (Ca)	mg/kg	22,700	12	1,600	3,350	6,400	20	8,700	37,450	50,300	-	No standard in Schedule 3.1
Chromium (Cr)	mg/kg	19.6	12	12.4	18.65	29	20	35.2	41.2	104	60	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Cobalt (Co)	mg/kg	**44.8**	12	1	8.85	13.4	20	8.1	12.9	19.1	25	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Copper (Cu)	mg/kg	40.7	12	14.9	28.95	34.6	20	19.2	34.4	61.9	75	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 5.5 (lowest CSR standard); std varies with hardness, receiving hardness >= 200 mg/L is assumed
Iron (Fe)	mg/kg	31,200	12	13,200	18,800	23,400	20	20,300	26,150	40,200	150,000	Schedule 3.1 Part 2; IL
Lead (Pb)	mg/kg	10.4	12	11.1	15.95	28.7	20	8.05	13.65	20.6	200	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 5.0 (lowest CSR standard); std varies with hardness, receiving hardness = 200 to < 300 mg/L is assumed
Lithium (Li)	mg/kg	21.9	1	21.3	21.3	21.3	-	-	-	-	450	Schedule 3.1 Part 2; IL
Magnesium (Mg)	mg/kg	5430	12	500	2,350	3,100	20	3,900	12,200	15,000	-	No standard in Schedule 3.1
Manganese (Mn)	mg/kg	782	12	10	86.5	154	20	275	458	728	2,000	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates and plants, no standard for groundwater
Mercury (Hg)	mg/kg	0.076	12	0.00006	0.083	0.107	20	0.031	0.0515	0.113	75	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates and plants, no standard for groundwater
Molybdenum (Mo)	mg/kg	3.26	12	0.46	1.3	14.4	20	1.48	2.725	5.28	150	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates and plants
Nickel (Ni)	mg/kg	137	12	3.9	25.3	38.6	20	24.3	40.25	66.7	pH-based	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH<5 (90 mg/kg); pH5-<5.5 (100 mg/kg); pH5.5-<6 (150 mg/kg); pH6-<6.5 (200 mg/kg); pH6.5-<7 (300 mg/kg);pH7-<7.5 (900 mg/kg); pH7.5-<8 (5,000 mg/kg); pH>=8 (9,500 mg/kg)
Phosphorous (P)	mg/kg	971	12	570	710	970	20	810	895	1,350	-	No standard in Schedule 3.1
Potassium (K)	mg/kg	1360	12	2,000	2,700	3,400	20	900	1,900	3,300	-	No standard in Schedule 3.1
Selenium (Se)	mg/kg	0.84	12	0.7	1.0	2.3	20	0.1	0.8	1.7	1	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Silver (Ag)	mg/kg	0.19	12	0.28	0.3565	0.473	20	0.085	0.219	0.378	40	Schedule 3.1 Part 3; IL
Sodium (Na)	mg/kg	233	12	120	855	3,000	20	140	365	1,590	1,000	Schedule 3.1 Part 1; Na ion; IL-toxicity to soil invertebrates and plants, no standard for groundwater
Strontium (Sr)	mg/kg	81.4	12	44.5	58.6	74.1	20	65.6	102	130	-	No standard in Schedule 3.1
Thallium (Tl)	mg/kg	0.195	12	0.05	0.09	0.31	20	0.08	0.185	0.3	25	Schedule 3.1 Part 3; IL
Tin (Sn)	mg/kg	1.19	1	0.7	0.7	0.7	-	-	-	-	300	Schedule 3.1 Part 3; IL
Titanium (Ti)	mg/kg	52.4	12	10	10	<50	20	50	170	290	-	No standard in Schedule 3.1
Uranium (U)	mg/kg	2.66	12	0.6	1.24	1.6	20	0.6	1.35	1.7	150	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Vanadium (V)	mg/kg	29.3	12	20	25.5	31	20	27	41.5	70	300	Schedule 3.1 Part 1; IL-toxicity to to soil invertebrates and plants, no standard for groundwater
Zinc (Zn)	mg/kg	620	12	18.6	111.5	155	20	53.7	113	178	150	Schedule 3.1 Part 1; IL-groundwater flow to surface (freshwater); pH <6.0 (lowest CSR standard); std varies with hardness, receiving hardness = 200 to < 300 mg/L is assumed
Zirconium (Zr)	mg/kg	2.98	1	2.8	2.8	2.8	-	-	-	-	-	No standard in Schedule 3.1

[1] ABA and rinse pH test results for geochemistry samples collected in 2018. Site C Clean Energy Project Acid Rock Drainage and Metal Leachate 2018 Annual Report. 1 February 2019.
[2] Site C Clean Energy Project, Implementation Design Dam Site Geochemical Characterization – Status at the End of 2013, Revision 1. Prepared by Klohn Crippen Berger Ltd. and SNC-Lavalin Inc. for BC Hydro. BKS-03-101. January 2015.
[3] Contaminated Site Regulation (CSR) B.C. Reg. 375/96, amended January 24, 2019; Schedule 3.1, Industrial Land. Matrix Standards for human health (intake of contaminated soil) and Environmental Protection (toxicity to soil invertebrates and plants) in Schedule 3.1 Part 1 and the Industrial Land Environmental Protection (groundwater flow to surface water used by aquatic life) standard are applied; the lowest standard is shown in the table. If no standard is specified in Generic Numerical Standards to Protect Ecological Health (Schedule 3.1 Part 3), then Generic Numerical Standards to Protect Human Health (Schedule 3.1, Part 2) are used.
Grey shading with **bold text** indicates the dredgeate exceeded the applicable CSR Soil Standard.

2.5.3 Crusher Sediment Pond Dredgeate Results

Dredgeate samples were collected from three of the Area A Crusher sediment collection ponds on March 1 and 2, 2022. Results are screened against the lowest CSR standard for industrial lands as noted above. In addition, the total metal contents of these samples are screened against the range of concentrations measured in the NPAG overburden materials, which are similar to the crusher feed materials that the sediments were separated from in the crusher. The list of metal(oid)s and the corresponding screening values for the Crusher Pond sediment samples are presented in Table 2-17 and Table 2-17.

Concentrations for most metals in the dredgeate samples were below the applicable CSR Soil Standard (Table 2-17). However, As exceeded the CSR Soil Standard in all three dredgeate samples by a factor of 1.1 to 2.0. The As content in two of the dredgeate samples also slightly exceeded the maximum concentration measured in the 20 NPAG overburden samples by up to a factor of 1.4.

The hydrocarbon content of the sediment pond dredgeate samples were below the CSR standards used to screen the samples and the results are summarized in Table 2-18.

The leachable toxic waste metal evaluation of the sediment pond dredgeate samples is summarized in Table 2-19 and the regulated leachable metal(oids) were below the HWR leachate standards for all samples. Of particular note is that the concentration of leachable As in the leachate was below the detection limit.

The geochemical assessment of the crusher sediment pond dredgeate samples indicates that it is appropriate to dispose the dredgeate sediments within the designated location within Area A using appropriate placement procedures. Although As concentrations exceeded the CSR standard, the leachable As concentrations were below the detection limit which suggests a low risk of As leaching from this material.

Table 2-17:
Total Metal Content of Crusher Sediment Pond Dredgeate

Sample ID	Units	Crusher SLP - E Dredgeate	Crusher SLP - C Dredgeate	Crusher SLP - W Dredgeate	NPAG Material (Left Bank) [1]				CSR Soil Standard [2]	CSR Notes
Date		2022/03/01	2022/03/02	2022/03/02	n	Minimum	Median	Maximum		
Moisture	%	21	45	34	-	-	-	-	-	No standard in Schedule 3.1
Total Sulfur (S)	%	<0.06	<0.06	<0.06	-	-	-	-	-	
Soluble (2:1) pH	pH	8.35	8.16	8.25	20	7.4	8.195	8.79	-	No standard in Schedule 3.1
Total Metals										
Aluminum (Al)	mg/kg	6960	13100	14400	20	6,800	12,400	22,700	250,000	Schedule 3.1 Part 2; IL
Antimony (Sb)	mg/kg	1.08	1.74	1.79	20	0.46	0.735	1.32	40	Schedule 3.1 Part 3; IL
Arsenic (As)	mg/kg	**10.5**	**19.8**	**19.9**	20	6.3	7.9	13.9	10	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Barium (Ba)	mg/kg	209	432	444	20	301	347.5	655	1,500	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates
Beryllium (Be)	mg/kg	0.4	0.75	0.8	-	-	-	-	pH-based	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 6.5 (std = 1 mg/kg); pH6.5 - <7.0 (std=4 mg/kg); pH7 - <7.5 (std=30mg/kg); pH7.5 - <8 (std=250 mg/kg); pH >=8 (std=500 mg/kg)
Bismuth (Bi)	mg/kg	0.11	0.26	0.27	20	0.08	0.185	0.34	-	No standard in Schedule 3.1
Cadmium (Cd)	mg/kg	0.586	0.97	1.05	20	0.58	1.035	1.24	pH-based	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH <7 (1 mg/kg); pH7-<7.5 (3 mg/kg); pH7.5-<8 (20mg/kg); pH>8 (50 mg/kg)
Calcium (Ca)	mg/kg	38,600	33,800	33,300	20	8,700	37,450	50,300	-	No standard in Schedule 3.1
Chromium (Cr)	mg/kg	14.6	29	32.3	20	35.2	41.2	104	60	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Cobalt (Co)	mg/kg	8.06	17.2	17.9	20	8.1	12.9	19.1	25	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Copper (Cu)	mg/kg	19.1	40.7	43.5	20	19.2	34.4	61.9	75	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 5.5 (lowest CSR standard); std varies with hardness, receiving hardness >= 200 mg/L is assumed
Iron (Fe)	mg/kg	25,200	40,300	39,800	20	20,300	26,150	40,200	150,000	Schedule 3.1 Part 2; IL
Lead (Pb)	mg/kg	8.98	19.4	19.6	20	8.05	13.65	20.6	200	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 5.0 (lowest CSR standard); std varies with hardness, receiving hardness = 200 to < 300 mg/L is assumed
Lithium (Li)	mg/kg	8.72	15.1	16.2	-	-	-	-	450	Schedule 3.1 Part 2; IL
Magnesium (Mg)	mg/kg	11600	11300	11500	20	3,900	12,200	15,000	-	No standard in Schedule 3.1
Manganese (Mn)	mg/kg	476	799	807	20	275	458	728	2,000	Schedule 3.1 Part 1; IL-toxicity to to soil invertebrates and plants, no standard for groundwater
Mercury (Hg)	mg/kg	0.051	0.128	0.129	20	0.031	0.0515	0.113	75	Schedule 3.1 Part 1; IL-toxicity to to soil invertebrates and plants, no standard for groundwater
Molybdenum (Mo)	mg/kg	2.74	6.1	6.17	20	1.48	2.725	5.28	150	Schedule 3.1 Part 1; IL-toxicity to to soil invertebrates and plants
Nickel (Ni)	mg/kg	22.8	44.3	45.3	20	24.3	40.25	66.7	pH-based	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH<5 (90 mg/kg); pH5-<5.5 (100 mg/kg); pH5.5-<6 (150 mg/kg); pH6-<6.5 (200 mg/kg); pH6.5-<7 (300 mg/kg);pH7-<7.5 (900 mg/kg); pH7.5-<8 (5,000 mg/kg); pH>=8 (9,500 mg/kg)
Phosphorous (P)	mg/kg	920	1050	1080	20	810	895	1,350	-	No standard in Schedule 3.1
Potassium (K)	mg/kg	774	1680	1950	20	900	1,900	3,300	-	No standard in Schedule 3.1
Selenium (Se)	mg/kg	<0.50	0.67	0.68	20	0.1	0.8	1.7	1	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Silver (Ag)	mg/kg	0.134	0.293	0.313	20	0.085	0.219	0.378	40	Schedule 3.1 Part 3; IL
Sodium (Na)	mg/kg	<100	160	165	20	140	365	1,590	1,000	Schedule 3.1 Part 1; Na ion; IL-toxicity to to soil invertebrates and plants, no standard for groundwater
Strontium (Sr)	mg/kg	70.3	74.2	80	20	65.6	102	130	-	No standard in Schedule 3.1
Thallium (Tl)	mg/kg	0.18	0.362	0.377	20	0.08	0.185	0.3	25	Schedule 3.1 Part 3; IL
Tin (Sn)	mg/kg	0.24	0.59	0.69	-	-	-	-	300	Schedule 3.1 Part 3; IL
Titanium (Ti)	mg/kg	128	93.1	99.9	20	50	170	290	-	No standard in Schedule 3.1
Uranium (U)	mg/kg	<0.50	<0.50	<0.50	20	0.6	1.35	1.7	150	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Vanadium (V)	mg/kg	1.01	1.5	1.59	20	27	41.5	70	300	Schedule 3.1 Part 1; IL-toxicity to to soil invertebrates and plants, no standard for groundwater
Zinc (Zn)	mg/kg	29.4	47.1	51.3	20	53.7	113	178	150	Schedule 3.1 Part 1; IL-groundwater flow to surface (freshwater); pH <6.0 (lowest CSR standard); std varies with hardness, receiving hardness = 200 to < 300 mg/L is assumed
Zirconium (Zr)	mg/kg	65.4	128	137	-	-	-	-	-	No standard in Schedule 3.1

[1] Site C Clean Energy Project, Implementation Design Dam Site Geochemical Characterization – Status at the End of 2013, Revision 1. Prepared by Klohn Crippen Berger Ltd. and SNC-Lavalin Inc. for BC Hydro. BKS-03-101. January 2015.
[2] Contaminated Site Regulation (CSR) B.C. Reg. 375/96, amended January 24, 2019; Schedule 3.1, Industrial Land. Matrix Standards for human health (intake of contaminated soil) and Environmental Protection (toxicity to soil invertebrates and plants) in Schedule 3.1 Part 1 and the Industrial Land Environmental Protection (groundwater flow to surface water used by aquatic life) standard are applied; the lowest standard is shown in the table. If no standard is specified in Generic Numerical Standards to Protect Ecological Health (Schedule 3.1 Part 3), then Generic Numerical Standards to Protect Human Health (Schedule 3.1, Part 2) are used.
Grey shading and **bold** text indicates the dredgeate exceeded the applicable CSR Soil Standard.

Table 2-18:
Hydrocarbon Content of AC-E-Sump Sludge, Crusher Sediment Pond Dredgeate and MWTF/WTP Sludge

Parameter	Units	AC-E-Sump Sludge	Crusher SLP - E Dredgeate	Crusher SLP - C Dredgeate	Crusher SLP - W Dredgeate	MWTF-SLP Cell 1 Sludge	WTF-Cell 1-Sludge	CSR Soil Standard[1]	CSR Notes
		19/02/2022	01/03/2022	02/03/2022	02/03/2022	13/02/2022	25/09/2022		
Non-Halogenated Hydrocarbons									
VPH (VH6 to 10 - BTEX)	mg/kg	<10	<8.6	<8.6	<8.6	<24	<26	200	Schedule 3.1 Part 3; IL
Benzene	mg/kg	<0.005	<0.005	<0.005	<0.005	0.041	<0.013	2.5	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Toluene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.050	<0.13	0.5	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Ethylbenzene	mg/kg	<0.01	<0.01	<0.01	<0.01	0.095	<0.026	200	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
MTBE	mg/kg	<0.1	<0.04	<0.04	<0.04	<0.040	<0.26	20,000	Schedule 3.1 Part 2; IL
Styrene	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.085	<0.078	50	Schedule 3.1 Part 3; IL
Xylenes (Total)	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.16	<0.10	20	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Extractable Hydrocarbons									
LEPH (C10-C19 less PAH)	mg/kg	<100	<100	<100	<100	<230	<100	2,000	Schedule 3.1 Part 3; IL
HEPH (C19-C32 less PAH)	mg/kg	140	<100	<100	<100	<230	<100	5,000	Schedule 3.1 Part 3; IL
Oil and Grease	mg/kg	-	<100	130	<100	<230	430	-	No standard in Schedule 3.1
Total PAH	mg/kg	0.47	<0.02	0.063	0.038	0.53	0.11	-	No standard in Schedule 3.1
Acenaphthylene	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.011	<0.013	-	No standard in Schedule 3.1
Acenaphthene	mg/kg	0.0054	<0.005	<0.005	<0.005	<0.011	<0.013	15,000	Schedule 3.1 Part 2; IL
Anthracene	mg/kg	<0.004	<0.004	<0.004	<0.004	<0.0088	<0.010	30	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates; no standard groundwater (AL-freshwater)
Benzo(a)anthracene	mg/kg	<0.02	<0.01	<0.01	<0.01	<0.022	<0.050	10	Schedule 3.1 Part 3; IL
Benzo(b&j)fluoranthene	mg/kg	0.021	<0.01	0.033	0.031	0.023	<0.050	10	Schedule 3.1 Part 3; IL
Benzo(k)fluoranthene	mg/kg	<0.02	<0.01	<0.01	<0.01	<0.022	<0.050	10	Schedule 3.1 Part 3; IL
Benzo(g,h,i)perylene	mg/kg	0.058	<0.02	0.056	0.051	0.059	<0.13	-	No standard in Schedule 3.1
Benzo(a)pyrene	mg/kg	<0.02	<0.01	<0.01	<0.01	<0.022	<0.050	50	Schedule 3.1 Part 1; IL-human intake of soil; no standard groundwater (AL-freshwater)
Chrysene	mg/kg	0.036	<0.01	<0.01	<0.01	<0.022	<0.050	4,500	Schedule 3.1 Part 2; IL
Dibenz(a,h)anthracene	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.044	<0.050	10	Schedule 3.1 Part 3; IL
Fluoranthene	mg/kg	0.023	<0.01	<0.01	<0.01	<0.022	<0.050	200	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates; no standard groundwater (AL-freshwater)
Fluorene	mg/kg	<0.02	<0.01	<0.01	<0.01	<0.022	<0.050	9,500	Schedule 3.1 Part 2; IL
Indeno(1,2,3-cd)pyrene	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.044	<0.050	10	Schedule 3.1 Part 3; IL
1-Methylnaphthalene	mg/kg	0.07	-	-	-	-	<0.13	1,000	Schedule 3.1 Part 2; IL
2-Methylnaphthalene	mg/kg	0.099	<0.01	<0.01	<0.01	0.2	0.056	950	Schedule 3.1 Part 2; IL
Naphthalene	mg/kg	0.039	<0.01	<0.01	<0.01	0.13	0.030	20	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates
Phenanthrene	mg/kg	0.083	0.012	0.045	0.038	0.086	0.025	50	Schedule 3.1 Part 3; IL
Pyrene	mg/kg	0.04	<0.01	0.019	<0.01	0.037	<0.050	100	Schedule 3.1 Part 3; IL
Quinoline	mg/kg	-	-	-	-	-	-	10	Schedule 3.1 Part 2; IL
Glycols									
Ethylene Glycol	mg/kg	<10	<10	<10	<10	<23	-	700	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL)
Triethylene Glycol	mg/kg	<10	<10	<10	<10	<23	-	450,000	Schedule 3.1 Part 2; IL

[1] Contaminated Site Regulation (CSR) B.C. Reg. 375/96, amended January 24, 2019; Schedule 3.1, Industrial Land. Matrix Standards for human health (intake of contaminated soil) and Environmental Protection (toxicity to soil invertebrates and plants) in Schedule 3.1 Part 1 and the Industrial Land Environmental Protection (groundwater flow to surface water used by aquatic life) standard are applied; the lowest standard is shown in the table. If no standard is specified in Generic Numerical Standards to Protect Ecological Health (Schedule 3.1 Part 3), then Generic Numerical Standards to Protect Human Health (Schedule 3.1, Part 2) are used.

Table 2-19:
Leachable Toxic Metal Content of AC-E-Sump Sludge, Crusher Sediment Pond Dredgeate and MWTF/WTP Sludge

Parameter (TCLP Leachate)	AC-E-Sump Sludge	Crusher SLP – E Dredgeate	Crusher SLP – C Dredgeate	Crusher SLP – W Dredgeate	MWTF-SLP Cell 1 Sludge	WTF-Cell 1-Sludge	HWR Leachable Toxic Waste Standard[1]
	19/02/2022	01/03/2022	02/03/2022	02/03/2022	13/02/2022	25/09/2022	
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Metals							
Arsenic (As)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	2.5
Barium (Ba)	1.1	1.9	2.19	2.23	1.64	1.05	100
Boron (B)	0.13	<0.10	<0.10	<0.10	<0.10	0.15	500
Cadmium (Cd)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.5
Chromium (Cr)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	5
Copper (Cu)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	100
Lead (Pb)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	5
Mercury (Hg)	<0.002	0.0022	0.0038	0.0023	<0.002	<0.0020	0.1
Selenium (Se)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	1
Silver (Ag)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	5
Uranium (U)	<0.10	<0.010	<0.010	<0.010	<0.10	<0.10	10
Zinc (Zn)	2.42	<0.010	<0.010	<0.010	<0.10	<0.10	500

[1] Hazardous Waste Regulation (HWR) B.C. Reg. 63/88, amended November 1, 2017. Schedule 4, Table 1. Only parameters with a standard are shown in the table.

2.5.4 MWTF/WTP Sludge Dredgate Results

MWTF/WTP sludge samples were collected from Cell 1 of the Sludge Pond on two occasions in 2022. Cell 1 is where the majority of the MWTF/WTP solids are settled. Samples were collected on the following dates:

- February 13, 2022. Although a sludge sample was collected at this time, no sludge was removed from the Sludge Pond in Q1 2022; and
- September 25, 2022. This sample was collected in preparation for sludge removal from Cell 1 on October 13-14, 2022. At this time approximately 25 m^3 of sludge was removed and deposited in RSEM Area L5.

The total metal contents of the samples were screened against the lowest CSR standard for industrial lands as noted previously in Section 2.5.1. The total metal content of the samples is also screened against the range of concentrations measured in PAG bedrock and non-PAG (NPAG) overburden, which is the material that has been approved for storage in RSEM areas. The list of metal(oid)s and the corresponding screening values for the MWTF/WTP sludge pond samples are presented in Table 2-20. Concentrations for all metals in the sample were below the applicable CSR Soil Standard, excluding Na in the September sample which exceeded the standard by a factor of 1.4. This Na concentration remained within the range of the Na concentrations measured for PAG and NPAG material placed in RSEM areas.

The hydrocarbon content of the MWTF/WTP sludge samples was below the CSR standards that were used to screen the sample, as shown in Table 2-18.

The leachable metal content of the MWTF/WTP sludge samples is summarized in Table 2-19 and the regulated metal(oid)s were below the HWR leachate standards used to screen the samples.

Table 2-20:
Total Metal Content of MWTF/WTP Sludge

Parameter	Units	MWTF-SLP Cell 1 Dredgeate	WTF-Cell 1 Sludge	PAG Material deposited in RSEM Area R5A [1]				NPAG Material (Left Bank) [2]				CSR Soil Standard [3]	CSR Notes
Date		2022/02/13	2022/09/25	n	Minimum	Median	Maximum	n	Minimum	Median	Maximum		
Moisture	%	57	63	-	-	-	-	-	-	-	-	-	No standard in Schedule 3.1
pH	pH	8.67	9.33	137	2.31	6.7	10.6	20	7.4	8.195	8.79	-	No standard in Schedule 3.1
Total Metals													
Aluminum (Al)	mg/kg	7560	2070	12	5,300	8,200	11,700	20	6,800	12,400	22,700	250,000	Schedule 3.1 Part 2; IL
Antimony (Sb)	mg/kg	0.7	0.14	12	0.09	0.17	0.27	20	0.46	0.735	1.32	40	Schedule 3.1 Part 3; IL
Arsenic (As)	mg/kg	7.03	2.13	12	9.2	11.9	22.3	20	6.3	7.9	13.9	10	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Barium (Ba)	mg/kg	628	517	12	237	399.5	580	20	301	347.5	655	1,500	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates
Beryllium (Be)	mg/kg	0.44	<0.20	1	0.76	0.76	0.76	-	-	-	-	pH-based	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 6.5 (std = 1 mg/kg); pH6.5 - <7.0 (std=4 mg/kg); pH7 - <7.5 (std=30mg/kg); pH7.5 - <8 (std=250 mg/kg); pH >=8 (std=500 mg/kg)
Bismuth (Bi)	mg/kg	0.12	<0.10	12	0.22	0.29	0.34	20	0.08	0.185	0.34	-	No standard in Schedule 3.1
Cadmium (Cd)	mg/kg	0.393	0.24	12	0.15	0.33	0.43	20	0.58	1.035	1.24	pH-based	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH <7 (1 mg/kg); pH7-<7.5 (3 mg/kg); pH7.5-<8 (20mg/kg); pH>8 (50 mg/kg)
Calcium (Ca)	mg/kg	208,000	358,000	12	1,600	3,350	6,400	20	8,700	37,450	50,300	-	No standard in Schedule 3.1
Chromium (Cr)	mg/kg	11.6	3.7	12	12.4	18.65	29	20	35.2	41.2	104	60	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Cobalt (Co)	mg/kg	7.53	2.82	12	1	8.85	13.4	20	8.1	12.9	19.1	25	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Copper (Cu)	mg/kg	21.3	6.74	12	14.9	28.95	34.6	20	19.2	34.4	61.9	75	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 5.5 (lowest CSR standard); std varies with hardness, receiving hardness >= 200 mg/L is assumed
Iron (Fe)	mg/kg	15,000	2050	12	13,200	18,800	23,400	20	20,300	26,150	40,200	150,000	Schedule 3.1 Part 2; IL
Lead (Pb)	mg/kg	7.87	3.02	12	11.1	15.95	28.7	20	8.05	13.65	20.6	200	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH < 5.0 (lowest CSR standard); std varies with hardness, receiving hardness = 200 to < 300 mg/L is assumed
Lithium (Li)	mg/kg	15.2	4.2	1	21.3	21.3	21.3	-	-	-	-	450	Schedule 3.1 Part 2; IL
Magnesium (Mg)	mg/kg	7560	8430	12	500	2,350	3,100	20	3,900	12,200	15,000	-	No standard in Schedule 3.1
Manganese (Mn)	mg/kg	250	113	12	10	86.5	154	20	275	458	728	2,000	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates and plants, no standard for groundwater
Mercury (Hg)	mg/kg	0.064	<0.050	12	0.00006	0.083	0.107	20	0.031	0.0515	0.113	75	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates and plants, no standard for groundwater
Molybdenum (Mo)	mg/kg	1.64	0.26	12	0.46	1.3	14.4	20	1.48	2.725	5.28	150	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates and plants
Nickel (Ni)	mg/kg	22.3	8.62	12	3.9	25.3	38.6	20	24.3	40.25	66.7	pH-based	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater); pH<5 (90 mg/kg); pH5-<5.5 (100 mg/kg); pH5.5-<6 (150 mg/kg); pH6-<6.5 (200 mg/kg); pH6.5-<7 (300 mg/kg); pH7-<7.5 (900 mg/kg); pH7.5-<8 (5,000 mg/kg); pH>=8 (9,500 mg/kg)
Phosphorous (P)	mg/kg	511	116	12	570	710	970	20	810	895	1,350	-	No standard in Schedule 3.1
Potassium (K)	mg/kg	1440	538	12	2,000	2,700	3,400	20	900	1,900	3,300	-	No standard in Schedule 3.1
Selenium (Se)	mg/kg	0.77	<0.50	12	0.7	1.0	2.3	20	0.1	0.8	1.7	1	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Silver (Ag)	mg/kg	0.156	0.098	12	0.28	0.3565	0.473	20	0.085	0.219	0.378	40	Schedule 3.1 Part 3; IL
Sodium (Na)	mg/kg	856	**1350**	12	120	855	3,000	20	140	365	1,590	1,000	Schedule 3.1 Part 1; Na ion; IL-toxicity to to soil invertebrates and plants, no standard for groundwater
Strontium (Sr)	mg/kg	625	617	12	44.5	58.6	74.1	20	65.6	102	130	-	No standard in Schedule 3.1
Thallium (Tl)	mg/kg	0.13	<0.050	12	0.05	0.09	0.31	20	0.08	0.185	0.3	25	Schedule 3.1 Part 3; IL
Tin (Sn)	mg/kg	1.89	0.58	1	0.7	0.7	0.7	-	-	-	-	300	Schedule 3.1 Part 3; IL
Titanium (Ti)	mg/kg	37.7	20	12	10	10	<50	20	50	170	290	-	No standard in Schedule 3.1
Uranium (U)	mg/kg	2.15	1.73	12	0.6	1.24	1.6	20	0.6	1.35	1.7	150	Schedule 3.1 Part 1; IL-groundwater flow to surface (AL-freshwater)
Vanadium (V)	mg/kg	21.1	5.7	12	20	25.5	31	20	27	41.5	70	300	Schedule 3.1 Part 1; IL-toxicity to soil invertebrates and plants, no standard for groundwater
Zinc (Zn)	mg/kg	90.2	29	12	18.6	111.5	155	20	53.7	113	178	150	Schedule 3.1 Part 1; IL-groundwater flow to surface (freshwater); pH <6.0 (lowest CSR standard); std varies with hardness, receiving hardness = 200 to < 300 mg/L is assumed
Zirconium (Zr)	mg/kg	2.98	2.27	1	2.8	2.8	2.8	-	-	-	-	-	No standard in Schedule 3.1

[1] ABA and rinse pH test results for geochemistry samples collected in 2018. Site C Clean Energy Project Acid Rock Drainage and Metal Leachate 2018 Annual Report. 1 February 2019.
[2] Site C Clean Energy Project, Implementation Design Dam Site Geochemical Characterization – Status at the End of 2013, Revision 1. Prepared by Klohn Crippen Berger Ltd. and SNC-Lavalin Inc. for BC Hydro. BKS-03-101. January 2015.
[3] Contaminated Site Regulation (CSR) B.C. Reg. 375/96, amended January 24, 2019; Schedule 3.1, Industrial Land. Matrix Standards for human health (intake of contaminated soil) and Environmental Protection (toxicity to soil invertebrates and plants) in Schedule 3.1 Part 1 and the Industrial Land Environmental Protection (groundwater flow to surface water used by aquatic life) standard are applied; the lowest standard is shown in the table. If no standard is specified in Generic Numerical Standards to Protect Ecological Health (Schedule 3.1 Part 3), then Generic Numerical Standards to Protect Human Health (Schedule 3.1, Part 2) are used.
Grey shading and **bold text** indicates the dredgeate exceeded the applicable CSR Soil Standard.

3. Surface Water Quality Monitoring

PEACE RIVER
HYDRO PARTNERS

3. Surface Water Quality Monitoring

3.1 Purpose and Objectives

The purpose of the surface water quality monitoring program is to meet PRHP's water quality monitoring requirements for PAG-contact water, which are stated in the BC Hydro and PRHP ARD/ML Management Plans. The specific objectives of the program are:

- To verify water quality predictions;
- To assess water quality within the construction site, including RSEM ponds and upgradient areas that affect them;
- To guide water management and verify the effectiveness of sediment pond operation; and
- To analyze water quality in PAG-containing RSEM sediment ponds that discharge to the Peace River, so as to assess compliance with end-of-pipe discharge limits.

3.2 Monitoring Program and Results

The PAG-contact water monitoring and compliance requirements are set out in Sections 7.2, 7.3 and 7.4.2 of the BC Hydro ARD/ML Management Plan. Requirements for non-PAG contact water are set out in CEMP Section 4.14 Surface Water Quality Management. This report addresses the surface water quality monitoring and reporting requirements noted in Section 7.2.2 (RSEM end of pipe water quality), 7.3.2 (PAG containing RSEM material and contact water monitoring), and 7.4.2 (Exceedance Response Plan).

Other requirements are addressed separately. These include requirements related to toxicity (Sections 7.2.1 and 7.3.1 of the BC Hydro ARD/ML Management Plan), Peace River water quality downstream of each RSEM (7.2.3), and Peace River water quality monitoring (7.3.4). These requirements are addressed in other documents.

The aspects of the monitoring program that are addressed in this report are:

- Continuous monitoring of discharge flow from each RSEM sediment control pond discharge pipe (Section 1.6);
- Continuous monitoring (15 minute intervals) of pH, turbidity and electrical conductivity using in situ sonde measurements of PAG-contact RSEM sediment control pond water quality, when discharging (Section 3.2.5.8);

- Daily field measurements and analytical water quality samples collected end of pipe from each PAG containing RSEM sediment control pond (Section 3.2.2 through Section 3.2.5);
- Periodic field measurements and analytical samples collected in-pond from each PAG containing RSEM sediment control pond when not discharging (Section 3.2.2 through Section 3.2.5);
- Daily, weekly or periodic field measurements and analytical samples of water quality at upstream sumps and ditches (Section 3.2.2 through Section 3.2.5); and,
- Current turbidity and TSS relationships for PAG containing RSEM sediment control ponds (Section 4.1).

Analytical measurements include general water chemistry and total and dissolved metals. Most analyses were completed by BV at their laboratory in Burnaby, B.C., which is accredited to the ISO 17025 standard for laboratory testing by the Standards Council of Canada (SCC). However, due to a cyberattack November 20th, 2021 the BV server was taken off-line and the lab was unable to process samples. Monitoring samples collected from January 1st to 24th were directed to ALS Environmental (ALS) in Burnaby, BC. ALS is accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA). The BV and ALS locations are listed as qualified laboratories under the British Columbia Environmental Data Quality Assurance (EDQA) Regulation. The approach used to screen water quality results is presented in Section 3.2.1.

The results of the 2022 water quality monitoring program are summarized below for the Left Bank (Section 3.2.2), the Earthfill Dam (Section 3.2.3) and the Right Bank (Section 3.2.4). Analytical measurements are described by station. The network of monitoring stations for the Site C project has been adapted as site conditions change. Some stations that were established in earlier construction phases are no longer in use and some new stations have been added.

Although the water management system is designed and operated by others, Lorax outlines water management information supplied by PRHP to provide context for the water quality results reported in these sections. The network of monitoring stations where samples were obtained in 2022 is discussed for each respective area in the sections below.

The Quality Assurance/Quality Control (QA/QC) monitoring results are summarized in Section 3.2.5. Tabulated water quality results for the 2022 ARD program are provided in:

- Appendix 3-A – 2022 *In Situ* Continuous Sonde Measurement Water Quality Data Summary (*i.e.*, continuously logged measurements from in-pond fixed probes);

- Appendix 3-B – 2022 *In Situ* Hand-Held Field Measurement Water Quality Data;
- Appendix 3-C – 2022 Analytical Sample and Field Duplicate Water Quality Data; and
- Appendix 3-D – 2022 Analytical Field Blank Water Quality Data
- Appendix 3-E Water Quality Monitoring Field QA/QC Program
- Appendix 3-F: Bureau Veritas (Burnaby) Scope of Accreditation
- Appendix 3-G: Bureau Veritas (Calgary) Scope of Accreditation
- Appendix 3-H: ALS (Burnaby) Scope of Accreditation
- Appendix 3-I: ALS Analytical QA/QC Program

3.2.1 Water Quality Screening Approach

Monitoring results from PAG-containing RSEM sediment control ponds are compared against two sets of end of pipe (EOP) discharge limits in 2022. For the period of January 1st to April 5th, discharge limits specified in BC Hydro's ARD/ML Management Plan (in the CEMP, Appendix E Rev. 5.2, Section 7, Table 2, page 23) (BC Hydro, 2016a and 2016b) were applied. Revised discharge limits were applied from April 6th, 2022 onwards as specified in Table 2 of Appendix E (Revision 6.0, dated January 17, 2022) of the CEMP (Revision 10.1, dated April 6, 2022) (BC Hydro, 2022a and 2022b). The previous and revised RSEM EOP limits are presented in Table 3-1, for reference. The revision includes the addition of dissolved Al and Cd, and total As, Fe and Mn as well as modified limits for total Cu and Zn. RSEM EOP limits for TSS, pH and total Co remain unchanged.

With respect to evaluating TSS, it is assumed that, during clear flow conditions (when background TSS is below 25 mg/L), the RSEM end-of-pipe discharge limit (*i.e.*, the BC short-term WQG for TSS) is exceeded if the TSS in discharged water exceeds the background concentration by 25 mg/L at any one time for a duration of 24 hours. Because water quality sampling is conducted daily, the TSS exceedance screening protocol developed by PRHP for clear flow conditions in Peace River requires a TSS concentration in discharged water be above the BC short-term WQG for two consecutive days to be considered an exceedance of the RSEM end-of-pipe limit. During turbid flow conditions in Peace River, when background TSS is 25 mg/L or higher, an exceedance is triggered when a single sample is above the corresponding calculated BC WQG for TSS.

Table 3-1:
End-of-Pipe (EOP) Discharge Limits for PAG-containing RSEM Sediment Ponds

Parameter	Units	Previous End-of-Pipe Discharge Limit (January 1st to April 5th, 2022)	Revised End-of-Pipe Discharge Limit (April 6th, 2022 onwards)
TSS	mg/L	BC Water Quality Guidelines[1]	BC Water Quality Guidelines[1]
pH	pH units	6.0 – 9.0	6.0 – 9.0
Aluminum (Dissolved)	mg/L	-	0.460
Arsenic (Total)	mg/L	-	0.050
Cadmium (Total)	mg/L	0.00029	-
Cadmium (Dissolved)	mg/L	-	0.00186
Cobalt (Total)	mg/L	0.55	0.55
Copper (Total)	mg/L	0.011	0.0163
Iron (Total)	mg/L	-	20.9 (Turbid flow, April – June) 10.3 (Clear flow, July – March)
Manganese (Total)	mg/L	-	8.29
Zinc (Total)	mg/L	0.033	0.251

Notes:
[1] Approved British Columbia Water Quality Guidelines for the Protection of Aquatic Life (2021)

Water quality at stations within the construction site upgradient of RSEM sediment ponds are not compared to RSEM EOP limits as water accumulated at these stations are not discharged directly to the Peace River. It is conveyed to RSEM sediment ponds, where it mixes with water from other sources, or is trucked to the MWTF if deemed appropriate. Since the RSEM EOP discharge limits were derived to protect aquatic life, the stations within the construction site are in water storage or conveyance systems that are generally inaccessible to aquatic life and do not provide aquatic habitat. Therefore, RSEM sediment pond discharge is assessed independently.

Analytical results of samples from other construction areas are compared against the applicable limits shown in the CEMP Rev. 4, Section 4.14 (Surface Water Quality Management), Table 3 (page 62). The information from this table is reproduced in Table 3-2 for reference.

Although not the primary focus of this report, analytical results from samples of non-construction contact surface water may be included in this report for comparative purposes and are screened against approved BC WQGs for the protection of aquatic life (BC ENV, 2021), in accordance with Section 5.2.1.7 of BC Hydro's ARD/ML Management Plan. This is applicable to water quality in Garbage Creek as well as discharges from the Earthfill Dam, Area 30/Septimus Hill and Area A/Area 24 which were compared to short-term BC WQGs. Furthermore, water samples from receiving environments, such as monitoring

stations in the Septimus Beaver Pond and Peace River were compared to both short- and long-term WQG.

Water quality guideline values that are calculated as a function of pH, temperature, and/or hardness are derived using the most conservative values per station for the week in which the laboratory results were obtained (minimum pH, hardness and maximum temperature). A unique TSS limit is calculated per day and is derived from the measured background TSS concentration in the Peace River for that given day. Analytical results are compared to the calculated TSS limit for the day the analytical sample is collected.

Table 3-2:
Limits for Construction Areas
Not Specified in Environmental Requirements

Parameter	Maximum Allowable
Suspended solids	• Change from background[1] of 25 mg/L at any one time for a duration of 24 hours in all waters during clear flows or in clear waters • Change from background[1] of 5 mg/L at any one time for a duration of 30 days in all waters during clear flows or in clear waters • Change from background[1] of 10 mg/L at any time when background is 25-100 mg/L during high flows or in turbid waters • Change from background[1] of 10% when background is >100 mg/L at any time during high flows or in turbid waters
Turbidity	• Change from background[1] of 8 NTU at any one time for a duration of 24 hours in all waters during clear flows or in clear waters • Change from background[1] of 2 NTU at any one time for a duration of 30 days in all waters during clear flows or in clear waters • Change from background[1] of 5 NTU at any time when background is 8-50 NTU during high flows or in turbid waters • Change from background[1] of 10% when background is >50 NTU at any time during high flows or in turbid waters
Streambed Substrate Composition	• % fines not to exceed: 10% < 2 mm, 19% <3 mm, 28% < 6.35 mm at salmonid spawning sites • Geometric mean diameter not less than 12 mm (minimum 30-day intra-gravel dissolved oxygen of 6 mg/L) • Fredle number not less than 5 mm (minimum 30-day intra-gravel dissolved oxygen of 8 mg/L)
pH	• 6.5 – 9.0
Oil and Grease	• The surface water should be virtually free of petroleum, animal or vegetable oils

[1]. Background is the measured concentration for specified parameters in the Peace River

3.2.2 Left Bank

Water quality monitoring was conducted throughout the Left Bank at EOP and upgradient station locations. The 2022 monitoring stations are listed in Table 3-3 and Table 3-4, and an overview of water quality and management in each catchment area for the Left Bank are presented in the sections below and in Section 0. The monitoring stations are shown in Figure 3-1. Sampling within the main catchment areas was conducted as follows:

- Left Bank Excavation and RSEM Area L5 – analytical samples and *in situ* field measurements were obtained from the LBEX-B0 sump, LBEX-B1 sump, and LBEX-PAG-SUMP, and from the RSEM Area L5 Phase 2 East and West sediment control ponds from within the pond and at EOP. Upstream and downstream samples were also collected from Garbage Creek which is directed through culverts and ditches to bypass construction in RSEM Area L5.
- RSEM Area L6 – analytical samples and *in situ* field measurements were obtained from the RSEM Area L6 sediment control pond from within the pond and EOP.

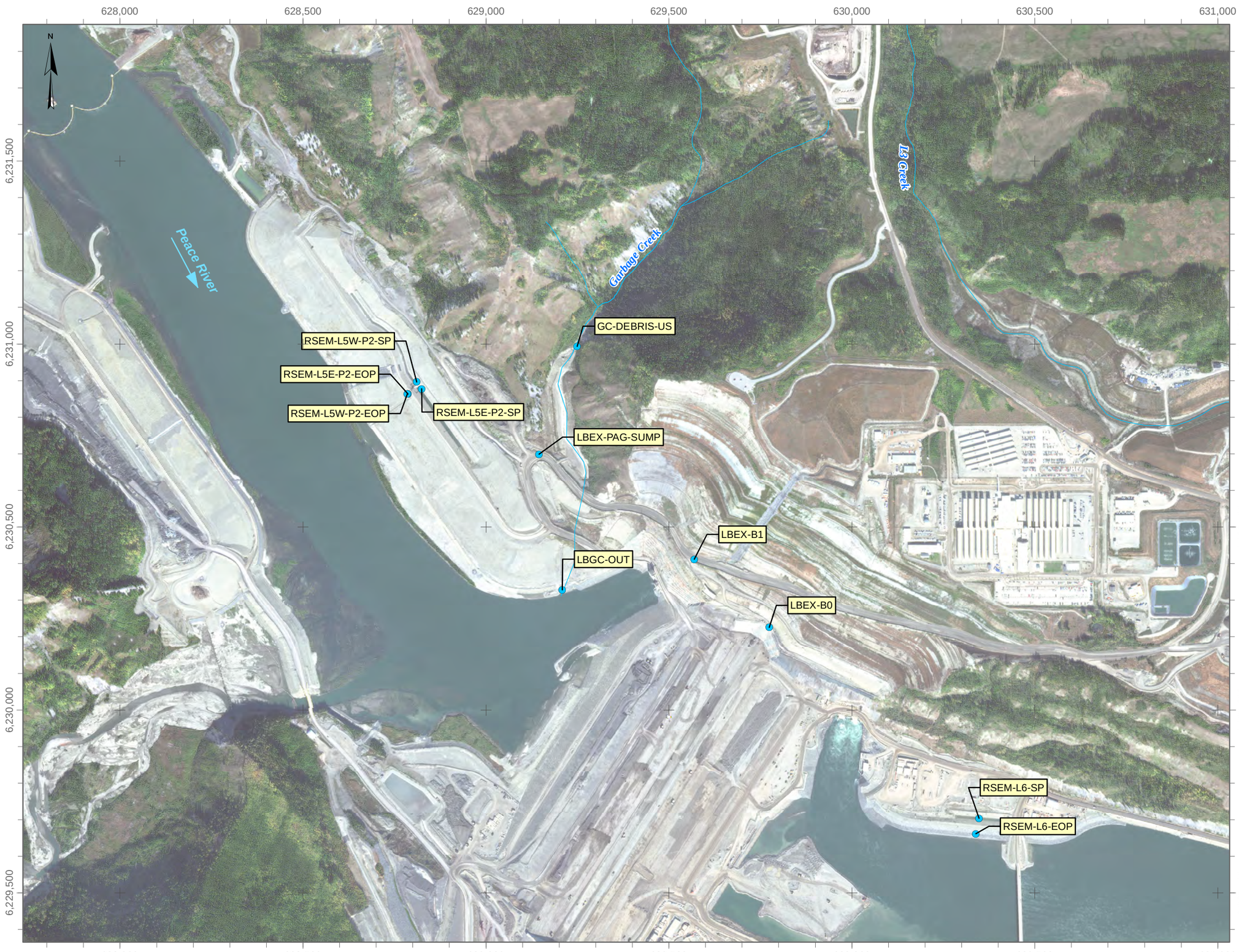
Table 3-3:
Water Quality Monitoring Stations in 2022 (Left Bank)

Station ID	Easting	Northing	Description
RSEM AREA L5 SUBCATCHMENT - LBEX			
LBEX-PAG-SUMP	629275	6230596	The sump collects contact runoff from the PAG exposed slopes along the LBEX haul road and road runoff. Which passively flows through the discharge culvert at high level into the ditch line that connects to RSEM L5-P2 EP.
LBEX-B0	629774	6230226	LBEX Bench 0 Sump
LBEX-B1	629569	6230412	LBEX Bench 1 Sump
RSEM AREA L5 SUBCATCHMENT – RSEM AREA L5 DEPOSITION AREA			
RSEM-L5E-P2-SP	628824	6230878	RSEM L5 East Phase 2 sediment control pond, in pond
RSEM-L5E-P2-EOP	628787	6230863	RSEM L5 East Phase 2 sediment control pond, end of pipe
RSEM-L5W-P2-SP	628811	6230896	RSEM L5 West Phase 2 sediment control pond, in pond
RSEM-L5W-P2-EOP	628785	6230864	RSEM L5 West Phase 2 sediment control pond, end of pipe
GARBAGE CREEK DIVERSION			
GC-DEBRIS-US	629249	6230994	Garbage Creek 30 m upstream of diversion inlet sump
LBGC-OUT	629209	6230328	Garbage Creek diversion culvert outlet
RSEM AREA L6			
RSEM-L6-SP	630347	6229704	RSEM L6 sediment control pond, in pond
RSEM-L6-EOP	630339	6229662	RSEM L6 sediment control pond, end of pipe

Table 3-4:
Summary of Water Quality Monitoring (Left Bank) – 2022

Station ID[1]	***In situ* Sonde Continuous Measurements[2] (Y / N)**	***In situ* Field Measurements**		**Analytical (Lab) Samples**	
		Sample Count[3]	Intended Frequency[4] (D / W / M / P)	Sample Count	Intended Frequency[4] (D / W / M / P)
RSEM AREA L5 SUBCATCHMENT - LBEX					
LBEX-PAG-SUMP	N	4	P	0	P
LBEX-B0	N	3	P	0	P
LBEX-B1	N	9	W	1	M
RSEM AREA L5 SUBCATCHMENT – RSEM AREA L5 DEPOSITION AREA					
RSEM-L5E-P2-SP	Y[5]	95	P	43	P
RSEM-L5E-P2-EOP	N	15	D	14	D
RSEM-L5W-P2-SP	Y[5]	99	P	38	P
RSEM-L5W-P2-EOP	N	4	D	4	D
GARBAGE CREEK DIVERSION					
GC-DEBRIS-US	N	30	M	26[6]	M
LBGC-OUT	N	31	W	27[6]	W
RSEM AREA L6					
RSEM-L6-SP	N	43	P	10	P
RSEM-L6-EOP	N	4	D	4	D

[1] -SP = sediment control pond, in pond location; -EOP = sediment control pond, end of pipe location.
[2] Y = Yes; N = No.
[3] Field duplicates are not included in the table.
[4] Intended monitoring frequency when flow or water level is adequate to obtain *in situ* measurement or surface water sample; D = Daily, W = Weekly, M = Monthly, P = Periodic (as needed). Measurements and samples are collected at the intended frequency if there is sufficient water at the time of monitoring. Intended frequencies are aligned with guidance in the Acid Rock Drainage and Metal Leachate Management Plan (BC Hydro, 2016a).
[5] Sonde was deployed when the pond was discharging.
[6] TSS and turbidity measurements only.



LEGEND

- Monitoring Location

Note: Site C aerial imagery collected September 13, 2022

Coordinate System: *NAD 1983 UTM Zone 10N*
Projection: *Transverse Mercator*
Datum: *North American 1983*
Units: *Meter*

1:10,000

0 200 400
Meters

DATE SAVED:	Jan 20, 2023
DRAWN BY:	GM
REVIEWED:	BM
VERSION:	1

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project
ARD/ML 2022 Annual Report

TITLE:

Left Bank Water Quality Sampling Locations

PROJECT #: A416-1

FIGURE: 3-1

P:\@Drafting\SiteC\Drafting Figures\MXD\2022_Annual Report\Fig 3.1_LB WQ.mxd

LBEX Sumps

The LBEX sumps are developed along the LBEX benches to collect surface runoff. The upper benches drain to LBEX-B2 sump through the Left Bank Drainage Channel and the water is piped or trucked to the RSEM Area L5 Phase 2 East sediment control pond. The lower LBEX-B0 and LBEX-B1 sumps collect possible ARD influenced runoff from the PAG bedrock exposed in the lower benches of the LBEX. The LBEX-PAG-SUMP collects contact runoff and seepage from the PAG exposure above the LBEX haul road and is directed to the WTP or the RSEM L5 Phase 2 East sediment control pond, as appropriate.

In 2022, monitoring records indicate that water periodically collected in the LBEX-B1 sump and was dewatered to the RSEM L5 Phase 2 East sediment control pond. Water from LBEX-B2 was periodically pumped to the RSEM L5 Phase 2 East sediment control pond. Acidic water from LBEX Bench 2 and Bench 3 is segregated and transferred to the LBEX-PAG-SUMP and the WTP as needed. Water accumulations at LBEX-B0 and LBEX-PAG-SUMP were periodically transferred to the WTP for treatment.

Over the course of 2022, one analytical sample was collected at LBEX-B1 (Table 3-5). Field measurements were collected monthly at LBEX-B0 and periodically at LBEX-B1 in Q1 2022. Four field measurements were collected from LBEX-PAG-SUMP from early February to late May 2022.

The LBEX-B1 sump water quality was circum-neutral to slightly alkaline with a sulphate concentration of 153 mg/L and TSS concentration of 525 mg/L (Table 3-5). The LBEX-B0 water quality was variable with field pH ranging from 5.6 to 7.2 and conductivity ranging from 464 µS/cm to 1937 µS/cm. One field pH measurement of 4.7 was observed at LBEX-PAG-SUMP in late May 2022 while the remaining samples were circum-neutral.

3.2.2.1 RSEM Area L5 Sediment Control Ponds

The RSEM Area L5 Phase 2 East and West sediment control ponds are divided by a berm which isolates the two ponds from each other. The berm was designed to allow the cells to merge in a large (greater than 1 in 10 year 24-hour) storm event. The East and West ponds discharge through separate culverts onto a shared rip rap protected outfall, which descends the bank to the Peace River. Two stations have been established in each pond, one station within the pond itself (the SP station), and another for sampling discharge from the end-of-pipe (the EOP station). The EOP station is sampled when the pond is discharging at the time of monitoring. The RSEM Area L5 Phase 2 East and West sediment control ponds collect runoff within the RSEM Area L5 Phase 2 catchment as well as water transferred from the LBEX and the L5 Vac Sump.

Table 3-5:
LBEX Lower Benches 2022 Annual Water Quality Summary

Parameter		Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	D-Al	T-As	D-Cd	T-Co	T-Cu	T-Fe	T-Mn	T-Zn
Units		**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
LBEX-PAG-SUMP (n=0 lab, 4 field)	Max	7.6	-	2,030	-	-	-	-	-	-	-	-	-	-
	Min	4.7		1,233										
	Median	7.5		1,600										
LBEX-B0 (n=0 lab, 3 field)	Max	7.2	-	1,937	-	-	-	-	-	-	-	-	-	-
	Min	5.6		464										
	Median	6.6		1,415										
LBEX-B1 (n=1 lab, 9 field)	Max	8.1	438	1,537	525	153	0.0058	0.00299	0.000062	0.00569	0.0193	6.46	0.286	0.0502
	Min	7.3		169										
	Median	7.9		789										

Notes: TSS = Total suspended solids.

During their operation in 2022, the RSEM Area L5 Phase 2 East and West sediment control ponds collected surface runoff from within the RSEM Area L5 Phase 2 catchment, as well as water transferred from the LBEX-B1 and LBEX-B2 sumps. Water management by site personnel included the transfer of water between RSEM Area L5 Phase 2 East and West ponds to minimize the number of final discharge points from RSEM Area L5. Water from the RSEM Area L5 Phase 2 East and West ponds was periodically trucked to the MWTF. The RSEM Area L5 Phase 2 East pond periodically received water from the LBEX-B1 and LBEX-B2 sumps throughout 2022.

Predominantly frozen conditions in Q1 2022 limited runoff inflows and discharges from the ponds. However, the RSEM Area L5 Phase 2 East sediment control pond discharged on six days (January 23rd, February 11th, and March 17th, 18th, 23rd and 25th) during warmer periods when surface runoff accumulated in the pond. The RSEM Area L5 Phase 2 West sediment control pond discharged on March 25th and 26th. Snowmelt driven runoff in RSEM Area L5 and the LBEX led to water accumulation and periodic discharge from the RSEM Area L5 ponds in Q2 2022. The RSEM L5 East sediment control pond was dewatered to the Peace River on April 12th – 17th, April 19th – 21st, and May 28th – 30th. The RSEM L5 West sediment control pond was dewatered to the Peace River on May 27th – 30th. Discharge or dewatering in late May was influenced by a precipitation event on May 28th as well as active pumping of water from LBEX-B1 and LBEX-B2 sumps. Low water levels in the RSEM L5 East and West ponds persisted for the rest of the year and the ponds did not discharge.

Analytical water samples were collected from the RSEM Area L5 Phase 2 East and West sediment control ponds at EOP on a daily basis when discharging; otherwise in-pond samples were periodically collected. *In situ* field measurements were collected in parallel with analytical samples, with few exceptions.

The 2022 analytical data and field pH measurements for RSEM Area L5 Phase 2 East and West sediment control ponds are summarized in Table 3-6 and plotted in Figure 3-2 through Figure 3-23. The monitoring data indicate pond waters were typically circum-neutral to alkaline. Carbon dioxide sparging was occasionally applied near the East and West pond discharge pipe intake to reduce pH at EOP. Sulphate occurred at moderate to high levels in both the RSEM L5 Phase 2 East pond (up to 1,300 mg/L) and the RSEM L5 Phase 2 West pond (up to 1,950 mg/L). Maximum sulphate concentrations at respective EOP stations were lower, at 839 mg/L at the East pond EOP and 836 mg/L at the West pond EOP. Concentrations of TSS and metals in analytical samples from the RSEM Area Phase 2 L5 East and West sediment control ponds were generally low. Field and analytical measurements of the RSEM Area L5 Phase 2 East and West ponds met the RSEM EOP limits when the ponds were discharging. The TSS measurement on January 23rd at the East Pond EOP was above the calculated TSS guideline; however, the pond discharged for less than 24 hours thus it is not considered an exceedance of the RSEM EOP Limit, per the screening protocol for clear flow conditions in Peace River.

Table 3-6:
RSEM L5 Phase 2 East and West Pond 2022 Annual Water Quality Summary

Parameter		Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	D-Al	T-As	T-Cd	D-Cd	T-Co	T-Cu	T-Fe	T-Mn	T-Zn
Units		**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
RSEM EOP Limit[1]		**6.0-9.0**	**-**	**-**	**WQG**	**-**	**0.46**	**0.05**	**0.00029**	**0.00186**	**0.55**	**0.0163**	**10.3 (July-March), 20.9 (April-June)**	**8.29**	**0.251**
RSEM-L5E-P2-SP (n=43 lab, 95 field)	Max	8.9	2,580	2,900	40.5	1,300	0.0378	0.00134	0.00444	0.00424	0.0753	0.00811	2.29	2.05	0.249
	Min	7.3	452	484	<0.96	164	<0.003	0.00018	<0.00001	<0.00001	0.00024	0.00101	0.019	0.0153	<0.005
	Median	8.3	747	1,135	3.4	280	0.0142	0.00035	0.000125	0.000102	0.00289	0.00265	0.133	0.204	0.0082
RSEM-L5E-P2-EOP (n=14 lab, 15 field)	Max	8.7	1,920	1,894	36.4[2]	839	0.0297	0.00168	0.000897[3]	0.000917	0.0161	0.00651	2.87	0.470	0.0529
	Min	7.4	320	305	2.0	85	<0.003	0.00026	0.000046	0.000018	0.00078	0.00161	0.072	0.0889	<0.005
	Median	8.2	705	691	5.8	262	0.0080	0.00042	0.000102	0.000070	0.00230	0.00220	0.228	0.141	0.0063
RSEM-L5W-P2-SP (n=38 lab, 99 field)	Max	9.1	3,960	6,590	64.3	1,950	0.0851	0.00144	0.00221	0.00176	0.0387	0.00665	3.09	1.18	0.118
	Min	7.5	314	343	<0.97	112	<0.003	0.00013	0.000010	<0.00001	0.00038	0.00121	0.019	0.0070	<0.005
	Median	8.4	631	1,246	2.7	231	0.0052	0.00031	0.000069	0.000059	0.00171	0.00181	0.077	0.111	0.0050
RSEM-L5W-P2-EOP (n=4 lab, 4 field)	Max	8.4	1,970	1,930	2.9	836	0.0058	0.0359	0.000180	0.000155	0.00339	0.00345	0.159	0.164	0.0087
	Min	7.5	462	460	<1	160	0.0038	0.00027	0.000076	0.000078	0.00218	0.00140	0.077	0.092	0.0053
	Median	8.0	1,198	1,188	1.7	501	0.0041	0.00035	0.000123	0.000116	0.00247	0.00200	0.105	0.134	0.0072

Notes: TSS = Total suspended solids.

WQG = BC water quality guideline for aquatic life. The BC WQG for TSS is used as the discharge limit for PAG-containing RSEM pond EOP limits, per the CEMP, Appendix E Rev. 5.2, Section 7, Table 2, page 23. TSS guideline is dependent on background TSS readings in Peace River.

[1]RSEM EOP Limit only applies to RSEM sediment control pond discharge (-EOP samples). Only revised RSEM EOP Limits (Revision 10.1, dated April 6, 2022) are shown in the table, with the exception of T-Cd, which shows the original RSEM EOP Limit (Appendix E Revision 5.2, dated July 26, 2016) that applies from January 1st to April 6th, 2022. The revised RSEM EOP Limits (Revision 10.1, dated April 6, 2022) apply from April 6th, 2022, onwards and have been revised from those applied previously to RSEM pond discharges (Appendix E Revision 5.2, dated July 26, 2016).

Water quality for station RSEM-L5E-P2-EOP and RSEM-L5W-P2-EOP is screened against RSEM EOP limits. ***Gold italics*** indicate the result is elevated relative to the revised RSEM EOP Limit (Revision 10.1, dated April 6, 2022). ***Blue italics*** indicate the result is elevated relative to the original RSEM EOP Limits (Appendix E Revision 5.2, dated July 26, 2016).

[2]The TSS value measured on January 23rd was elevated relative to the calculated guideline; however, the pond discharged for less than 24 hours thus it is not considered an exceedance of the RSEM EOP Limit

[3]Maximum concentrations of T-Cd for samples collected prior to April 6th were elevated relative to the original RSEM EOP limits at RSEM-L5E-P2-EOP (0.000408 mg/L) and is not shown in the table.

[2]The TSS value measured on January 23rd was elevated relative to the calculated guideline; however, the pond discharged for less than 24 hours thus it is not considered an exceedance of the RSEM EOP Limit.

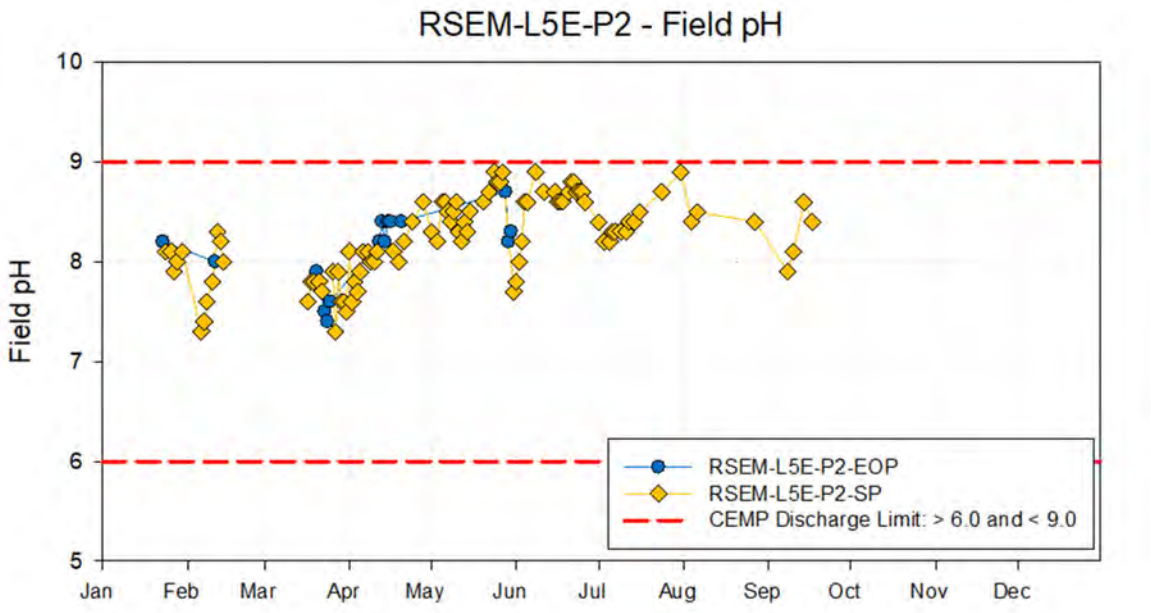


Figure 3-2: Time series profile for field pH in RSEM-L5 East compared to RSEM EOP Limits in 2022. EOP – End of Pipe; SP – Sediment Pond.

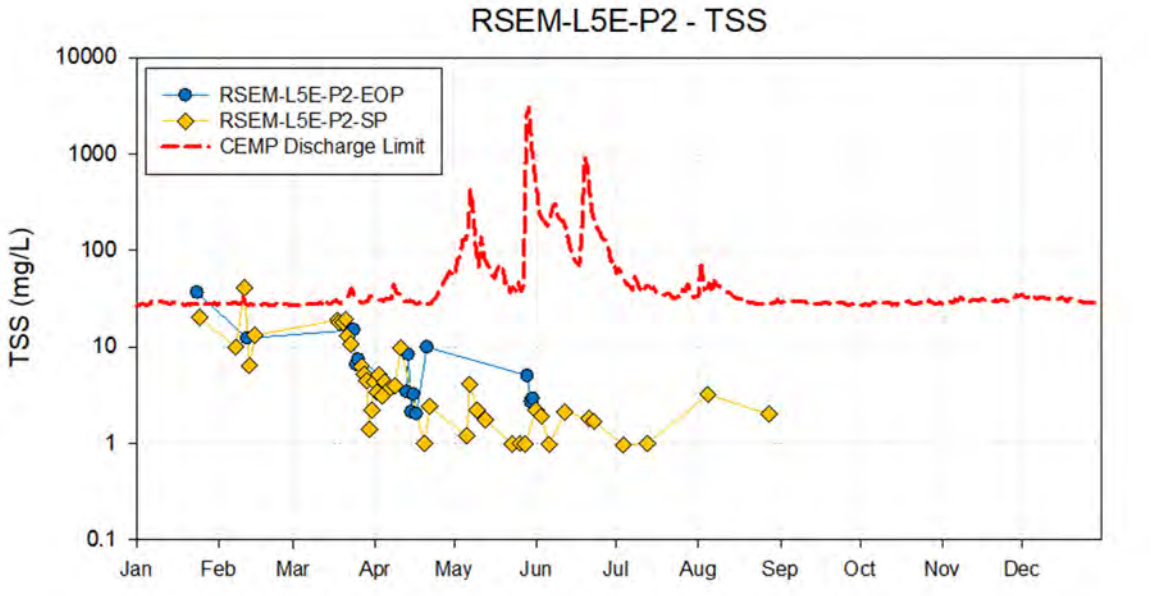


Figure 3-3: Time series profile for total suspended solids (TSS) in RSEM-L5 East compared to RSEM EOP Limits in 2022. TSS is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond.

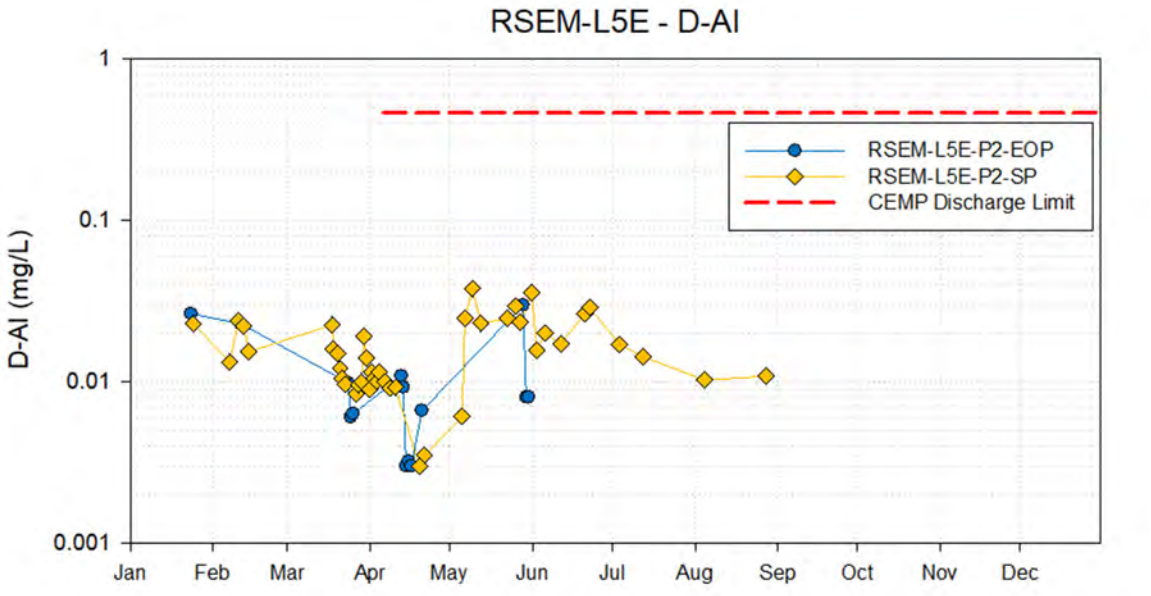


Figure 3-4: Concentrations of dissolved aluminum (Al) for RSEM-L5 East compared to RSEM EOP Limits in 2022. D-Al is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; D – Dissolved Concentrations.

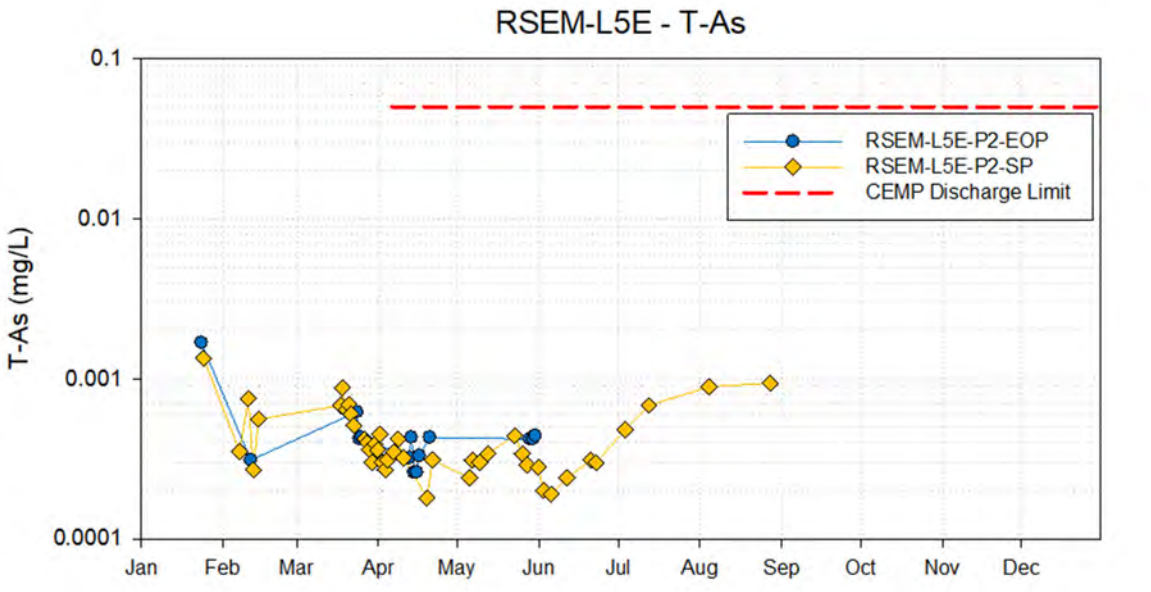


Figure 3-5: Concentrations of total arsenic (As) for RSEM-L5 East compared to RSEM EOP Limits in 2022. T-As is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

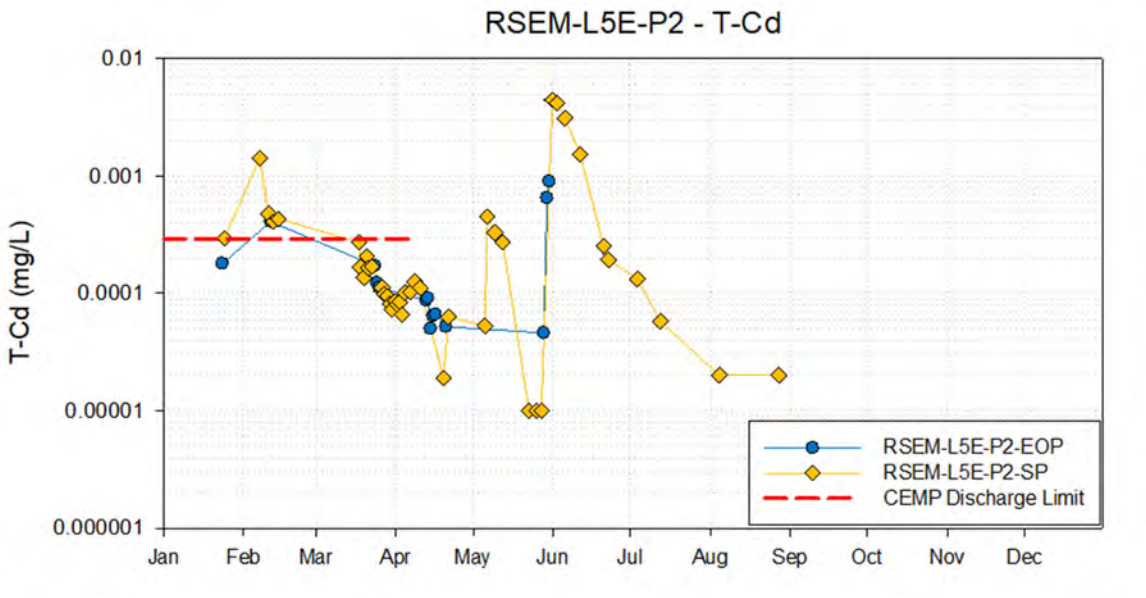


Figure 3-6: Concentrations of total cadmium (Cd) for RSEM-L5 East compared to RSEM EOP Limits in 2022. T-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

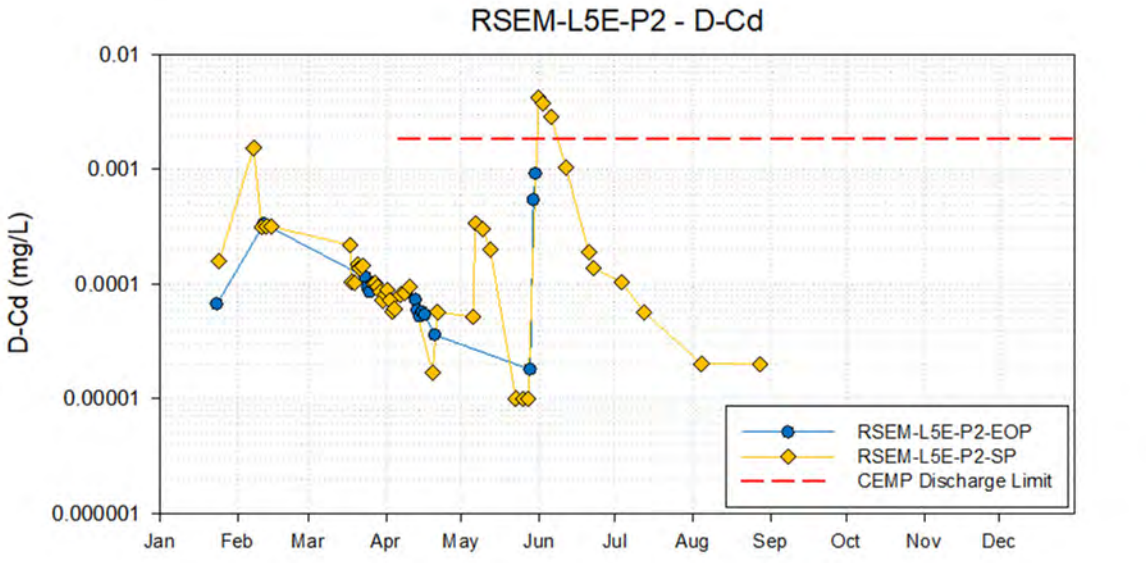


Figure 3-7: Concentrations of dissolved cadmium (Cd) for RSEM-L5 East compared to RSEM EOP Limits in 2022. D-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; D – Dissolved Concentrations.

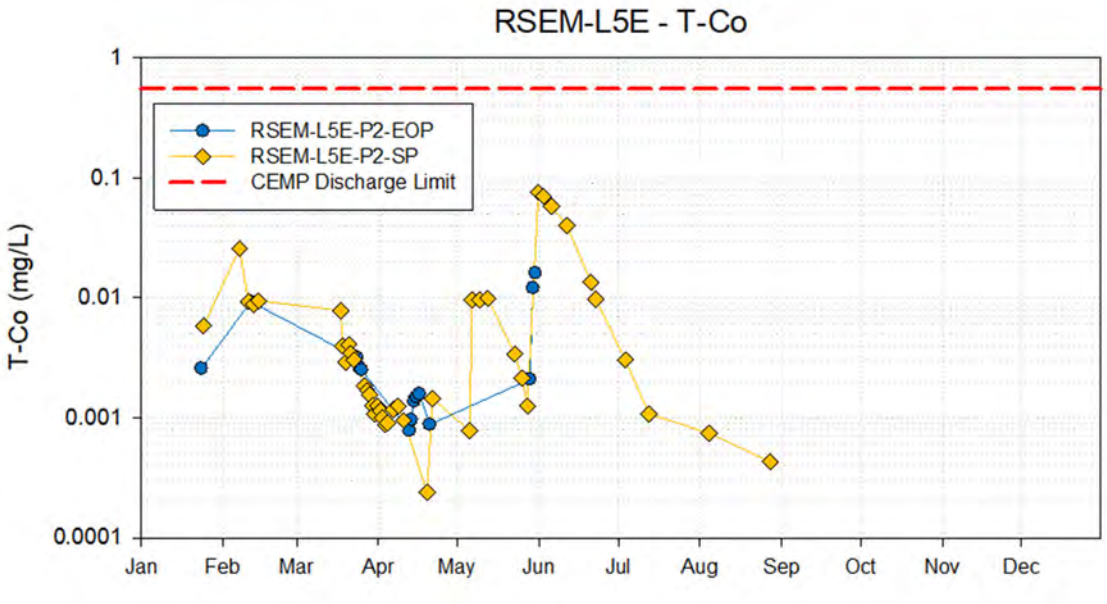


Figure 3-8: Concentrations of total cobalt (Co) for RSEM-L5 East compared to RSEM EOP Limits in 2022. T-Co is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

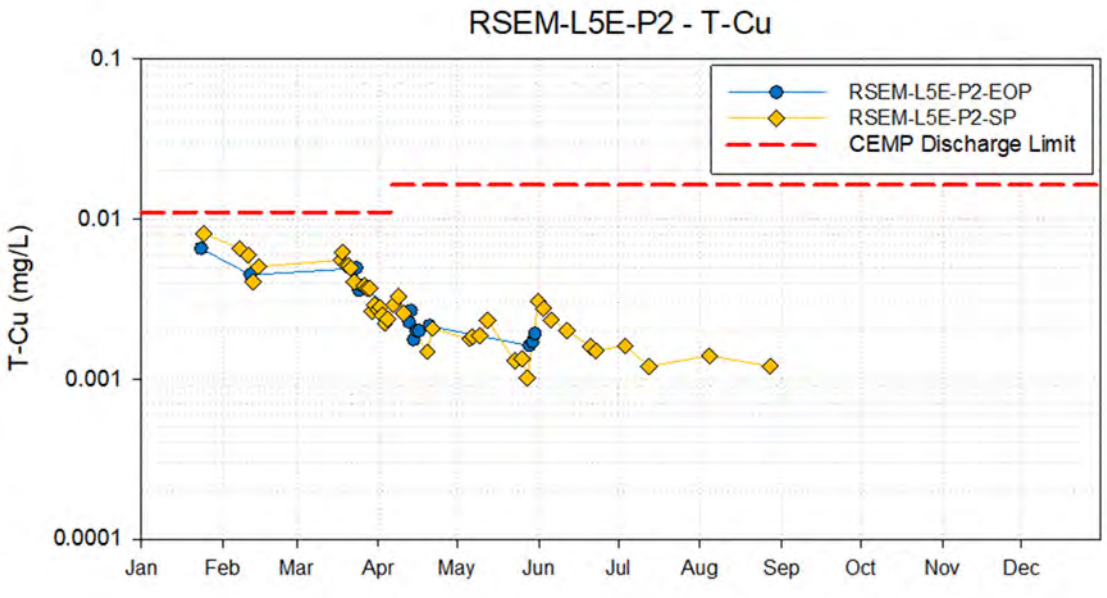


Figure 3-9: Concentrations of total copper (Cu) for RSEM-L5 East compared to RSEM EOP Limits in 2022. T-Cu is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

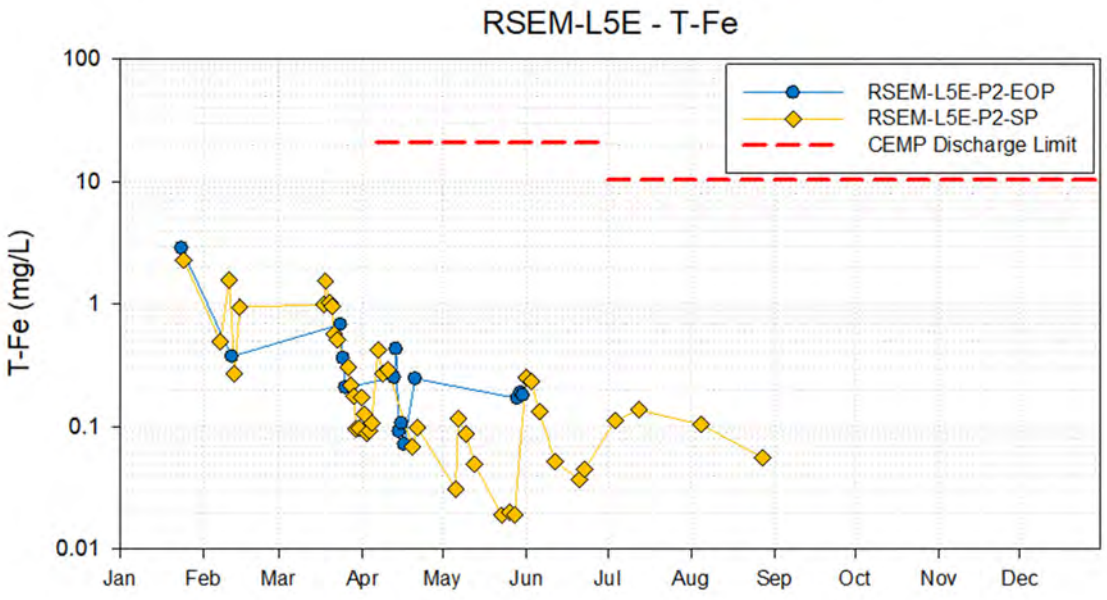


Figure 3-10: Concentrations of total iron (Fe) for RSEM-L5 East compared to RSEM EOP Limits in 2022. T-Fe is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

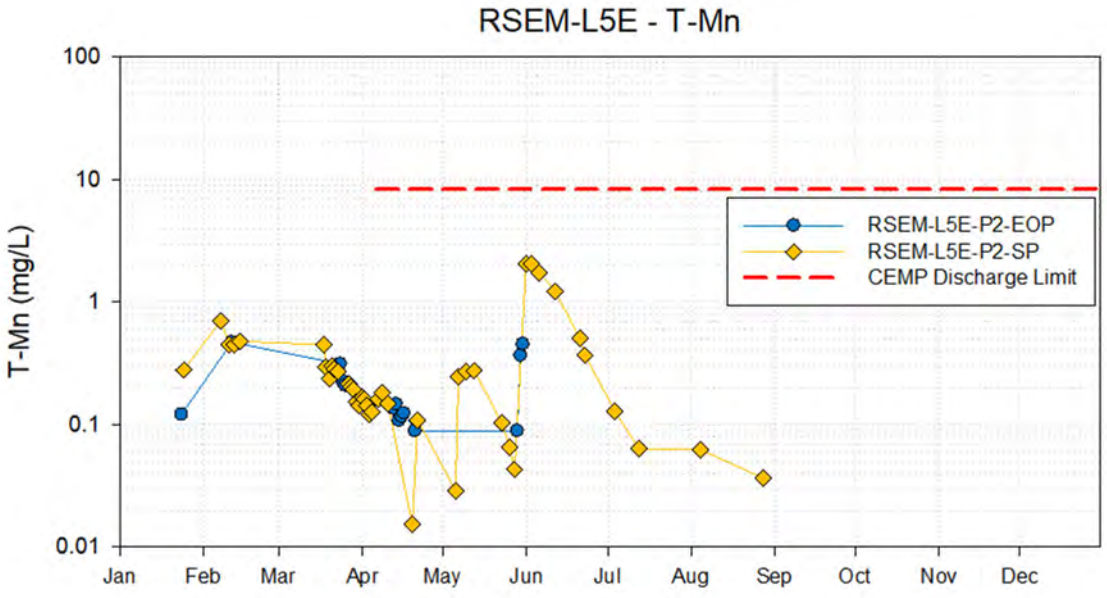


Figure 3-11: Concentrations of total manganese (Mn) for RSEM-L5 East compared to RSEM EOP Limits in 2022. T-Mn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

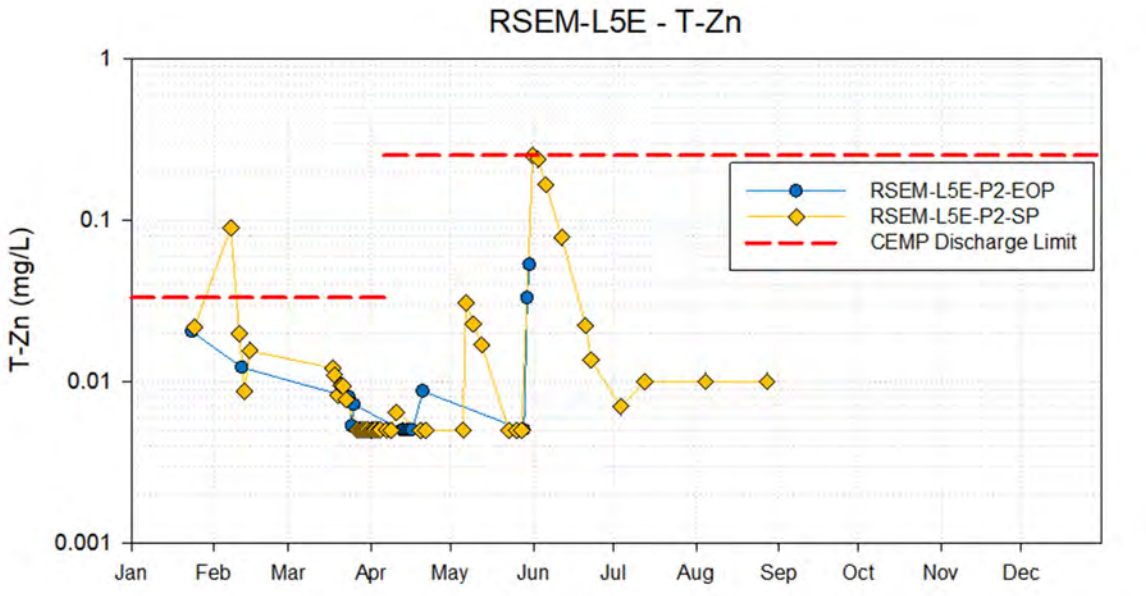


Figure 3-12: Concentrations of total zinc (Zn) for RSEM-L5 East compared to RSEM EOP Limits in 2022. T-Zn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

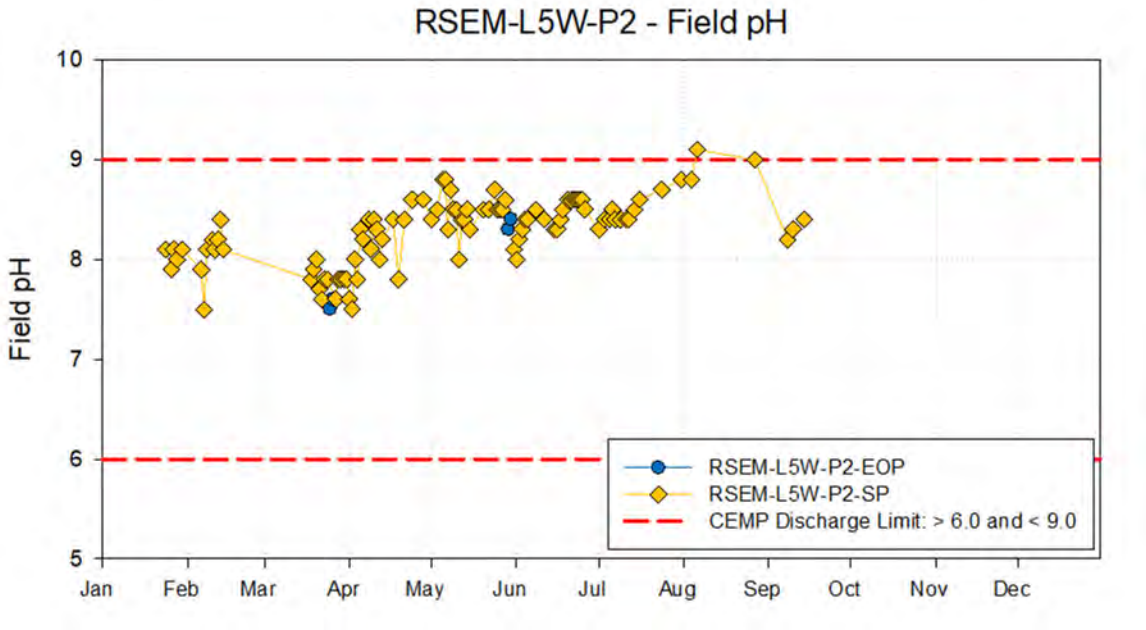


Figure 3-13: Time series profile for field pH in RSEM-L5 West compared to RSEM EOP Limits in 2022. EOP – End of Pipe; SP – Sediment Pond.

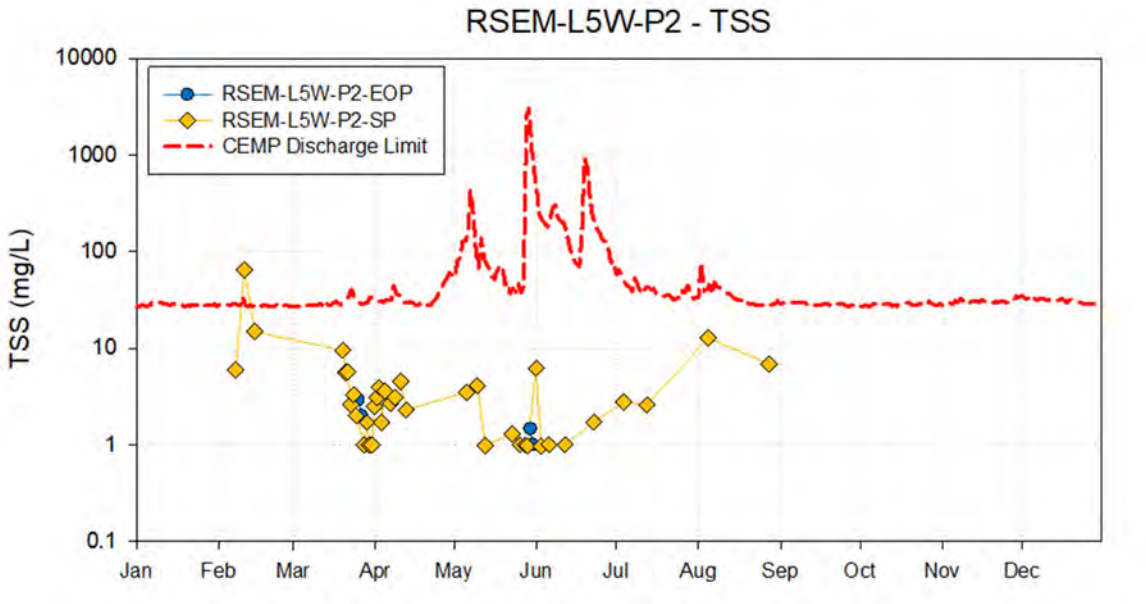


Figure 3-14: Time series profile for total suspended solids (TSS) in RSEM-L5 West compared to RSEM EOP Limits in 2022. TSS is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond.

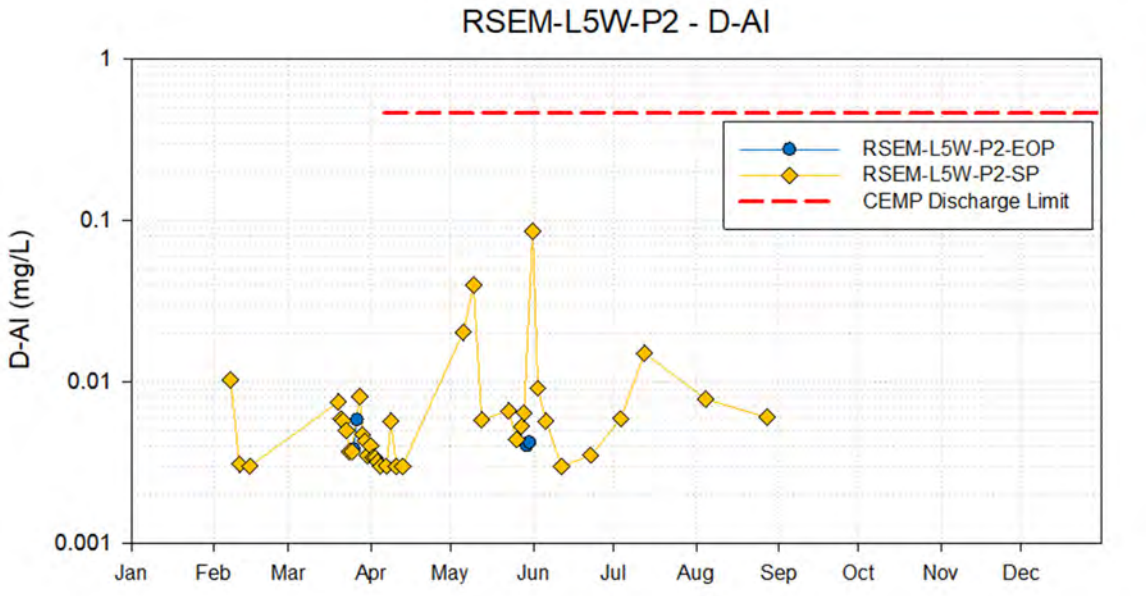


Figure 3-15: Concentrations of dissolved aluminum (Al) for RSEM-L5 West compared to RSEM EOP Limits in 2022. D-Al is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; D – Dissolved Concentrations.

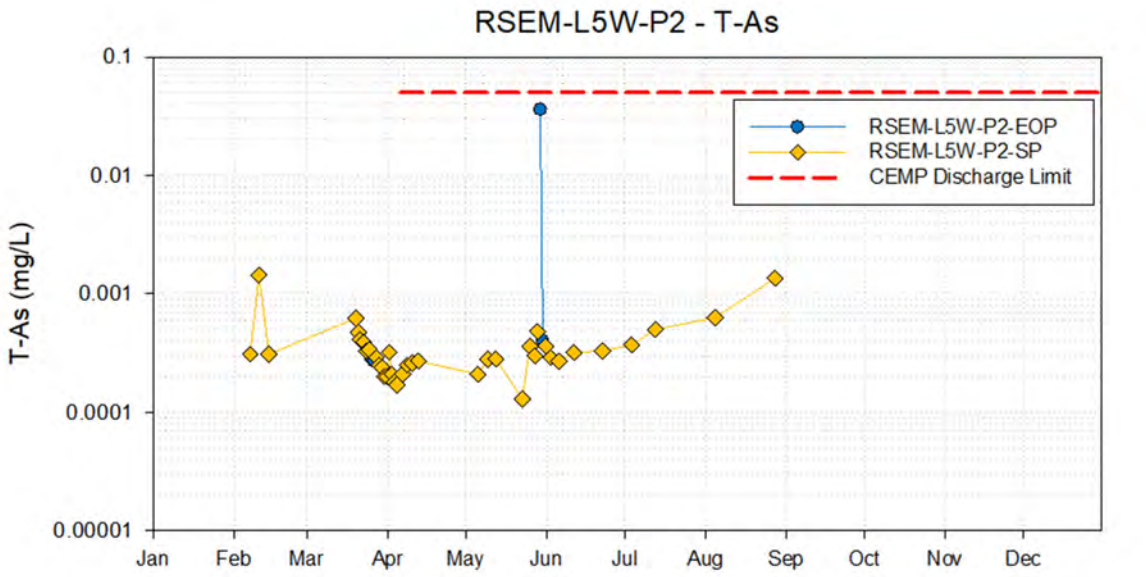


Figure 3-16: Concentrations of total arsenic (As) for RSEM-L5 West compared to RSEM EOP Limits in 2022. T-As is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

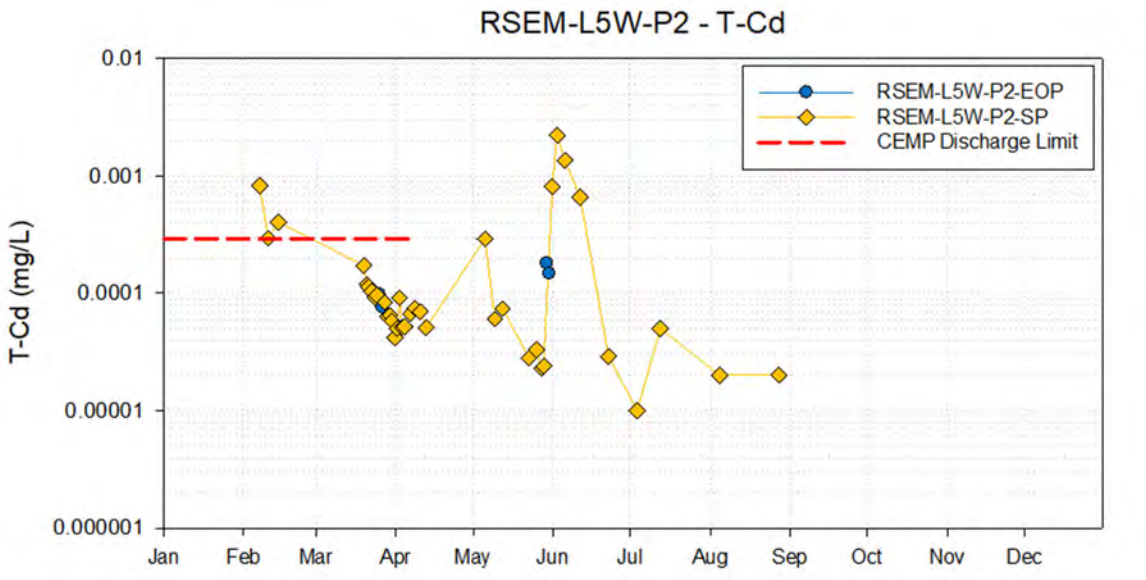


Figure 3-17: Concentrations of total cadmium (Cd) for RSEM-L5 West compared to RSEM EOP Limits in 2022. T-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

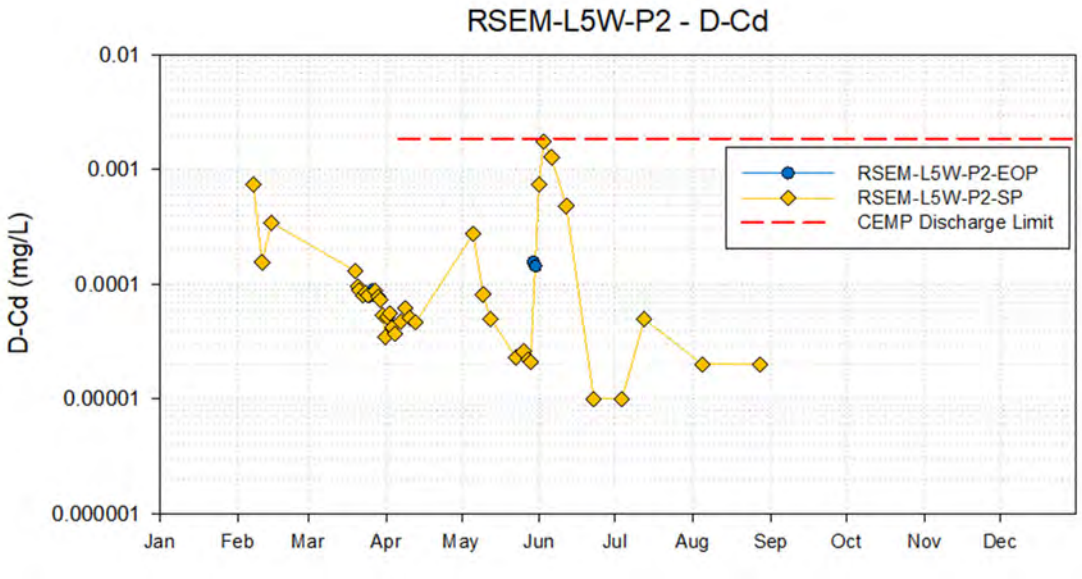


Figure 3-18: Concentrations of dissolved cadmium (Cd) for RSEM-L5 West compared to RSEM EOP Limits in 2022. D-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; D – Dissolved Concentrations.

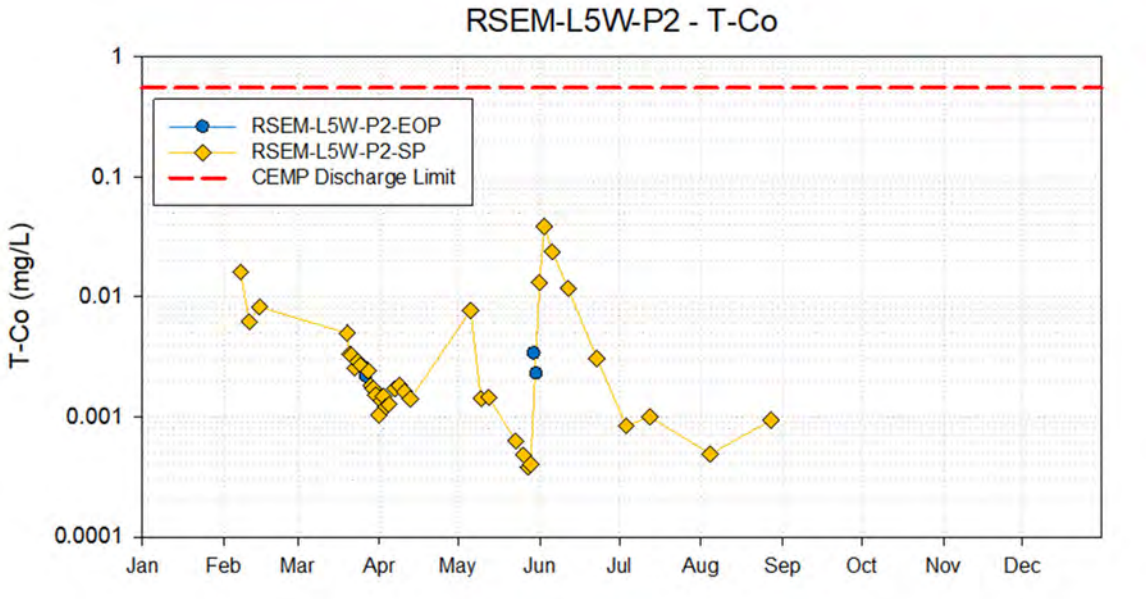


Figure 3-19: Concentrations of total cobalt (Co) for RSEM-L5 West compared to RSEM EOP Limits in 2022. T-Co is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

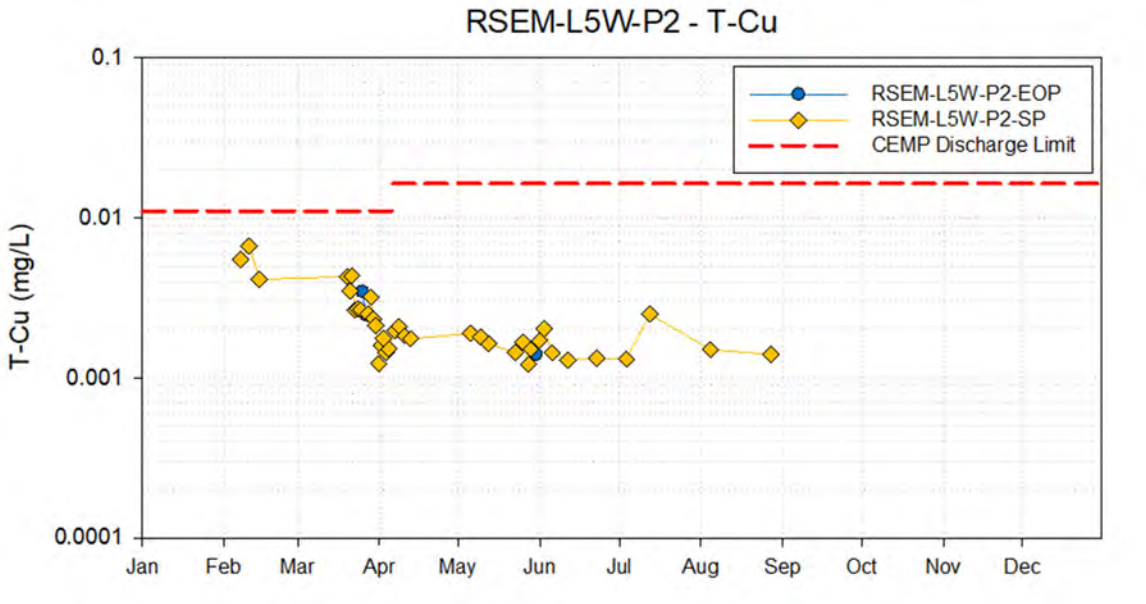


Figure 3-20: Concentrations of total copper (Cu) for RSEM-L5 West compared to RSEM EOP Limits in 2022. T-Cu is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

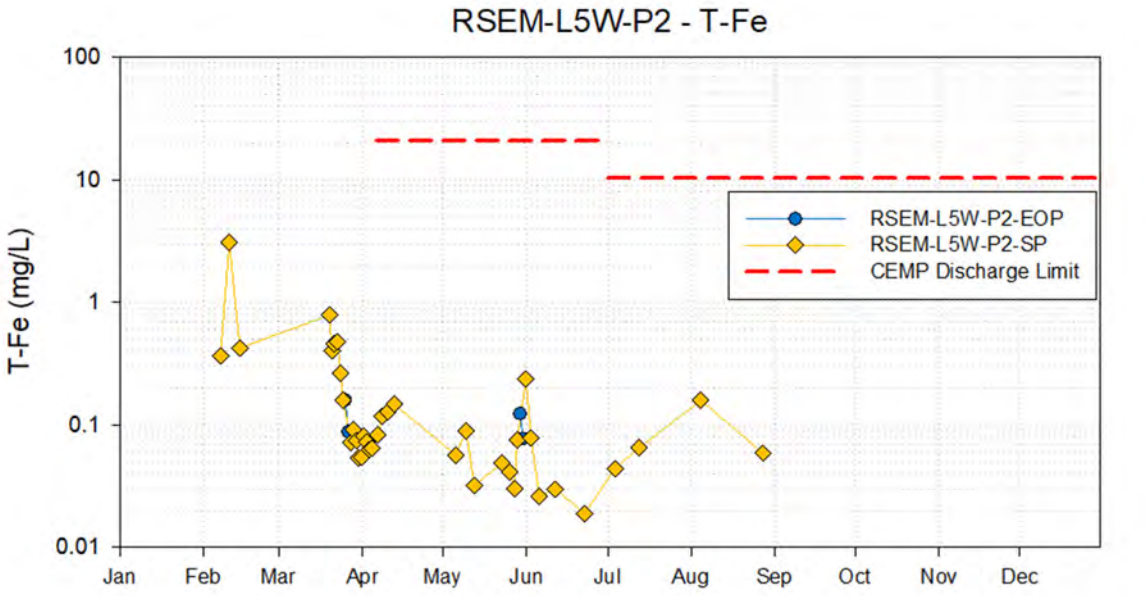


Figure 3-21: Concentrations of total iron (Fe) for RSEM-L5 West compared to RSEM EOP Limits in 2022. T-Fe is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

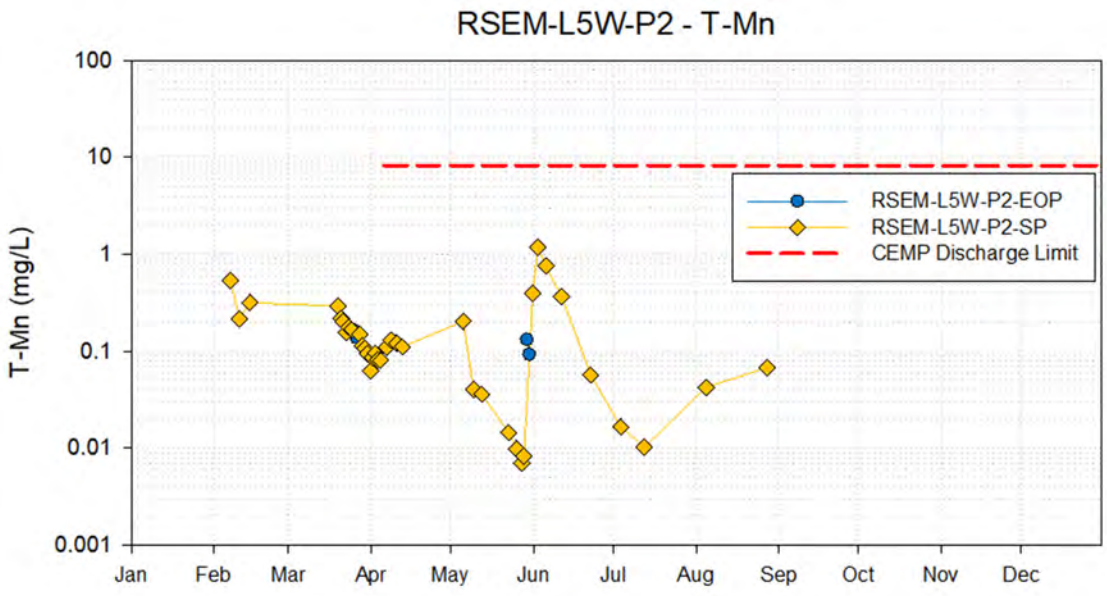


Figure 3-22: Concentrations of total manganese (Mn) for RSEM-L5 West compared to RSEM EOP Limits in 2022. T-Mn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

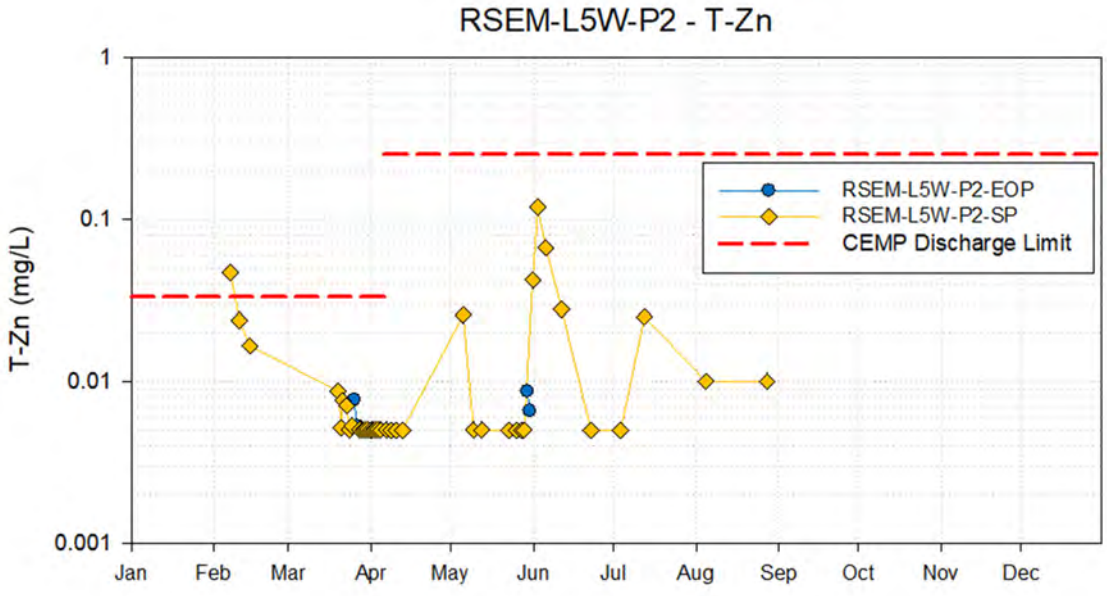


Figure 3-23: Concentrations of total zinc (Zn) for RSEM-L5 West compared to RSEM EOP Limits in 2022. T-Zn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

3.2.2.2 Garbage Creek Diversion

Garbage Creek originates upgradient of the construction site and is conveyed in ditches and via culverts through RSEM Area L5 to minimize any potential influence from construction activities on water quality. An ARD influence was noted in water from this catchment prior to construction activities and is attributed to exposed shale outcrops upstream of the construction site. There was substantial erosion upstream of the construction site in spring 2018. Since then, the creek is often turbid with elevated TSS upstream of the Left Bank construction area. For the purpose of evaluating water quality, Garbage Creek is considered non-construction contact surface water.

Monitoring records indicate that the creek was generally frozen during winter months in 2022, during which no samples were collected. During periods of flow (late January through October), analytical samples for turbidity and TSS, and field measurements, were typically collected weekly from the final culvert outlet (LBGC-OUT) during periods of high flow (March to August). Concurrent samples at GC-DEBRIS-US, upstream of the construction site, were also collected on a weekly basis, depending on flow conditions. One analytical sample and field measurements were collected in late October at LBGC-OUT but not at the upstream station (GC-DEBRIS-US).

Garbage Creek was generally monitored during snowmelt and after rainfall and the water quality was overall circum-neutral to alkaline with elevated turbidity and TSS at both stations in most of the months sampled (Table 3-7). The maximum TSS at both stations was observed in late May during a precipitation event. Concurrent field pH, conductivity and TSS measurements were comparable at the upstream and downstream locations, confirming the primary influences on Garbage Creek water quality are upstream of the project area.

Table 3-7:
Garbage Creek Diversion 2022 Annual Water Quality Summary

Parameter		Field pH	Field Conductivity	Turbidity	TSS
Units		**-**	**µS/cm**	**NTU**	**mg/L**
Short-term BC WQG		**6.5-9.0**	**-**	**-**	**WQG**
GC-Debris-US (n=24 lab TSS/25 Turbidity only, 30 field)	Max	8.7	2,760	8,400	***68,700***
	Min	7.2	218	0.46	<0.96
	Median	8.2	938	95.7	1,635
LBGC-OUT (n=25 lab TSS/26 Turbidity only, 31 field)	Max	8.7	2,760	6,200	***78,800***
	Min	7.6	257	0.49	1.24
	Median	8.2	937	47.1	1,180

Notes: TSS = Total suspended solids.
WQG = BC water quality guideline for aquatic life. The BC WQG for TSS is used as the discharge limit for PAG-containing RSEM pond EOP limits, per the CEMP, Appendix E Rev. 5.2, Section 7, Table 2, page 23. TSS guideline is dependent on background TSS readings in Peace River.
Water quality for these stations is screened against WQGs to guide water management (Section 3.2.1) and does not imply non-compliance with the CEMP. ***Red italics*** indicate the result is elevated relative to the short-term BC WQGs.

3.2.2.3 RSEM Area L6 Sediment Control Pond

The RSEM L6 sediment control pond receives runoff water from RSEM Area L6 and discharges through a culvert onto a rip rap protected outfall, which descends the bank to the Peace River. Water quality is monitored at end-of-pipe (the EOP station) when discharging, and otherwise at the in-pond station (the SP station).

The RSEM L6 sediment control pond did not discharge in 2022 except on April 23rd-25th, May 17th-19th, and June 4th-5th, when the pond was dewatered to the Peace River. Analytical water samples and field measurements were periodically collected from the pond in late March through October 2022. More frequent field measurements were collected from late January onwards. Analytical samples and corresponding field measurements were collected from the EOP station on April 24th, May 17th and 18th, and June 5th, when the pond was discharging.

The pH in all analytical samples and field measurements was circumneutral to slightly alkaline, with low TSS (up to 7 mg/L) and moderate sulphate levels (up to 432 mg/L) (Table 3-8; Figure 3-24 to Figure 3-34). The water quality sample collected from the RSEM L6 sediment control pond EOP station met the RSEM EOP limits when the pond discharged. Overall, the concentrations of metals (D-Al, T-As, D-Cd, T-Co, T-Cu, T-Fe, T-Mn, and T-Zn) are low.

Table 3-8:
RSEM L6 Pond 2022 Annual Water Quality Summary

Parameter		Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	D-Al	T-As	T-Cd	D-Cd	T-Co	T-Cu	T-Fe	T-Mn	T-Zn
Units		**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
RSEM EOP Limit[1]		**6.0-9.0**	**-**	**-**	**WQG**	**-**	**0.46**	**0.05**	**0.00029**	**0.00186**	**0.55**	**0.0163**	**10.3 (July-March), 20.9 (April-June)**	**8.29**	**0.251**
RSEM-L6-SP (n=10 lab, 43 field)	Max	8.8	1,200	1,250	7.0	432	0.0202	0.00081	0.000083	0.000057	0.00061	0.00268	0.912	0.0840	0.0073
	Min	7.6	437	124	<1	53	0.00340	0.00022	<0.00001	<0.00001	<0.0002	0.00104	0.048	0.0049	<0.005
	Median	8.5	532	600	2.4	119	0.00495	0.00037	0.000036	0.000029	0.00027	0.00140	0.098	0.0534	0.0050
RSEM-L6-EOP (n=4 lab, 4 field)	Max	8.8	718	593	1.7	212	0.0130	0.00035	0.000034	0.000031	0.00025	0.00134	0.080	0.0614	<0.005
	Min	8.3	497	568	<1	100	0.00520	0.00022	0.000015	<0.00001	<0.0002	0.00111	0.038	0.0074	<0.005
	Median	8.5	639	569	1.2	177	0.0102	0.00026	0.000022	0.000016	0.00020	0.00116	0.068	0.0135	0.0050

Notes: TSS = Total suspended solids.
WQG = BC water quality guideline for aquatic life. The BC WQG for TSS is used as the discharge limit for PAG-containing RSEM pond EOP limits, per the CEMP, Appendix E Rev. 5.2, Section 7, Table 2, page 23. TSS guideline is dependent on background TSS readings in Peace River.
[1]RSEM EOP Limit only applies to RSEM sediment control pond discharge (-EOP samples). Only revised RSEM EOP Limits (Revision 10.1, dated April 6, 2022) are shown in the table, with the exception of T-Cd, which shows the original RSEM EOP Limit (Appendix E Revision 5.2, dated July 26, 2016) that applies from January 1st to April 6th, 2022. The revised RSEM EOP Limits (Revision 10.1, dated April 6, 2022) apply from April 6th, 2022 onwards and have been revised from those applied previously to RSEM pond discharges (Appendix E Revision 5.2, dated July 26, 2016).
Water quality for station RSEM-L6-EOP is screened against RSEM EOP limits. ***Gold italics*** indicate the result is elevated relative to the revised RSEM EOP Limit (Revision 10.1, dated April 6, 2022). ***Blue italics*** indicate the result is elevated relative to the original RSEM EOP Limits (Appendix E Revision 5.2, dated July 26, 2016).

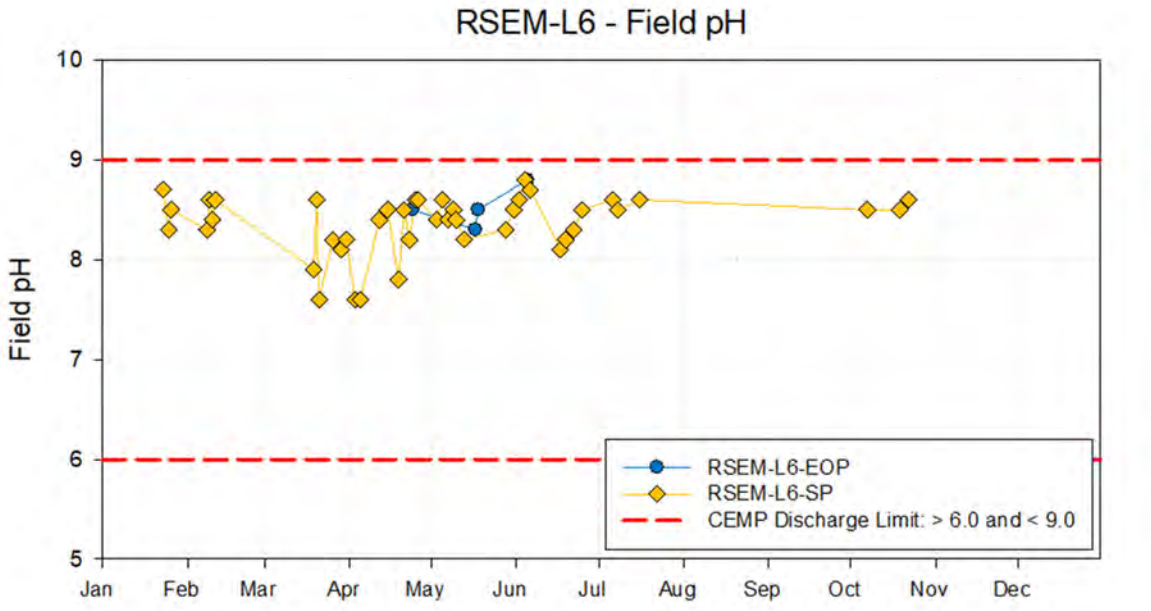


Figure 3-24: Time series profile for field pH in RSEM-L6 compared to RSEM EOP Limits in 2022. EOP – End of Pipe; SP – Sediment Pond.

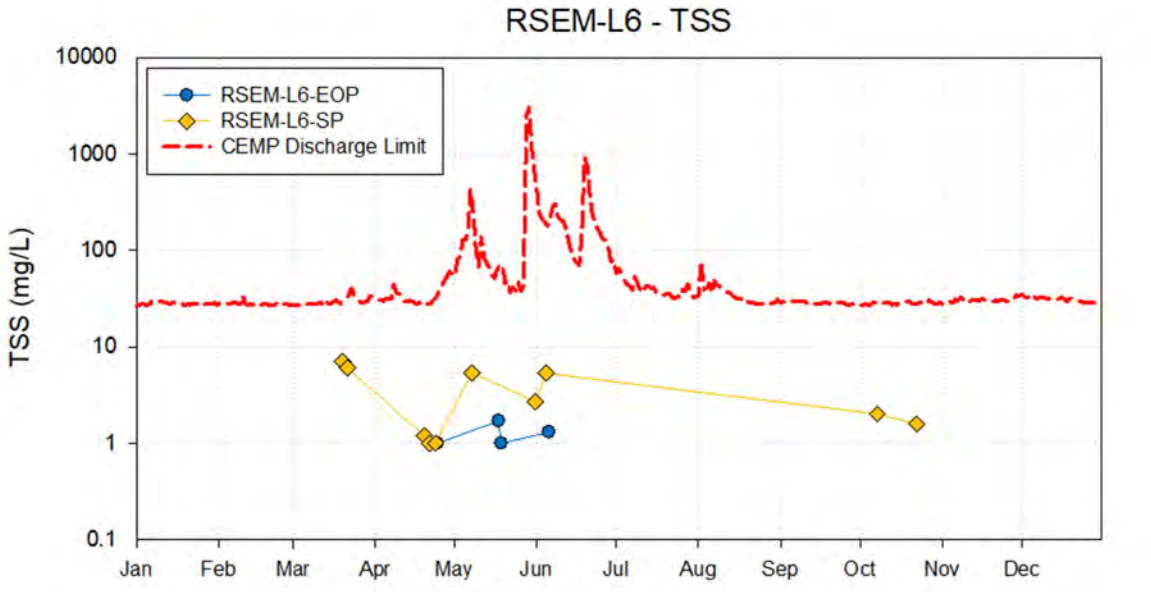


Figure 3-25: Time series profile for total suspended solids (TSS) in RSEM-L6 compared to RSEM EOP Limits in 2022. TSS is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond.

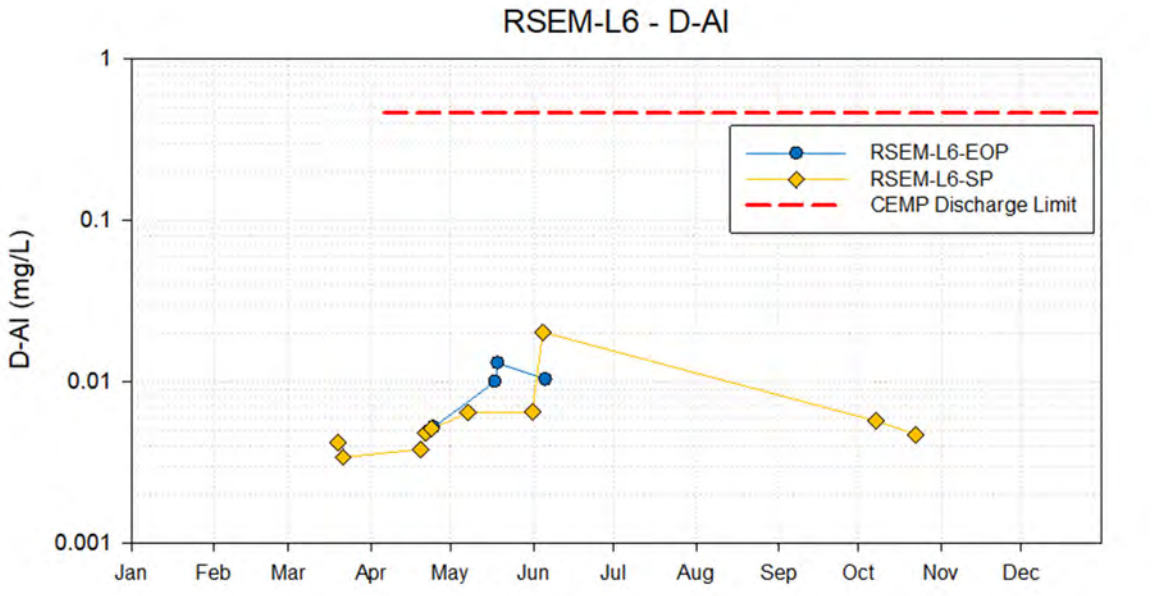


Figure 3-26: Concentrations of dissolved aluminum (Al) for RSEM-L6 compared to RSEM EOP Limits in 2022. D-Al is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; D – Dissolved Concentrations.

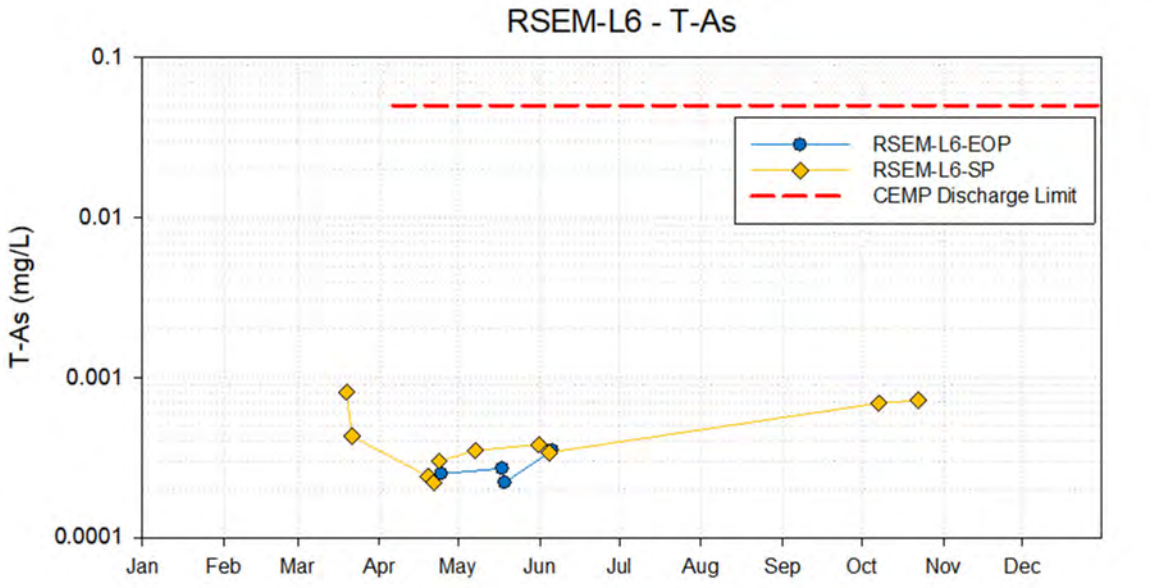


Figure 3-27: Concentrations of total arsenic (As) for RSEM-L6 compared to RSEM EOP Limits in 2022. T-As is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

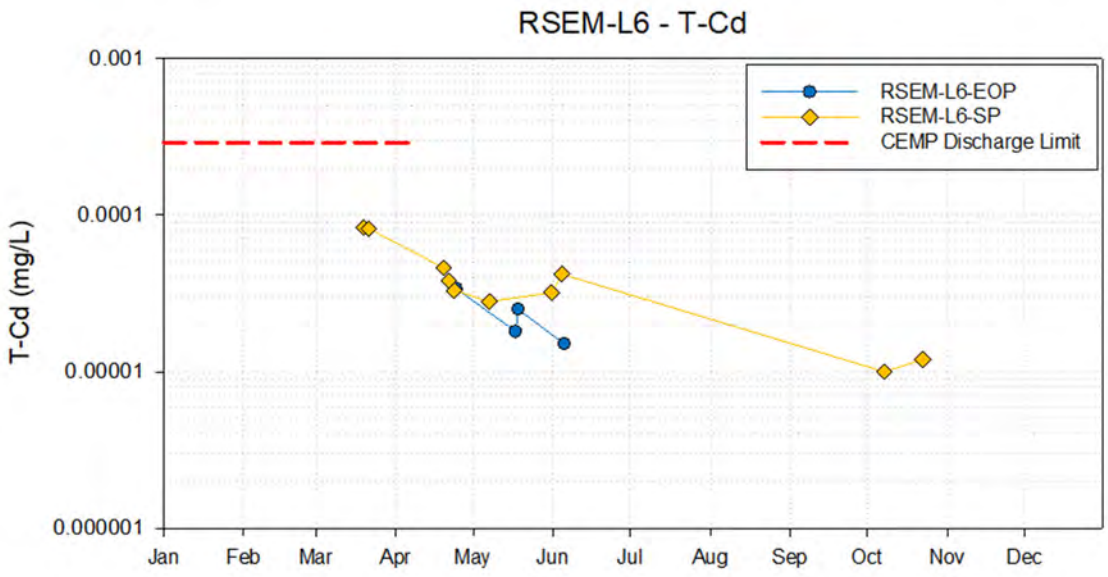


Figure 3-28: Concentrations of total cadmium (Cd) for RSEM-L6 compared to RSEM EOP Limits in 2022. T-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

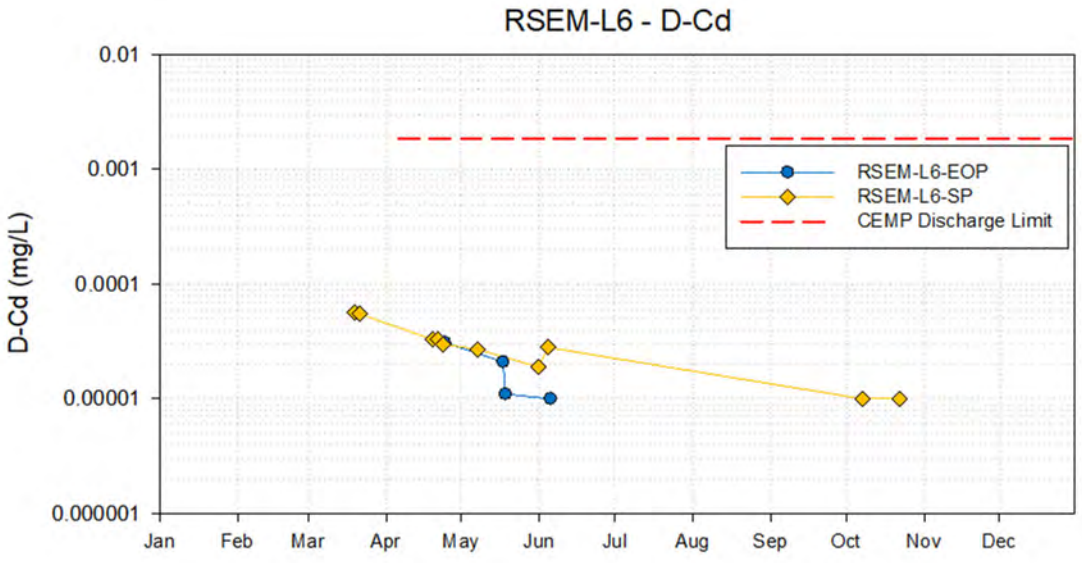


Figure 3-29: Concentrations of dissolved cadmium (Cd) for RSEM-L6 compared to RSEM EOP Limits in 2022. D-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; D – Dissolved Concentrations.

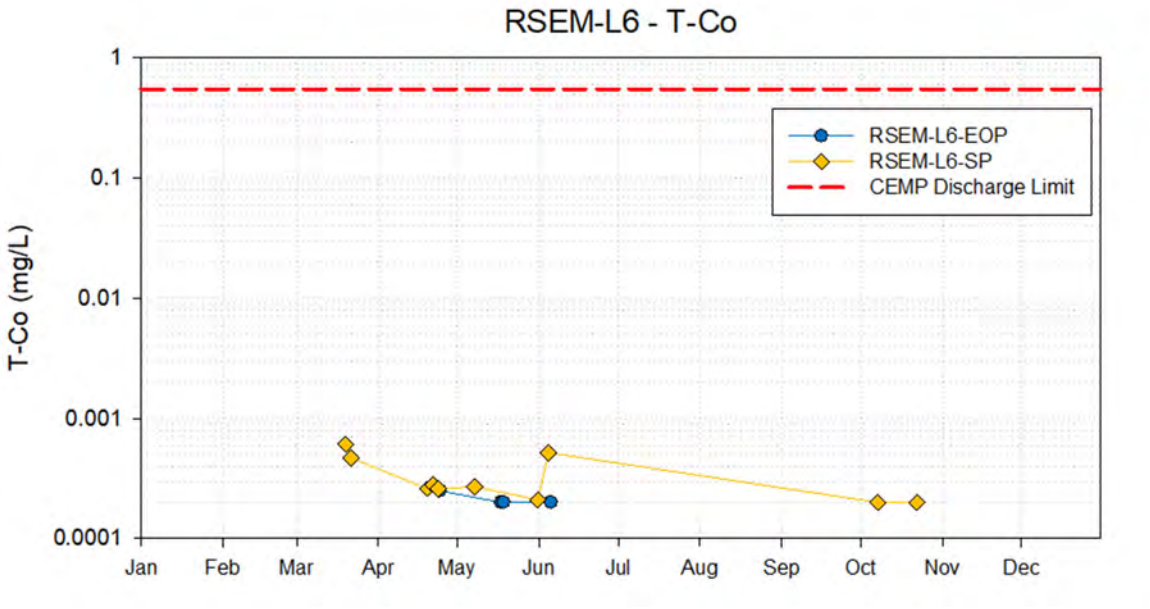


Figure 3-30: Concentrations of total cobalt (Co) for RSEM-L6 compared to RSEM EOP Limits in 2022. T-Co is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

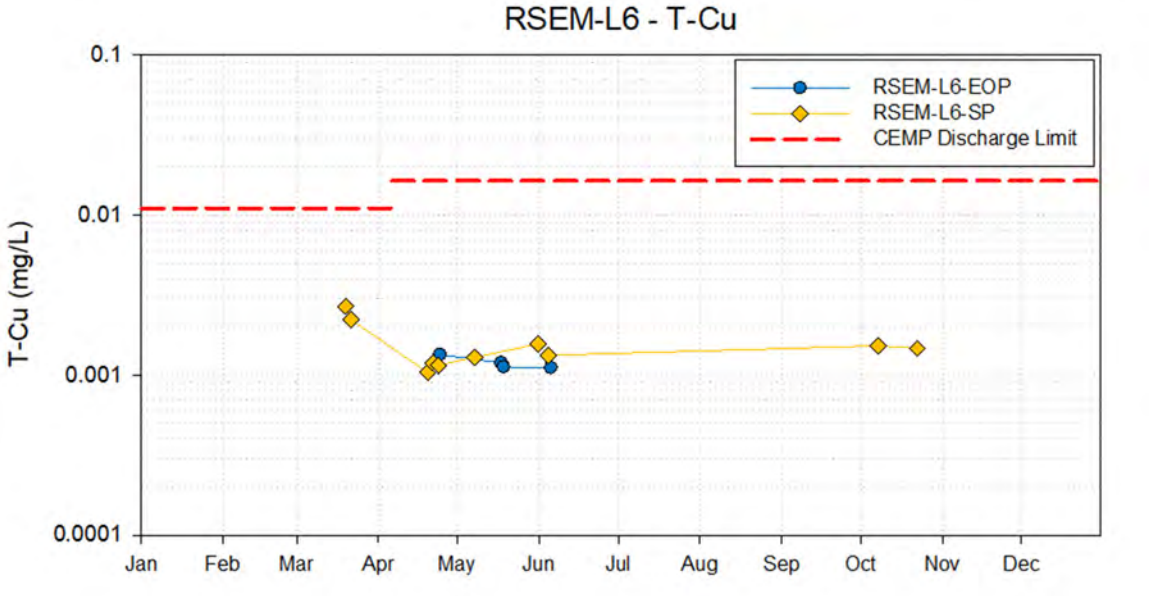


Figure 3-31: Concentrations of total copper (Cu) for RSEM-L6 compared to RSEM EOP Limits in 2022. T-Cu is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

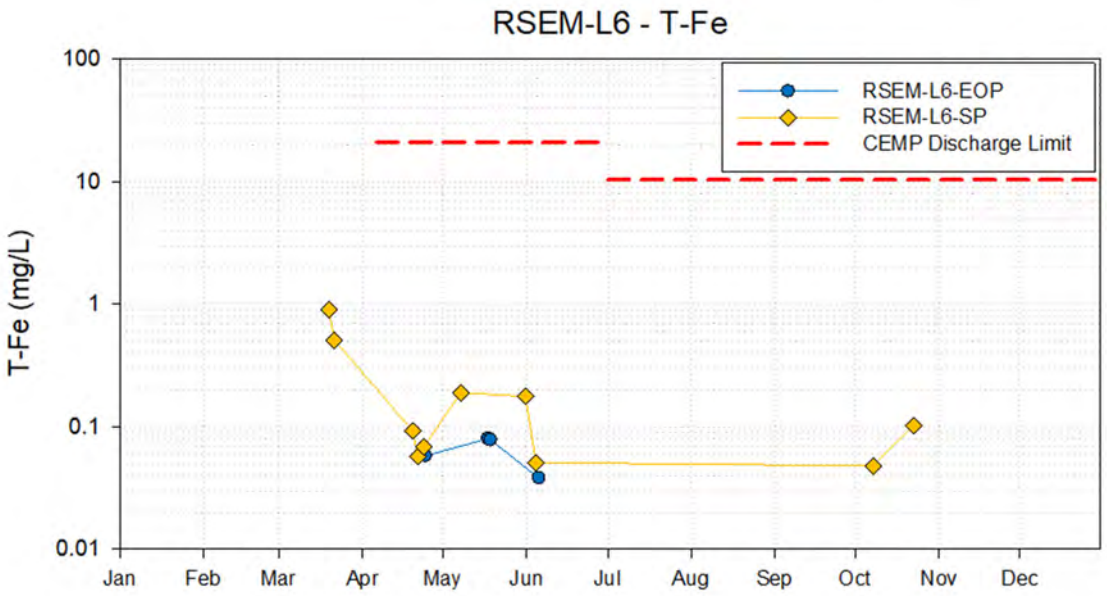


Figure 3-32: Concentrations of total iron (Fe) for RSEM-L6 compared to RSEM EOP Limits in 2022. T-Fe is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

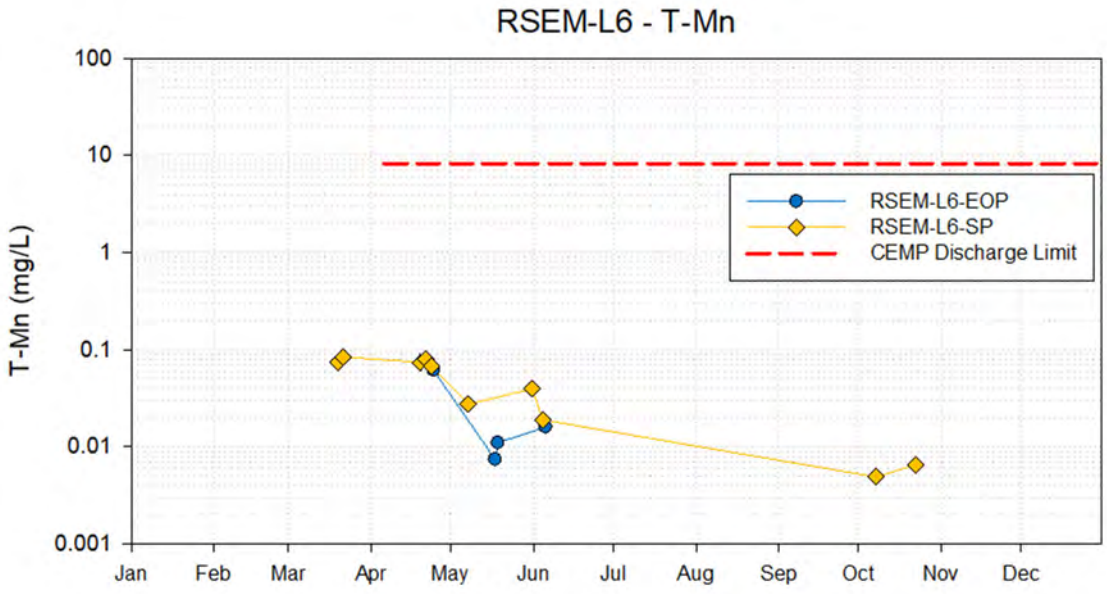


Figure 3-33: Concentrations of total manganese (Mn) for RSEM-L6 compared to RSEM EOP Limits in 2022. T-Mn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

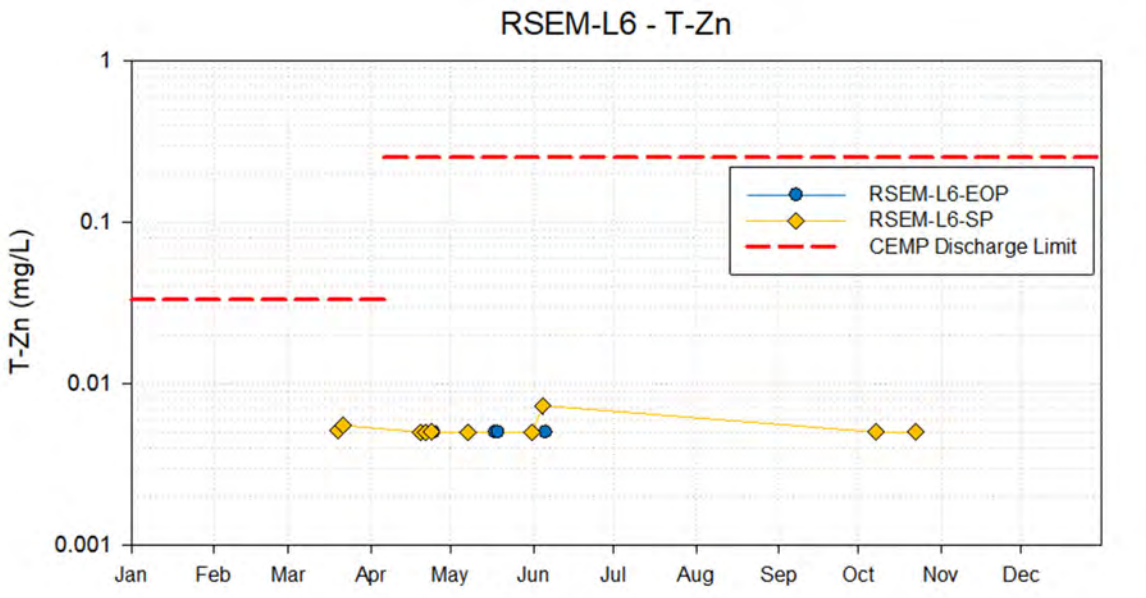


Figure 3-34: Concentrations of total zinc (Zn) for RSEM-L6 compared to RSEM EOP Limits in 2022. T-Zn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

3.2.3 Earthfill Dam

Initiation of the Earthfill Dam construction across the Peace River mainstem in 2020 redirected the river through the diversion tunnels. Activities required for the construction include the excavation of the Core Trench, placement of the compacted Dam Core and adjacent filter zones, permanent placement of PAG fill in Zone 8 on the upstream side of the Dam Core and placement of non-PAG fill downstream of the Core Trench.

In Q1 and Q2 2022, the collection of runoff and dewatering of Peace River seepage water was performed upstream and downstream of the Earthfill Dam, and within the Isolation Zone. Analytical sampling associated with ARD monitoring was discontinued after May following decommissioning of the upstream and downstream wells and cessation of dewatering in the Earthfill Dam area.

The 2022 Earthfill Dam water quality monitoring locations and frequencies are listed in Table 3-9 and Table 3-10, respectively. Station stations are shown in Figure 3-35. Sampling and general water management was conducted as follows:

- Dam Core Dewatering and Discharges – samples were obtained from the two upstream standpipes (USCD-NORTH-WELL and USCD-SOUTH-WELL), and from other stations representing core water dewatering (EARTHFILL-DAM-W-SUMP and DC-DISCHARGE-R6-WP). Seepage collected from the upstream

standpipes was directed to the MWTF, while water from the EARTHFILL-DAM-W-SUMP and DC-DISCHARGE-R6-WP stations was directed to the RSEM R6 West pond.

- Non-PAG Contact Water Discharges and Peace River – samples were obtained from stations discharging to the Peace River (EARTHFILL-DAM-E-BT and EARTHFILL-DAM-DS-OUT), and from Peace River stations upstream (PR-US-R5A) and downstream (PR-IDZ) of contact water discharges.

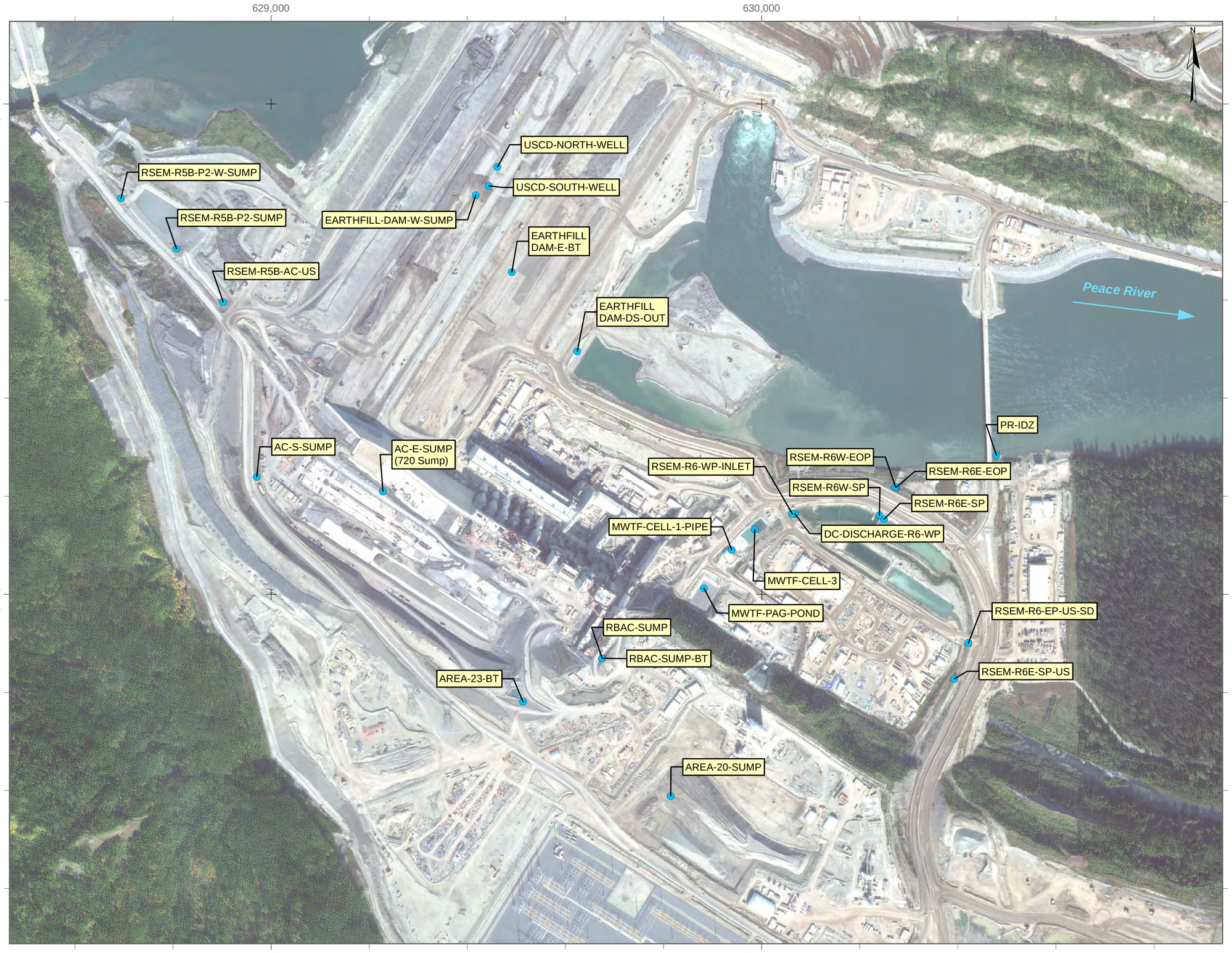
Table 3-9:
Water Quality Monitoring Stations in 2022 (Earthfill Dam)

Station ID	Easting	Northing	Description
DAM CORE DEWATERING AND DISCHARGES			
USCD-NORTH-WELL	629462	6229872	Dewatering well upstream of the Dam Core that is periodically pumped to a baker tank and hauled to MWTF.
USCD-SOUTH-WELL	629444	6229833	Dewatering well upstream of the Dam Core that is periodically pumped up to a baker tank and hauled to MWTF.
DC-DISCHARGE-R6-WP	630068	6229164	End of pipe location of the Earthfill Dam Core Trench waters pumped to R6 West sediment control pond
EARTHFILL-DAM-W-SUMP	629417	6229814	Sump on the western side of the Earthfill Dam Core Trench that collects river water seepage
NON-PAG CONTACT WATER DISCHARGES AND PEACE RIVER			
EARTHFILL DAM-E-BT	629491	6229657	Baker tank east of dam core that receives groundwater seepage pumped from sumps and standpipes east and west of the Dam Core
EARTHFILL DAM-DS-OUT	629624	6229495	Discharge point for the pipeline that receives water from EARTHFILL DAM-E-BT and PR-ISOLATION-ZONE.
PR-US-R5A	627926	6231158	Peace River upstream of discharges from the Earthfill Dam Core Trench and the Isolation Zone, adjacent to RSEM Area R5A
PR-IDZ	630479	6229283	Peace River downstream of discharges from the Earthfill Dam Core Trench and the Isolation Zone

Table 3-10:
Summary of Water Quality Monitoring in 2022 (Earthfill Dam)

Station ID[1]	*In situ* Continuous Measurements[1] (Y / N)	*In situ* Field Measurements		Analytical (Lab) Samples	
		Count[2]	Intended Frequency[3]	Count	Intended Frequency[3]
DAM CORE DEWATERING AND DISCHARGES					
USCD-NORTH-WELL	N	0	P	3	P
USCD-SOUTH-WELL	N	0	P	2	P
DC-DISCHARGE-R6-WP	N	1	W	0	M
EARTHFILL-DAM-W-SUMP	N	1	D	0	D/W
NON-PAG CONTACT WATER DISCHARGES AND PEACE RIVER					
EARTHFILL DAM-E-BT	N	53	D	8	W
EARTHFILL DAM-DS-OUT	N	79	D	12	W
PR-US-R5A	N	20	W	12	W
PR-IDZ	N	143	W	21	W

[1] Y = Yes; N = No.
[2] Field duplicates are not included in the table.
[3] Intended monitoring frequency when flow or water level is adequate to obtain *in situ* measurement or surface water sample; D = Daily (if discharging), W = Weekly (if level > 50%), M = Monthly, Q = Quarterly (if level < 50%), P = Periodic (if needed). Measurements and samples are collected at the intended frequency if there is sufficient water at the time of monitoring. Intended frequencies are aligned with guidance in the Acid Rock Drainage and Metal Leachate Management Plan (BC Hydro, 2016a).



LEGEND

- Monitoring Location

Note: Site C aerial imagery collected September 13, 2022

Coordinate System: *NAD 1983 UTM Zone 10N*
Projection: *Transverse Mercator*
Datum: *North American 1983*
Units: *Meter*

1:7,500

0 200 400 Meters

DATE SAVED:	Jan 30, 2023
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VERSION:	1

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project
ARD/ML 2022 Annual Report

TITLE: Earthfill Dam, RSEM Area R5B and RSEM Area R6 Water Quality Sampling Locations

PROJECT #: A416-1 *FIGURE:* 3-35

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3.2.3.1 Dam Core Dewatering and Discharges

Standpipes were installed in the gravel filters on the upstream and downstream sides of the Earthfill Dam for dewatering of accumulated Peace River seepage water to maintain the water level below the crest of the partially constructed Dam Core. Water levels in the standpipes were monitored and the standpipes were dewatered if the water level reached 409 masl. As water in the upstream wells (USCD-NORTH-WELL and USCD-SOUTH-WELL) may reflect PAG contact, water from the wells was directed to the MWTF throughout Q1 and Q2 2022 until decommissioning occurred on May 23rd. During Q1 and Q2 2022, water from the downstream wells was directed to the Peace River over the downstream Cofferdam via Earthfill-Dam-BT and Earthfill Dam-DS-Out, until decommissioning occurred on May 15th. In Q1 2022, dewatering from the downstream wells was also combined with water collected in the Isolation Zone sump. Although water from the downstream wells may also reflect PAG contact, discharge occurred in combination with non-PAG contact water. Therefore, water quality results for the combined (PAG and non-PAG) discharge are presented in the following section.

Water quality samples collected at USCD-NORTH-WELL and USCD-SOUTH-WELL show alkaline conditions with moderate conductivity (up to 864 µS/cm) and generally low TSS (<12 mg/L), as shown in Table 3-11. The analytical measurements indicate generally low sulphate levels (<128 mg/L) and elevated total Zn concentrations. Total Zn is primarily present in the dissolved form. The water quality signature suggests that Zn does not originate from ARD influence, rather the Zn concentrations are believed to originate from the galvanized metal walls of the standpipe which are in contact with groundwater.

Dam core seepage from the western portion of the Earthfill dam excavation was collected in a sump (EARTHFILL-DAM-W-SUMP) and directed to the RSEM R6 West pond. Similarly, DC-DISCHARGE-R6-WP represents pipeline discharge of dam core water to the RSEM R6 West pond. Dam core water from these stations were characterized by slightly alkaline conditions and moderate conductivity.

Table 3-11:
Dam Core Dewatering and Discharges 2022 Annual Water Quality Summary

Parameter		Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Zn
Units		**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**
USCD- (n=3 lab, 0 field)	Max	-	864	-	7.6	128	0.245
	Min		537		2.7	63.6	0.024
	Median		766		5.1	103	0.169
USCD-SOUTH-WELL (n=2 lab, 0 field)	Max	-	862	-	12	121	0.981
	Min		737		8.9	113	0.289
	Median		800		10	117	0.635
DC-DISCHARGE-R6-WP (n=0 lab, 1 field)	Value	7.6	-	580	-	-	-
EARTHFILL-DAM-W-SUMP (n=0 lab, 1 field)	Value	8.1	-	405	-	-	-

Notes: TSS = Total suspended solids.

3.2.3.2 Non-PAG Contact Water Discharges and Peace River

The Isolation Zone contains river water seepage that is isolated in the thalweg between the Dam Core and downstream Cofferdam. During Q1 2022, this area was dewatered to the river over the Downstream Cofferdam via EARTHFILL-DAM-DS-OUT. Discharge from EARTHFILL-DAM-DS-OUT during this period also included water from the downstream standpipes collected via the EARTHFILL-DAM-E-BT. Dewatering from the Isolation Zone was stopped on March 26th, and the Thalweg sump was in-filled with non-PAG fill by March 28th. Following the cessation of dewatering from the Isolation Zone, seepage from east and west of the Dam Core and from the downstream standpipes was discharged via the EARTHFILL-DAM-E-BT and EARTHFILL-DAM-DS-OUT. Water quality for these stations are screened relative to short-term BC WQGs to confirm that the water was suitable for discharge.

Daily field measurements and weekly analytical sampling was conducted at the EARTHFILL-DAM-E-BT and EARTHFILL-DAM-DS-OUT stations for discharge monitoring. Water quality samples collected at the monitoring stations were circumneutral to alkaline with low to moderate conductivity up to 634 µS/cm, as shown in Table 3-12. TSS and sulphate concentrations were below 10 mg/L and 122 mg/L, respectively. The analytical results indicate that the quality of water discharged to the Peace River was below the short-term BC WQGs.

Peace River stations upstream (PR-US-R5A) and downstream (PR-IDZ) of contact water discharges were used to evaluate any effects on water quality measured in the receiving environment. Note water quality at PR-US-R5A and PR-IDZ are screened relative to short and long term BC WQGs. Field measurements for the Peace River stations collected in Q3 and Q4 are not evaluated, as analytical sampling associated with ARD monitoring was discontinued after May following cessation of dewatering in the Earthfill Dam area.

Water quality monitoring was conducted on a daily to weekly basis at the upstream (PR-US-R5A) and downstream (PR-IDZ) Peace River stations. Water quality at both stations was circumneutral to alkaline with low to moderate conductivity (up to 768 µS/cm) (Table 3-12). Sulphate concentrations were low (<28 mg/L), while TSS levels varied throughout 2022 (<1 to 131 mg/L). Individual samples exceeded the BC short or long term WQGs at PR-US-R5A and PR-IDZ (total Cr) and at PR-IDZ (total Fe and Zn and dissolved Cu) on a few occasions. Elevated total metal concentrations generally reflected TSS influence.

Table 3-12:
Non-PAG Contact Water Discharges and Peace River 2022 Annual Water Quality Summary

Parameter		Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	T-Cr	D-Cu[a]	T-Fe	T-Zn
Units		**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
Short-term BC WQG		**6.5-9.0**	**-**	**-**	**WQG**	**-**	**-**	**a**	**1**	**0.033**
Long-term BC WQG		**-**	**-**	**-**		**309**	**0.001 (CrVI), 0.0089 (CrIII)**		**-**	**0.0075**
EARTHFILL-DAM-E-BT* (n=8 lab, 53 field)	Max	8.5	580	634	10	122	<0.001	0.00053	0.127	<0.005
	Min	7.4	509	313	<1	94.6	<0.001	<0.0005	0.011	<0.005
	Median	8.0	554	536	1.4	113	0.0010	0.00050	0.032	0.0050
EARTHFILL-DAM-DS-OUT* (n=12 lab, 79 field)	Max	8.4	492	537	2	86.1	<0.001	0.00068	0.300	<0.005
	Min	7.1	212	197	<0.99	18.9	<0.0005	0.00031	<0.01	<0.003
	Median	8.0	400	417	1.0	56.3	0.0010	0.00050	0.010	0.0050
PR-US-R5A (n=12 lab, 20 field)	Max	8.7	239	267	23	27.7	**0.0017**	0.00097	0.936	0.0065
	Min	7.8	187	161	<1	15.0	<0.0005	0.00058	0.040	0.0038
	Median	8.3	195	188	5.2	16.8	0.0010	0.00068	0.095	0.0050
PR-IDZ (n=21 lab, 143 field)	Max	8.8	202	768	131	19.4	**0.0039**	0.00109	***3.60***	**0.0205**
	Min	7.5	187	164	1.3	14.3	<0.0005	<0.0005	0.027	<0.003
	Median	8.3	195	225	3.1	16.1	0.0010	0.00062	0.053	0.0050

Notes: TSS = Total suspended solids
WQG = BC water quality guideline for aquatic life. The BC WQG for TSS is used as the discharge limit for PAG-containing RSEM pond EOP limits, per the CEMP, Appendix E Rev. 5.2, Section 7, Table 2, page 23. TSS guideline is dependent on background TSS readings in Peace River. Calculated guidelines (*i.e.*, those based on hardness, pH, temperature, or chloride levels) are based on the minimum data statistic measured at the stations in 2022. Temperature of 10°C assumed.
[a] D-Cu guideline is the sample specific guidelines taken from the Cu Look-Up Table provided as a supplement to the Cu WQG and based on the Biotic Ligand Model software (BC ENV, 2019b). The guideline is temperature, pH, DOC, hardness, alkalinity, chloride, sulphate, Ca, Mg, K, Na, and humic acid content dependent. A unique guideline dependent upon pH, hardness and DOC is derived for each sample for the purpose of screening. The sample specific D-Cu guideline was exceeded for the following samples that are not shown in the table:
D-Cu Long-term BC WQG of 0.0006 mg/L: PR-IDZ – April 20.
D-Cu Long-term BC WQG of 0.0007 mg/L: PR-IDZ – February 3.
*Stations Earthfill-Dam-E-BT and Earthfill-Dam-DS-OUT are only screened against short-term BC WQGs while receiving stations PR-US-R5A and PR-IDZ are screened against both short-term and long-term BC WQGs.
Water quality for these stations is screened against WQGs to guide water management (Section 3.2.1) and does not imply non-compliance with the CEMP. ***Red italics*** indicate the result is elevated relative to the short-term BC WQGs and **bolded values in orange highlight** indicate the result is elevated relative to the long-term BC WQGs.

3.2.4 Right Bank

Water quality monitoring performed on the Right Bank in 2022 included several stations in Area 30/Septimus Hill, Area A/Area 24, Approach Channel and Area 23, RSEM Area R5B and R6 catchments, the R5A sediment ponds and the Water Treatment Facilities.

The 2022 station locations and monitoring frequencies are listed in Table 2-13 and Table 3-14, respectively. Monitoring locations are shown in Figure 3-35 (RSEM Area R5B, RSEM Area R6), Figure 3-36 (Area A and Area 30) and Figure 3-37 (RSEM Area R5A). Sampling and general water management within the catchment areas was conducted as follows:

- Area 30/ Septimus Hill – samples were obtained from the sediment pond and sediment pond outlet and from the receiving Septimus Beaver Pond.
- Area A/ Area 24 – samples represent ponded groundwater intercepted in the eastern zones of Area A at the North Ditch and Northeast Sump and from Area 24 at the East and West sumps. Ponded groundwater was discharged to adjacent vegetation or the Peace River side channel, dewatered to the crusher ponds or pumped to the SBIAR ditch and directed to the RSEM R6 East Pond.
- Approach Channel and Area 23 – samples were obtained from sumps, baker tanks and ditches in the Approach Channel and Area 23. Responsibility of water management in the Approach Channel was assumed by AFDE on April 1st 2022. Contact water collected by AFDE is directed to the R5B Phase 2 Sump, where PRHP redirects it for discharge from the site as deemed appropriate.
- RSEM Area R5B – samples were collected from the R5B sumps (R5B West Sump and R5B Phase 2 Sump) and drainage ditch (RSEM-R5B-AC-US) which receive runoff from the western portion of the Approach Channel. Drainage accumulated in the R5B Phase 2 Sump was periodically directed to the water treatment facilities, the RSEM R6 East pond via the SBIAR ditch or to RSEM R5A Pond A.
- Water Treatment Facilities – samples were collected from the pre-treatment pond, plant discharge and sludge collection ponds. Treated effluent from the MWTF/WTP Sludge Pond was discharged to the RSEM Area R6 West sediment control pond.
- RSEM Area R6 – samples of sediment control pond inflows were taken at the Area-20-Sump, RSEM-R6E-SP-US and RSEM-R6-EP-US-SD. Samples were obtained daily from the RSEM R6 East and West sediment control pond EOP stations (RSEM-R6E-EOP and RSEM-R6W-EOP) when the ponds were discharging.
- RSEM Area R5A – water accumulations in the RSEM Area R5A sediment control ponds were monitored primarily with field measurements. Samples were obtained daily from the RSEM R5A pond EOP stations when the ponds were discharging.

Table 3-13:
Water Quality Monitoring Stations in 2022 (Right Bank)

Station ID	Easting	Northing	Description
AREA 30 / SEPTIMUS HILL			
AREA-30-SP	631049	6225811	Area 30 sediment control pond, in-pond
AREA-30-EOP	630980	6225761	Area 30 sediment control pond, end of pipe
SEPTIMUS-BEAVER-POND	630916	6225818	Septimus Beaver Pond sample location 1
	630869	6225840	Septimus Beaver Pond sample location 2
	630819	6225757	Septimus Beaver Pond sample location 3
	630668	6225628	Septimus Beaver Pond sample location 4
	630672	6225483	Septimus Beaver Pond sample location 5
	630737	6225465	Septimus Beaver Pond sample location 6
	630851	6225542	Septimus Beaver Pond sample location 7
	631020	6225610	Septimus Beaver Pond sample location 8
AREA A/ AREA 24			
AREA-A-NE-SUMP	632823	6228298	Sump for collection groundwater seepage in the northeast section of Area A and that is pumped to adjacent vegetation/wetland.
AREA-A-N-DITCH	631200	6228345	Ditch along the northern edge of Area A
AREA-24-E-SUMP	633570	6228769	Non-PAG contact groundwater pooling at the east section of Area 24 passively discharging to the Peace River Side channel through the unnamed watercourse.
AREA-24-W-SUMP	633066	6228363	Non-PAG contact groundwater pooling at the west section of Area 24 being dewatered to vegetation/wetland.
APPROACH CHANNEL and AREA 23			
AC-E-SUMP (720 Sump)	629228	6229210	Collection sump at the base of the AC benches, east side. Also known as the 720 Sump.
AC-S-SUMP	628971	6229240	Collection sump at the base of the AC benches, south side.
RBAC-SUMP	629675	6228870	Groundwater sump at southeast end of Approach Channel
RBAC-SUMP-BT	629675	6228870	Baker tank used to store water collected in RBAC-SUMP
AREA-23-BT	629514	6228781	Collection sump that receives runoff flow and groundwater seepage from ongoing Approach Channel excavation
RSEM AREA R5B			
RSEM-R5B-AC-US	628902	6229596	Drainage ditch to channel runoff flow from the Approach Channel to R5B-P2-SUMP
RSEM-R5B-P2-W-SUMP	628694	6229808	The runoff collection sump west of the Phase 2 R5B Sump.
RSEM-R5B-P2-SUMP	628807	6229705	Phase 2 R5B sump the collects runoff RSEM Area R5B and the western extent of the Approach Channel excavation
WATER TREATMENT FACILITIES			
MWTF-PAG-POND	629883	6229012	Collection pond for possible ARD influenced water.
MWTF-CELL-1-PIPE	629939	6229091	Treated water released from the MWTF to Cell 1 of the settling/sludge pond.
MWTF-CELL-3	629986	6229132	Treated effluent discharge at MWTF-SLP-R6.
RSEM-R6-WP-INLET	630063	6229164	Inlet/upstream section of RSEM-R6W-SP
RSEM AREA R6			
RSEM R6E SEDIMENT CONTROL POND			
AREA-20-SUMP	629815	6228589	Collection sump to the west of Area 20/21 excavation receiving seepage flows from the excavation work and actively pumped to R6-EP via R6-EP-US-SD
RSEM-R6E-SP-US	630393	6228828	Upstream of flocculant shack at R6 east sediment pond
RSEM-R6-EP-US-SD	630422	6228901	Ditch along SBIAR Road upstream of culvert
RSEM-R6E-SP	630250	6229153	RSEM R6 East sediment control pond, in-pond
RSEM-R6E-EOP	630274	6229218	RSEM R6 East sediment control pond, end of pipe
RSEM R6W SEDIMENT CONTROL POND			
RSEM-R6W-SP	630240	6229161	RSEM R6 West sediment control pond, in-pond
RSEM-R6W-EOP	630273	6229219	RSEM R6 West pond, end of pipe
RSEM AREA R5A			
RSEM-R5A-P2-A-SP	628058	6230696	Phase 2 RSEM R5A sediment control pond A, in-pond
RSEM-R5A-P2-A-EOP	628085	6230733	Phase 2 RSEM R5A sediment control pond A, end of pipe
RSEM-R5A-P2-B-SP	628034	6230729	Phase 2 RSEM R5A sediment control pond B, in-pond
RSEM-R5A-P2-B-EOP	628085	6230733	Phase 2 RSEM R5A sediment control pond B, end of pipe
RSEM-R5A-P2-C-SP	627455	6231560	Phase 2 RSEM R5A sediment control pond C, in-pond
RSEM-R5A-P2-D-SP	627431	6231592	Phase 2 RSEM R5A sediment control pond D, in-pond

Table 3-14:
Summary of Water Quality Monitoring in 2022 (Right Bank)

Station ID[1]	*In situ* Continuous Measurements[2] (Y / N)	*In situ* Field Measurements		Analytical (Lab) Samples	
		Count[3]	Intended Frequency[4] (D / W / M / P)	Count	Intended Frequency[4] (D / W / M / P)
AREA 30 / SEPTIMUS HILL					
AREA-30-SP	N	5	P	15	P
AREA-30-EOP	N	24	P	12	P
SEPTIMUS-BEAVER-POND	N	0	P	24	P
AREA A/ AREA 24					
AREA-A-NE-SUMP	N	119	D	2	P
AREA-A-N-DITCH	N	42	W	5	M
AREA-24-E-SUMP	N	94	P	1	P
AREA-24-W-SUMP	N	23	P	0	P
APPROACH CHANNEL and AREA 23					
AC-E-SUMP (720 Sump)	N	1	W-M	0	P
AC-S-SUMP	N	0	P	1	P
RBAC-SUMP	N	50	D-W	0	P
RBAC-SUMP-BT	N	0	P	1	P
AREA-23-BT	N	5	D-W	1	P
RSEM AREA R5B					
RSEM-R5B-AC-US	N	28	P	0	P
R5B-P2-W-SUMP	N	2	D-W	0	P
R5B-P2-SUMP	N	162	D-W	43	P
WATER TREATMENT FACILITIES					
MWTF-PAG-POND	N	60	W	34	W
MWTF-CELL-1-PIPE	N	0	P	2 (23[7])	W
MWTF-CELL-3	N	252	D-W	50	W
RSEM-R6-WP-INLET	N	0	P	2	P
RSEM AREA R6					
RSEM R6 EAST SEDIMENT CONTROL POND					
AREA-20-SUMP	N	0	P	1	P
RSEM-R6E-SP-US	N	0	P	1	P
RSEM-R6-EP-US-SD	N	153	W	4	P
RSEM-R6E-SP	Y	115	P	32	P
RSEM-R6E-EOP	N	244	D	245	D
RSEM R6 WEST SEDIMENT CONTROL POND					
RSEM-R6W-SP	Y	24	P	15	P
RSEM-R6W-EOP	N	335	D	335	D
RSEM AREA R5A					
RSEM-R5A-P2-A-SP	Y[5]	56	P	30	P
RSEM-R5A-P2-A-EOP	N	54	D	51	D
RSEM-R5A-P2-B-SP	Y[5]	37	P	6	P
RSEM-R5A-P2-B-EOP	N	3	D	2	D
RSEM-R5A-P2-C-SP	Y[6]	34	P	4	P
RSEM-R5A-P2-D-SP	Y[6]	31	P	2	P

[1] -SP = sediment control pond, in pond location;-EOP = sediment control pond, end of pipe location.
[2] Y = Yes; N = No.
[3] Field duplicates are not included in the table.
[4] Intended monitoring frequency when flow or water level is adequate to obtain *in situ* measurement or surface water sample; D = Daily, W = Weekly, M = Monthly, P = Periodic (as needed). Measurements and samples are collected at the intended frequency if there is sufficient water at the time of monitoring. Intended frequencies are aligned with guidance in the Acid Rock Drainage and Metal Leachate Management Plan (BC Hydro, 2016a).
[5] Sonde was deployed when the pond was discharging.
[6] Sonde was installed during periods when the pond water levels were elevated, however the pond did not discharge.
[7] TSS and turbidity measurements only.

LEGEND

- Monitoring Location

Note: Site C aerial imagery collected September 13, 2022

Coordinate System: *NAD 1983 UTM Zone 10N*
Projection: *Transverse Mercator*
Datum: *North American 1983*
Units: *Meter*

1:15,000

0 200 400 Meters

DATE SAVED:	Jan 30, 2023
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PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project
ARD/ML 2022 Annual Report

TITLE:

Area A and Area 30 Water Quality Sampling Locations

PROJECT #: A416-1

FIGURE: 3-36

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627,000 627,500 628,000 628,500 629,000

6,232,000 6,231,500 6,231,000 6,230,500

N

RSEM-R5A-P2-D-SP

RSEM-R5A-P2-C-SP

PR-US-R5A

Peace River

RSEM-R5A-P2-B-SP

RSEM-R5A-P2-A-SP

RSEM-R5A-P2-B-EOP

RSEM-R5A-P2-A-EOP

LEGEND

- Monitoring Location

Note: Site C aerial imagery collected September 13, 2022

Coordinate System: *NAD 1983 UTM Zone 10N*
Projection: *Transverse Mercator*
Datum: *North American 1983*
Units: *Meter*

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PROJECT:

Site C Clean Energy Project
ARD/ML 2022 Annual Report

TITLE:

RSEM Area R5A Quarry
Water Quality Sampling Locations

PROJECT #: A416-1

FIGURE: 3-37

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3.2.4.1 Area 30 / Septimus Hill

Area 30 is located southeast of the dam construction area and includes the rail loadout facility located on Septimus Hill that receives and stockpiles limestone aggregate from the West Pine Quarry. The limestone at West Pine Quarry has been identified as having a potential for Se leaching under neutral to alkaline conditions. Runoff from the stockpiled aggregate accumulates in the Area 30 sediment control pond, located along the northern edge of Area 30, and discharges to the adjacent Septimus Beaver Pond through a coarse aggregate channel bound in wire cages.

Throughout 2022, the sediment pond or discharge was monitored on at least a monthly frequency in January through October during ice free periods and samples submitted to the analytical laboratory. Occasional discharge was reported in February to September. Visual flow estimates of the Area 30 sediment pond on days when water quality monitoring was conducted indicate flow out of the sediment pond was < 5.0 L/s (Table 3-15). The increased frequency of discharge in April and May are attributed to spring freshet.

Table 3-15:
Area 30 Sediment Pond 2022 Discharge Flows.

Date	Flow Observed (L/s)	Date	Flow Observed (L/s)
25-Jan-22	No flow	24-May-22	No flow
9-Feb-22	No flow	30-May-22	1.0
10-Feb-22	5.0	16-Jun-22	No flow
20-Mar-22	1.0	17-Jun-22	3.0
22-Mar-22	1.0	20-Jun-22	0.2
26-Mar-22	No flow	3-Jul-22	No flow
29-Mar-22	0.5	11-Jul-22	No flow
18-Apr-22	No flow	30-Jul-22	No flow
23-Apr-22	2.0	5-Aug-22	0.5
27-Apr-22	2.0	9-Sep-22	No flow
1-May-22	1.0	17-Sep-22	2.0
4-May-22	2.0	1-Oct-22	No flow
7-May-22	4.5	6-Oct-22	No flow
10-May-22	1.0	22-Oct-22	No flow
14-May-22	0.5		

Field measurements collected at the Area 30 sediment control pond show alkaline conditions, with conductivity ranging from 148 to 3,630 µS/cm (Table 3-16). Sediment pond water quality showed a maximum TSS of 14.4 mg/L. Analytical results for sediment

pond discharge (Area-30-EOP) met the short-term BC WQGs for all parameters except total Fe and Zn (Table 3-16). An elevated Fe concentration (2.04 mg/L) detected in a sample collected on February 10th is attributed to the presence of particulates given the low corresponding dissolved Fe concentration (0.016 mg/L). Elevated total Zn concentrations were observed in samples collected on April 23rd, May 30th and September 17th, showing a maximum concentration of 0.127 mg/L in September. In all samples, the dissolved fraction dominates the Zn inventory. Monitoring results for 2022 do not indicate any seasonality in Zn concentrations (Figure 3-38). It appears that elevated Zn concentrations originate from the galvanized metal cage which binds the riprap blocks together in the sediment pond outlet structure. Diffusion of Zn within the pond is then facilitated via stagnant water from the outlet structure.

Seasonal trends from the 2022 monitoring data for sulphate and selenium concentrations are illustrated in Figure 3-38. The results show sulphate concentrations continually increasing from February to November, and overall ranging from 66 to 2,470 mg/L. Total Se concentrations, however, show a distinct seasonal trend, with peak concentrations observed in May and June and decreasing back toward 0.002 mg/L through October. Concentrations for total Se range from 0.00028 mg/L to 0.012 mg/L. The long-term Se water quality guideline is used as an early screening standard for the sediment pond water but are developed for the receiving environment, which in the case of Area 30 is the Septimus Beaver Pond. These Se concentrations in the sediment pond have triggered ongoing monitoring of the adjacent Septimus Beaver Pond in 2022 to ensure that Se concentrations continue to meet the WQG in the receiving environment.

Monitoring of the Septimus Beaver Pond was performed on April 2nd, June 25th and September 17th at eight spatially distributed locations illustrated in Figure 3-36. Parameters which showed concentrations above the short or long term BC WQGs are summarized below.

- During the April 2nd sampling event, TSS, NH_3-N, and total Cr, Fe, Mn and Zn and dissolved Fe were variably elevated at three locations. The elevated total Cr, Fe and Zn concentrations are attributed to the dominant influence of TSS.
- For the June 25th event, one location showed a sulphate concentration (227 mg/L) above the long-term BC WQG.
- For the September 17th event, one location showed elevated TSS and total Zn. The elevated total Zn concentration was attributed to the presence of particulates rather than dissolved species.

Overall, Se concentrations show a range of 0.00011 mg/L to 0.00048 mg/L in Septimus Beaver Pond samples, well below the long-term BC WQG (0.002 mg/L). In the event that

ongoing monitoring indicates that the Se leaching potential becomes unacceptable, the water management pond in Area 30 will be converted into a zero-discharge holding pond as needed. For the most part, other exceedances noted appear to be associated with sampling technique in the shallow sampling sites that resulted in the incorporation of sediment in the sample.

Table 3-16:
Area 30/Septimus Hill 2022 Annual Water Quality Summary

Parameter		Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	NH_3-N	T-Cr	D-Fe	T-Fe	T-Mn	T-Se	T-Zn
Units		**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
Short-term BC WQG		**6.5-9.0**	**-**	**-**	**WQG**	**-**	**25.5**	**-**	**0.35**	**1**	**1.28**	**-**	**0.033**
Long-term BC WQG		**-**	**-**	**-**		**218**	**1.84**	**0.001 (CrVI), 0.0089 (CrIII)**	**-**	**-**	**0.900**	**0.002**	**0.0075**
Area-30-SP* (n=15 lab, 5 field)	Max	8.0	3,430	3,630	14.4	2,470	0.33	<0.005	<0.05	1.82	1.09	0.0122	0.280
	Min	7.6	205	2,740	<0.98	66	<0.015	<0.001	<0.01	0.049	0.0024	0.00028	<0.005
	Median	7.9	2,010	3,370	3.5	1,240	0.022	0.0014	0.024	0.220	0.0254	0.00566	0.0580
Area-30-EOP* (n=12 lab, 24 field)	Max	8.4	2,680	2,660	12.8	1,640	0.29	0.0022	<0.05	***2.04***	0.591	0.0119	***0.127***
	Min	7.7	307	148	1.7	92	<0.015	<0.001	<0.01	0.067	0.0028	0.00098	<0.005
	Median	8.1	954	1,179	3.7	411	0.031	0.0010	0.016	0.193	0.0261	0.00591	0.0186
SEPTIMUS-BEAVER-POND* (n=24 lab, 0 field)	Max	-	863	-	***60.3***	**227**	**2.43**	**0.0030**	***0.40***	***2.69***	***1.80***	0.00048	**0.0256**
	Min		139		1.77	3	0.018	<0.001	0.050	0.133	0.0161	<0.0001	<0.005
	Median		615		8.0	96	0.053	0.0010	0.136	0.367	0.564	0.00017	0.005

Notes: TSS = Total suspended solids.
WQG = BC water quality guideline for aquatic life. The BC WQG for TSS is used as the discharge limit for PAG-containing RSEM pond EOP limits, per the CEMP, Appendix E Rev. 5.2, Section 7, Table 2, page 23. TSS guideline is dependent on background TSS readings in Peace River. Calculated guidelines (*i.e.*, those based on hardness, pH, temperature, or chloride levels) are based on the minimum data statistic measured at the stations in 2022. Temperature of 10°C assumed.
*Station Area-30-EOP is only screened against short-term BC WQGs while receiving station Septimus-Beaver-Pond is screened against both short-term and long-term BC WQGs.
Water quality for these stations is screened against WQGs to guide water management (Section 3.2.1) and does not imply non-compliance with the CEMP. ***Red italics*** indicate the result is elevated relative to the short-term BC WQGs and **bolded values in orange highlight** indicate the result is elevated relative to the long-term BC WQGs.

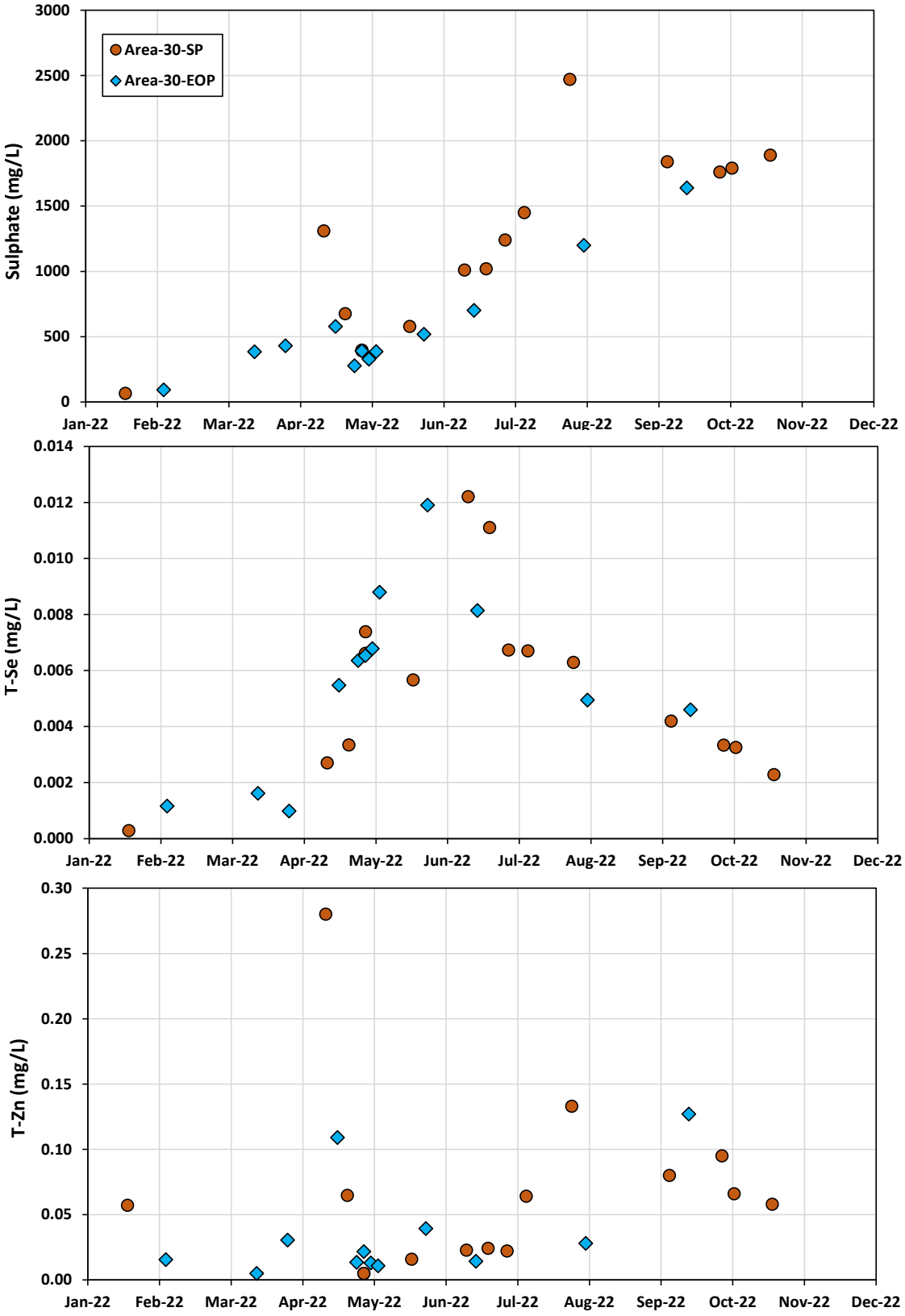

Figure 3-38: Time series profiles for sulphate, total selenium (Se) and total zinc (Zn) for Area-30-SP and Area-30-EOP samples.

3.2.4.2 Area A/Area 24

Area A is located south-east of the dam construction area, and east of the SBIAR ditch. Within this area, NPAG overburden and aggregate are excavated and transported to the Phase 2 Crusher to produce aggregate that is temporarily stockpiled for use at the construction site. Phase 2 Crusher water is directed to settling ponds in Area A to settle TSS, and clarified water is recycled within the crusher circuit.

The Area-A-N-Ditch which receives seepage from the Crusher settling ponds and runoff from the slope northwest and downgradient of the Phase 2 Crusher facility is located along the northern edge of Area A (Figure 3-36). Water accumulating in the Area-A-N-Ditch was periodically discharged to adjacent vegetation or the Peace River side channel, dewatered to the crusher ponds or pumped to the West SBIAR ditch and directed to the RSEM R6 East Pond.

Surface runoff and groundwater accumulates in low-lying, excavated areas within the eastern side of Area A and Area 24. Accumulated water was monitored in several of the low-lying inundated areas including the AREA-A-NE-SUMP and the Area-24-E-Sump and the Area-24-W-Sump. Water from the Area-24-W-Sump was directed to the Area A-NE-Sump or to the Area-24-E-Sump through a constructed drainage ditch. Water accumulating in the Area A-NE-Sump was periodically dewatered to the crusher ponds or discharged to adjacent vegetated areas. Flow from Area 24 East was passively channelled to an unnamed watercourse.

Throughout 2022, analytical samples were collected primarily for TSS and turbidity, while field measurements were taken when sufficient water was present. All AREA-A-N-DITCH, AREA-A-NE-SUMP, Area-24-E-Sump and Area-24-W-Sump field measurements show circumneutral to alkaline pH values (Table 3-17). Higher TSS (up to 100 mg/L) was measured at the AREA-A-NE-SUMP compared to other Area A/Area 24 stations (<21 mg/L). The AREA-A-NE-SUMP analytical sample collected on August 15th show TSS and total Fe concentrations above the short-term BC WQGs. Note that these screening results are not directly relevant since AREA-A-NE-SUMP water is not discharged to a watercourse. However, they do provide a comparative reference point for other Area A/Area 24 stations, namely AREA-A-N-DITCH, which also show total Fe concentrations above the short-term BC WQG in samples collected on January 25th and March 21st. All other analytical results show parameter concentrations below the BC WQGs.

Table 3-17:
Area A 2022 Annual Water Quality Summary

Parameter		Field pH	Lab Conductivity	Field Conductivity	TSS	T-Fe
Units		**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**
Short-term BC WQG		**6.5-9.0**	**-**	**-**	**WQG**	**1**
AREA-A-NE-SUMP (n=2 lab, 17 TSS/Turbidity only, 119 field)	Max	8.6	1,010	1,000	***100***	***2.45***
	Min	7.1	646	403	1.9	0.037
	Median	8.1	828	664	11.1	***1.24***
AREA-A-N-DITCH (n=5 lab, 1 TSS/Turbidity only, 42 field)	Max	8.6	504	591	11.5	***3.25***
	Min	7.4	317	285	<1	0.023
	Median	8.0	386	411	3.6	0.12
Area-24-E-Sump (n=1 lab, 16 TSS/12 Turbidity only, 94 field)	Max	8.7	543	857	15.2	0.050
	Min	7.3		491	<1	
	Median	8.4		596	4.3	
Area-24-W-Sump (n=4 lab TSS/Turbidity only, 23 field)	Max	8.3	-	737	20.8	-
	Min	7.4		565	1.5	
	Median	7.7		640	5.9	

Notes: TSS = Total suspended solids.
WQG = BC water quality guideline for aquatic life. The BC WQG for TSS is used as the discharge limit for PAG-containing RSEM pond EOP limits, per the CEMP, Appendix E Rev. 5.2, Section 7, Table 2, page 23. TSS guideline is dependent on background TSS readings in Peace River. Calculated guidelines (*i.e.*, those based on hardness, pH, temperature, or chloride levels) are based on the minimum data statistic measured at the stations in 2022. Temperature of 10°C assumed.
Water quality for these stations is screened against WQGs to guide water management (Section 3.2.1) and does not imply non-compliance with the CEMP. ***Red italics*** indicate the result is elevated relative to the short-term BC WQGs.

3.2.4.3 Approach Channel and Area 23

The Approach Channel is located south of the Powerhouse and extends from Area 21 northwest to RSEM Area R5B. Excavation of the Approach Channel PAG bedrock slope was initiated in late 2018 and the major excavation was completed in March 2022. Beginning April 1st, AFDE assumed responsibility for water management within the Approach Channel. As such, ARD water quality monitoring in the Approach Channel was only performed by PRHP in Q1 2022. Runoff managed by AFDE is transferred to the PRHP water management system for treatment by the MWTF/WTP, if necessary, and discharged through an RSEM sediment control pond.

During Q1 2022, surface runoff, groundwater seepage and PAG-contact waters from the Approach Channel were intercepted and managed with a network of sumps, ditches, baker tanks and active water management (*i.e.*, pumps, hoses and water trucks). Runoff and groundwater seepage along the upper benches of the excavation were directed to AREA-23-BT, and periodically trucked to the RSEM R6 East sediment control pond. The lower bench sump (AC-E-SUMP) was dewatered to the MWTF until it was decommissioned late February during the final stages of Approach Channel excavation. The RBAC-SUMP-BT baker tank stores water from the RBAC groundwater seep and the RBAC-SUMP and were also dewatered to the MWTF. PAG contact seepage flows from the south slopes of the Approach Channel were channeled into the south collection sump (AC-S-SUMP) which was directed into the RSEM-R5B-P2-SUMP through a drainage ditch connected to the eastern collection channel. After Q1 2022, the majority of Approach Channel water was transferred by AFDE to PRHP via the R5B Phase 2 Sump.

Throughout Q1 2022 field measurements were collected daily from the RBAC-SUMP and periodically from the other Approach Channel stations when water was present in sufficient quantity for monitoring. Analytical samples were collected infrequently with one sample collected at the AC-S-SUMP, RBAC-SUMP-BT and AREA-23-BT monitoring stations.

Despite the potential for strong PAG influence in the Approach Channel, the freshly exposed bedrock had not yet become acidic and water quality samples collected at the monitoring stations were typically circumneutral to alkaline, as shown in Table 3-18. One sample at the RBAC sump (February 17) is particularly alkaline showing a pH of 11.6, possibly indicating cement influence in the sump at that time.

Water quality at stations directed to the MWTF showed variable field conductivity up to 2,540 µS/cm and a moderate sulphate level (160 mg/L; Table 3-18). The RBAC-SUMP-BT sample collected in January shows a partial influence of TSS on observed metal concentrations, particularly for Cd and Zn. The AC-S-SUMP sample collected in March also shows TSS influenced metal concentrations. Water quality in the AREA-23-BT baker tank collected in February is characterized by moderate field conductivity (758 µS/cm) and sulphate concentration (131 mg/L).

Table 3-18:
Approach Channel 2022 Annual Water Quality Summary

Parameter		Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	D-Al	T-As	D-Cd	T-Co	T-Cu	T-Fe	T-Mn	T-Zn
Units		-	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
AC-E-SUMP (n=0 lab, 1 field)	Value	8.8	-	487	-	-	-	-	-	-	-	-	-	-
AC-S-SUMP (n=1 lab, 0 field)	Value	-	1,130	-	64.6	244	<0.003	0.00238	<0.00001	0.00297	0.00239	1.39	0.0184	0.0066
RBAC-SUMP (n=0 lab, 50 field)	Max	11.6	-	2,540	-	-	-	-	-	-	-	-	-	-
	Min	7.2		273										
	Median	8.2		913										
RBAC-SUMP-BT (n=1 lab, 0 field)	Value	-	948	-	46.2	160	0.277	0.00106	0.000208	0.0111	0.00439	1.04	0.150	0.071
AREA-23-BT (n=1 lab, 5 field)	Max	8.2	871	822	6.71	131	<0.003	0.00041	0.000031	0.00304	0.00069	0.084	0.0544	<0.005
	Min	7.8		721										
	Median	7.9		758										

Notes: TSS = Total suspended solids.

3.2.4.4 RSEM Area R5B

RSEM Area R5B is located northwest of the Approach Channel area. Responsibility for water management within the Approach Channel was assumed by AFDE on April 1st, 2022. Contact water from this area is collected by AFDE and directed to the R5B Phase 2 Sump, where PRHP redirects it for discharge from the site as deemed appropriate. The RSEM-R5B-AC-US drainage ditch drains to the R5B Phase 2 sump and primarily collects water from the Approach Channel. The R5B Phase 2 West Sump receives water from the ditches and sumps along the 777 Haul Road and from within the RSEM Area R5B Phase 2 catchment.

In 2022, water from the R5B West Sump was pumped to the R5B Phase 2 sump or trucked to the MWTF/WTP, as needed. In March, April and May, the R5B Phase 2 sump was dewatered to the RSEM R6 East Pond via the SBIAR ditch, as required. Subsequently, pumping systems were constructed to allow for pumping of R5B Phase 2 sump water directly to RSEM R5A Pond A, the RSEM R6 ponds or to the MWTF/WTP when water levels were high. Throughout the end of Q2 and into Q4, R5B Phase 2 sump water was periodically transferred to RSEM R5A Pond A or to the MWTF/WTP, depending on the water quality observed.

Field measurements were collected daily to weekly in February to October when adequate quantity of water was present in the R5B Phase 2 Sump. Field monitoring was performed at a lower frequency at RSEM-R5B-AC-US and R5B-P2-SUMP. Water quality measured at the R5B-P2-W-SUMP, RSEM-R5B-P2-SUMP and RSEM-R5B-AC-US showed circumneutral to alkaline conditions (Table 3-19). Conductivity measurements were generally higher in RSEM-R5B-AC-US samples, showing a maximum value of 3,010 µS/cm. Analytical results for R5B-P2-SUMP water show variable TSS (2.5 to 100 mg/L) and sulphate (212 to 732 mg/L) values, while total metal concentrations occasionally indicated a partial influence of TSS particularly for Co, Cu, Fe, Mn and Zn.

Table 3-19:
RSEM Area R5B 2022 Annual Water Quality Summary

Parameter		Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	D-Al	T-As	D-Cd	T-Co	T-Cu	T-Fe	T-Mn	T-Zn
Units		**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
RSEM-R5B-AC-US (n=0 lab, 28 field)	Max	9.6	-	3,010	-	-	-	-	-	-	-	-	-	-
	Min	8.0		717										
	Median	8.7		1,153										
RSEM-R5B-P2-W-SUMP (n=0 lab, 2 field)	Max	8.0	-	1,862	-	-	-	-	-	-	-	-	-	-
	Min	7.6		358										
	Median	7.8		1,110										
RSEM-R5B-P2-SUMP (n=43 lab, 162 field)	Max	9.6	1,860	1,993	100	732	0.0864	0.00582	0.000909	0.0333	0.00717	2.8	0.462	0.190
	Min	7.2	647	354	2.5	212	0.0045	0.00069	<0.00001	0.00040	0.00083	0.060	0.0053	<0.005
	Median	8.6	1,190	1,191	11.6	300	0.0152	0.00236	0.000010	0.00127	0.00194	0.469	0.0312	0.0104

Notes: TSS = Total suspended solids.

3.2.4.5 Water Treatment Facilities

Water treatment was formerly (January 1st to July 7th) undertaken by Ensero Solutions in the Mobile Water Treatment Facility (MWTF). Commissioning of PRHP's self-performed water treatment plant (WTP) was conducted from June 12th to 19th. PRHP assumed operation of water treatment on July 8th, 2022, using a newly constructed reagent mixing facility in place of the mobile facility. The PRHP self-operated treatment system is referred to as the Water Treatment Plant (WTP) and is in the same location as the former MWTF. A complete description of the transition in ARD water treatment management for 2022 is provided in Section 4.3.3.

The WTP on the Right Bank is used to treat PAG contact water to meet the RSEM end of pipe discharge limits. It is located in the RSEM Area R6 catchment adjacent to the RBDT facilities. The former AK Pond is the WTP Pre-Treatment pond. Water that requires treatment is stored in the WTP Pre-Treatment Pond to supply a steady flow of influent to the WTP; however, the WTP can be periodically shutdown due to low water levels. Treated water is routed through the WTP Sludge Pond to settle solids and lower pH prior to discharge of the treated effluent. The clarified and pH adjusted treated effluent is discharged from the Sludge Pond Cell 3 to the RSEM R6 West sediment control pond by gravity flow through a lined discharge channel. A portion of the discharge channel passes through a zinc-plated corrugated steel culvert located under an access road crossing.

Beginning on January 11, 2022, discharge from the MWTF was redirected around the galvanized corrugated culvert at the AFDE road crossing of the MWTF discharge channel, to the RSEM R6 West pond. MWTF discharge was redirected as the culvert was found to be the cause of the elevated Zn concentrations measured in the West pond in 2021. On January 10th, water quality at the inlet to the RSEM R6 West Pond (RSEM-R6-WP-IN) was collected to confirm the source of the elevated Zn (0.41 mg/L) (Table 3-20). On May 13th, another analytical sample was collected from RSEM-R6-WP-IN which showed a significantly lower Zn concentration (0.076 mg/L). Flow through the culvert was re-initiated on the same day and continued for the remainder of 2022.

During operation of the MWTF, analytical samples were collected weekly by Ensero at the MWTF-PAG-POND, MWTF-Cell-1-Pipe (TSS only), and MWTF-Cell-3 when the plant was operating. A similar monitoring frequency was employed for the PRHP operated WTP for analytical sample collection at the Pre-Treatment Pond and MWTF-SLP-R6 (analogous to the MWTF-PAG-POND and MWTF-Cell-3, respectively). Throughout 2022, field measurements were collected at MWTF-Cell-3 every few days when the MWTF/WTP was discharging. Under the PRHP operated WTP, field measurements were also collected every

few days at the Pre-Treatment Pond (MWTF-PAG-POND) when the WTP was operational.

Throughout 2022, MWTF-PAG-POND water samples were alkaline and occasionally showed elevated TSS and TSS influenced metal concentrations (Table 3-20). By comparison, analytical samples collected at the inflow to the sludge settling pond (MWTF-Cell-1-Pipe) show TSS levels up to 970 mg/L. At MWTF-Cell-3, treated effluent samples show circumneutral to alkaline pH conditions, relatively low TSS (<25 mg/L) and a maximum sulphate concentration of 608 mg/L. The most alkaline field pH measurement (9.2) reported was observed on September 7, which prompted sparging of WTP Cell 3 with CO_2 throughout the remainder of 2022. Following this action, pH measurements declined and remained below pH 9. Concentrations of analytical parameters indicate that both the MWTF and WTP were effective at reducing TSS and metal concentrations in treated effluent compared to corresponding influent concentrations (Section 4.3.3).

Table 3-20:
Water Treatment Facilities 2022 Annual Water Quality Summary

Parameter		Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	D-Al	T-As	D-Cd	T-Co	T-Cu	T-Fe	T-Mn	T-Zn
Units		-	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MWTF-PAG-POND (PRE-TREATMENT POND) (n=34 lab, 60 field)	Max	9.2	1,840	1,876	140	809	0.238	0.00469	0.00104	0.0361	0.0145	6.7	0.581	0.287
	Min	8.3	911	957	4.3	196	0.0057	0.00055	<0.00001	0.00023	0.00146	0.148	0.0047	<0.005
	Median	8.6	1,260	1,231	16.9	303	0.0302	0.00173	0.000013	0.00273	0.00442	0.723	0.0968	0.0253
MWTF-Cell-1-Pipe (PRHP-WTF-REACTOR-EOP) (n=2 lab, 23 lab TSS only, 0 field)	Max	-	1,460	-	970	511	0.064	0.00161	<0.00001	0.0007	0.00347	0.668	0.0244	0.0139
	Min		1,110		62	285	0.0263	0.00134	<0.00001	0.00034	0.00266	0.272	0.0121	0.0112
	Median		1,285		250	398	0.0453	0.00148	0.000010	0.00054	0.00307	0.470	0.0183	0.0126
MWTF-Cell-3 (MWTF-SLP-R6) (n=50 lab, 252 field)	Max	9.2	1,510	1,665	25	608	0.1170	0.0018	0.000075	0.00378	0.0033	0.809	0.0481	0.0251
	Min	6.3	456	106	<1	75	0.0039	0.00031	<0.000005	0.00011	<0.0005	0.015	0.0011	<0.003
	Median	7.6	1,010	821	4.2	243	0.0237	0.00095	0.000010	0.00031	0.00149	0.108	0.0094	0.0050
RSEM-R6-WP-INLET (n=2 lab, 0 field)	Max	-	1,070	-	9	364	0.0494	0.0015	0.000015	0.00056	0.0012	0.102	0.0216	0.4120
	Min		791		3.4	174	0.0117	0.00116	0.000012	0.00016	0.00118	0.102	0.0105	0.0756
	Median		931		6.0	269	0.0306	0.00133	0.000013	0.00036	0.00121	0.102	0.0161	0.2438

Notes:
TSS = Total suspended solids
Corresponding IDs for Ensero MWTF and PRHP WTP stations are provided in the table above with PRHP stations provided in brackets.

3.2.4.6 RSEM Area R6 Sediment Control Ponds

The RSEM Area R6 East and West sediment control ponds are divided by a berm which isolates the two ponds from each other. The berm was designed to allow the cells to merge in a large (greater than 1-in-10 year 24-hour) storm event. The East and West ponds discharge through separate culverts onto a shared rip rap-protected outfall, which descends the bank to the Peace River. Two stations have been established in each pond: one station within the pond itself (the SP station), and another for sampling discharge from the end of pipe (the EOP station). The EOP station is sampled if there is discharge at the time of monitoring.

The RSEM R6 East and West sediment control ponds receive surface runoff and periodic discharges from water from Area 20, Area 21, Area 54 and from the remaining RSEM Area R6 catchment. The RSEM R6 West sediment control pond has been receiving treated effluent from the water treatment sludge ponds since May 9, 2020. The R5B Phase 2 sump was periodically dewatered to the RSEM R6 East Pond in Q1 and Q2, and to the RSEM R6 West Pond in Q1.

Analytical water quality monitoring of RSEM R6 East and West sediment control ponds was conducted throughout 2022, including daily samples at EOP when discharging or occasional in-pond sampling as water levels allowed. The monitoring records indicate that the RSEM R6 East and West sediment control ponds discharged most days in 2022. The East Pond discharged nearly daily from April to November, while the West pond discharged nearly daily from February to December. Discharged flows from both ponds generally remained < 20 L/s. However, elevated flows (mostly up to 60 L/s) were observed at the East pond in September and October due to high flows through the SBIAR ditch associated with dewatering of Area 54 and sections of Area 20/21.

The continuous in situ sonde was deployed in-pond throughout 2022 at both ponds. excluding brief periods when the pond was not discharging due to low water levels, or the sonde required maintenance. Field measurements were collected on a daily to weekly basis at RSEM-R6-EP-US-SD, upstream of the RSEM R6 East pond, when water was flowing. Analytical water quality data and in situ field pH measurements for RSEM Area R6 East and West Ponds are summarized in the sections below.

RSEM Area R6 East Catchment

Individual analytical samples were collected to characterize waters directed to the RSEM R6 East Pond from the Area-20-Sump (directed via the SBIAR ditch) and from RSEM-R6E-SP-US (located upstream of the flocculant shack). The Area-20-Sump sample (July 8th) showed alkaline pH, elevated TSS and a low sulphate concentration. TSS

measured in the RSEM-R6E-SP-US and corresponding RSEM-R6E-EOP sample on April 10th showed that mitigation (flocculant addition) effectively reduced TSS to below the EOP limit.

Monitoring results for RSEM-R6-EP-US-SD, located at the inlet to the RSEM R6 East sediment control pond conveyance ditch, show mostly alkaline conditions, with the exception of a slightly acidic field pH value (5.8) measured on April 29th. TSS concentrations were generally high and variable, ranging from 194 mg/L to 27,600 mg/L. The latter measurement (April 27th) coincided with a precipitation event, and corresponds to TSS influenced metal concentrations for total As, Cu, Fe, Mn and Zn. Overall, sulphate levels are moderate and remain <379 mg/L.

Analytical water quality data and field pH measurements for RSEM R6 East pond stations are summarized in Table 3-21 and trends in water quality are illustrated in Figure 3-39 through Figure 3-49. The 2022 monitoring data indicate the RSEM R6 East sediment control pond water and EOP discharges were circum-neutral to slightly alkaline, with sulphate concentrations up to 417 mg/L. The RSEM EOP limits were met for all analytical samples and in situ field pH measurements for RSEM R6 East sediment control pond discharges, with few exceptions. The RSEM EOP limits were exceeded for total Cd, Cu and Zn in the March 17th discharge sample, with elevated metal concentrations associated with the elevated TSS. The elevated TSS measured in this sample is not considered an exceedance as per the PRHP screening protocol for clear flow conditions in Peace River, which requires a TSS concentration in discharged water to be above the BC short-term WQG for 24 hours (two consecutive days) to be considered an exceedance of the RSEM end-of-pipe limit. For reference, TSS measured at EOP on the following day (March 18th) was 3.8 mg/L.

RSEM Area R6 West Catchment

Results for RSEM R6 West sediment control pond stations are summarized in Table 3-21 and water quality trends are illustrated in Figure 3-50 through Figure 3-60. The 2022 monitoring data indicate that the RSEM R6 West sediment control pond water and EOP discharges were circum-neutral to slightly alkaline, with sulphate concentrations up to 588 mg/L. All discharge analytical samples and *in situ* field measurements met RSEM EOP limits except for total Zn in the January 4th (0.084 mg/L), January 10th (0.0801 mg/L) and January 11th (0.0922 mg/L) samples. The Zn exceedance is attributed to soluble Zn released from the zinc plated corrugated steel culvert which is in contact with WTP treated effluent flowing to the RSEM R6 West pond. Total Zn levels remain below the EOP limit following redirection of WTP discharge around the culvert starting on January 11th. Flow through the culvert was re-initiated on May 13th and continued for the remainder of 2022. However, no additional exceedances of total Zn were observed in discharges from the RSEM R6 West Pond.

Table 3-21:
RSEM R6 East and West Pond 2022 Annual Water Quality Summary

Parameter		Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	D-Al	T-As	T-Cd	D-Cd	T-Co	T-Cu	T-Fe	T-Mn	T-Zn
Units		**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
RSEM EOP Limit[1]		**6.0-9.0**	**-**	**-**	**WQG**	**-**	**0.46**	**0.05**	**0.00029**	**0.00186**	**0.55**	**0.0163**	**10.3 (July-March), 20.9 (April-June)**	**8.29**	**0.251**
RSEM-R6E-SP-US (n=1 lab, 0 field)	Value	-	1,080	-	63	315	0.0697	0.00066	0.000735	0.00048	0.0174	0.00515	2.00	0.333	0.139
RSEM-R6E-EP-US-SD (n=4 lab, 153 field)	Max	9.2	1,220	1,429	27,600	379	0.114	0.10	0.0174	0.00055	0.258	0.645	580	13.4	2.76
	Min	5.8	325	209	194	35	0.0149	0.00513	0.000521	<0.00001	0.00930	0.0136	10.9	0.347	0.0923
	Median	8.4	948	674	1,469	204	0.0280	0.0173	0.00295	0.000068	0.0554	0.0785	73.2	1.66	0.611
RSEM-R6E-SP (n=32 lab, 115 field)	Max	8.4	1,320	1,738	33.9	253	0.0275	0.00141	0.000089	0.000036	0.00685	0.0108	2.37	1.02	0.0209
	Min	7.2	343	341	<1	49	<0.003	0.00026	<0.00001	<0.00001	<0.0002	0.00054	0.051	0.0183	<0.005
	Median	7.8	659	663	3.2	92	0.0059	0.00058	0.000013	0.000010	0.00095	0.00092	0.106	0.0932	0.0051
RSEM-R6E-EOP (n=245 lab, 244 field)	Max	8.8	1,250	1,395	629[2]	417	0.0914	0.00439	***0.000559***	0.000396	0.0163	***0.0142***	12.1	0.482	***0.0795***
	Min	7.0	374	366	<0.97	46	<0.003	0.00019	<0.00001	<0.00001	<0.0002	<0.0005	0.033	0.0032	<0.005
	Median	8.3	550	577	2.8	91	0.0092	0.00038	0.000016	0.000010	0.00022	0.00074	0.094	0.0140	0.0050
Area 20 (n=1 lab, 0 field)	Value	-	786	-	133	61	0.0037	0.00258	0.000107	<0.00001	0.00174	0.00489	4.74	0.120	0.0137
RSEM-R6W-SP (n=15 lab, 24 field)	Max	8.6	1,250	1,244	18.6	427	0.0419	0.00169	0.000047	0.000037	0.00096	0.00550	0.183	0.0766	0.104
	Min	6.6	484	473	2.8	127	0.0047	0.00045	<0.00001	<0.000005	<0.0002	0.00056	0.037	0.0072	<0.003
	Median	7.5	812	771	7.9	198	0.0156	0.00104	0.000018	0.000010	0.00050	0.00162	0.118	0.0451	0.0078
RSEM-R6W-EOP (n=335 lab, 335 field)	Max	8.8	1,510	1,559	29.7	588	0.0706	0.00150	0.000148	0.000058	0.00173	0.00374	1.42	0.158	***0.0842***
	Min	6.8	278	204	<0.95	72	0.0044	0.00028	0.0000064	0.000006	<0.0002	0.00054	0.012	0.0016	<0.003
	Median	8.0	882	876	2.3	218	0.0162	0.00088	0.000011	0.000010	0.00024	0.00113	0.059	0.0085	0.0050

Notes: TSS = Total suspended solids.
WQG = BC water quality guideline for aquatic life. The BC WQG for TSS is used as the discharge limit for PAG-containing RSEM pond EOP limits, per the CEMP, Appendix E Rev. 5.2, Section 7, Table 2, page 23. TSS guideline is dependent on background TSS readings in Peace River.
[1]RSEM EOP Limit only applies to RSEM sediment control pond discharge (-EOP samples). Only revised RSEM EOP Limits (Revision 10.1, dated April 6, 2022) are shown in the table, with the exception of T-Cd, which shows the original RSEM EOP Limit (Appendix E Revision 5.2, dated July 26, 2016) that applies from January 1st to April 6th, 2022. The revised RSEM EOP Limits (Revision 10.1, dated April 6, 2022) apply from April 6th, 2022 onwards and have been revised from those applied previously to RSEM pond discharges (Appendix E Revision 5.2, dated July 26, 2016).
Water quality for station RSEM-R6E-EOP and RSEM-R6W-EOP is screened against RSEM EOP limits. ***Gold italics*** indicate the result is elevated relative to the revised RSEM EOP Limit (Revision 10.1, dated April 6, 2022). Note that the maximum total Fe concentration was detected in a sample from March 17th and thus is not considered an exceedance. ***Blue italics*** indicate the result is elevated relative to the original RSEM EOP Limits (Appendix E Revision 5.2, dated July 26, 2016).
[2]The TSS value measured on March 17th was elevated relative to the calculated guideline; however, the pond discharge was not above the WQG for more than 24 hours (two consecutive days) thus it is not considered an exceedance of the RSEM EOP Limit

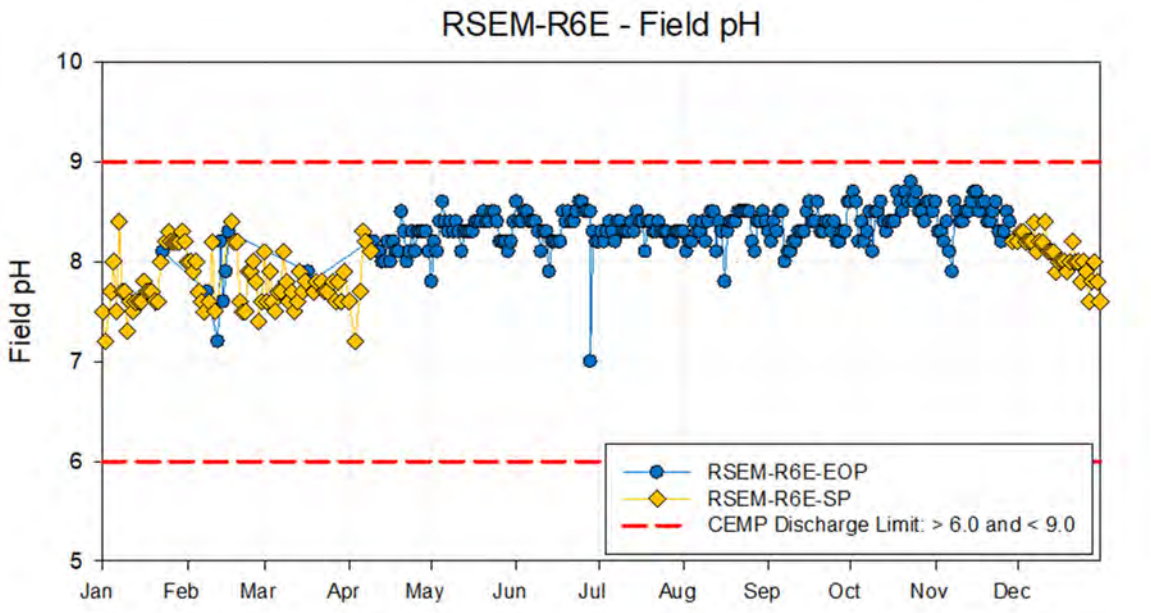

Figure 3-39: Time series profile for field pH in RSEM-R6 East compared to RSEM EOP Limits in 2022. EOP – End of Pipe; SP – Sediment Pond.

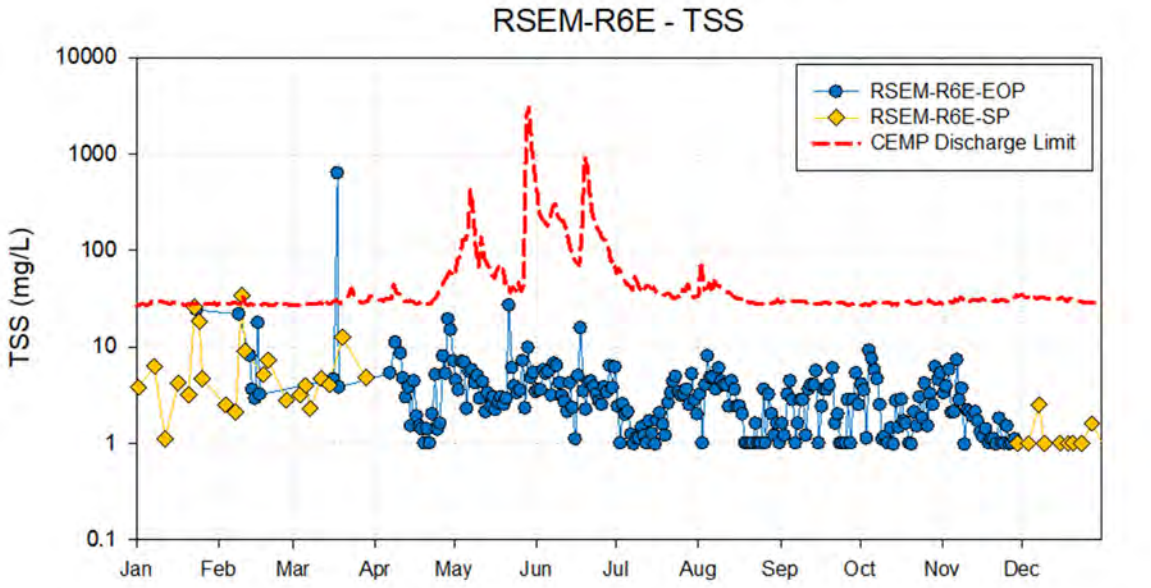

Figure 3-40: Time series profile for total suspended solids (TSS) in RSEM-R6 East compared to RSEM EOP Limits in 2022. TSS is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond.

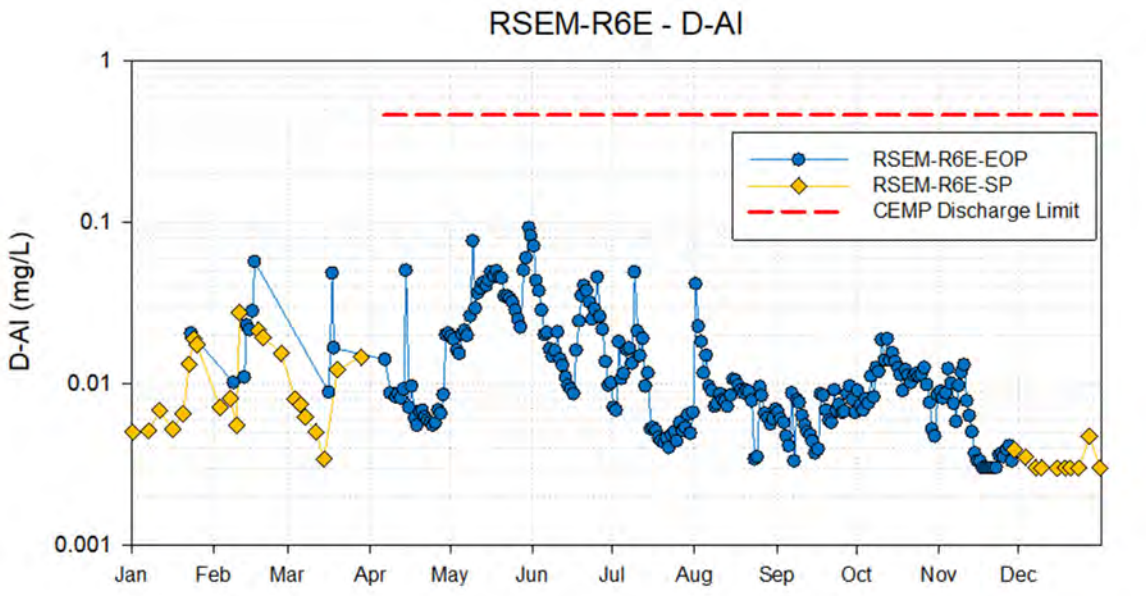

Figure 3-41: Concentrations of dissolved aluminum (Al) for RSEM-R6 East compared to RSEM EOP Limits in 2022. D-Al is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; D – Dissolved Concentrations.

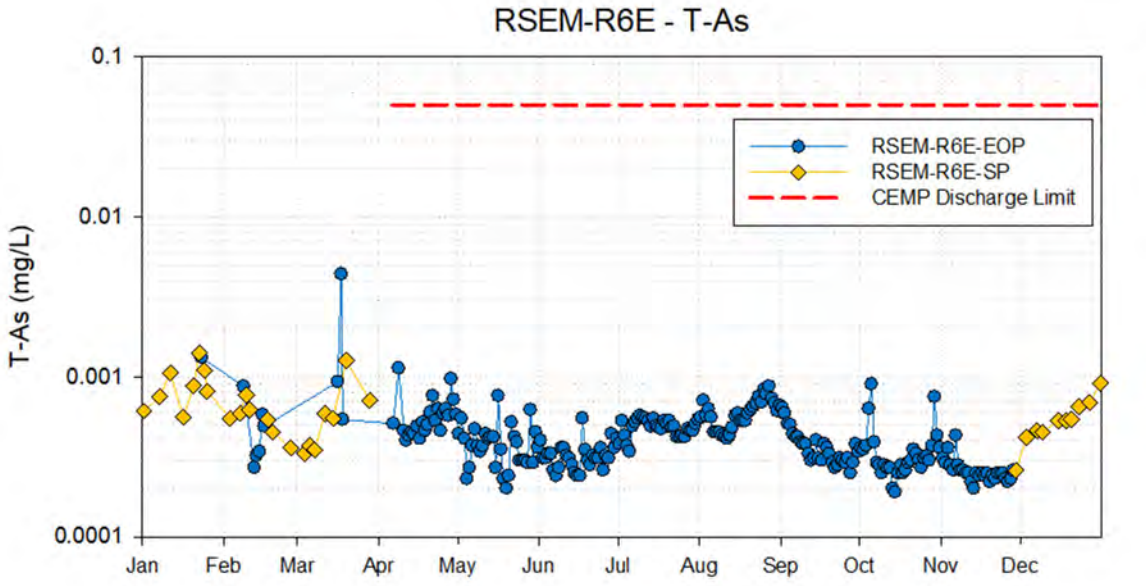

Figure 3-42: Concentrations of total arsenic (As) for RSEM-R6 East compared to RSEM EOP Limits in 2022. T-As is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

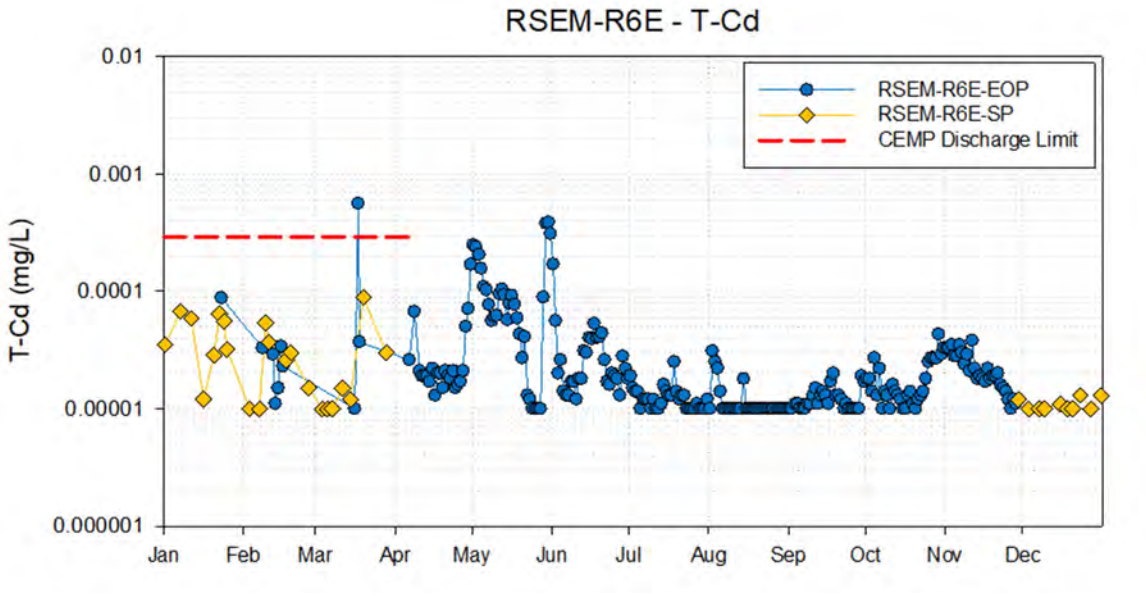

Figure 3-43: Concentrations of total cadmium (Cd) for RSEM-R6 East compared to RSEM EOP Limits in 2022. T-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Dissolved Concentrations.

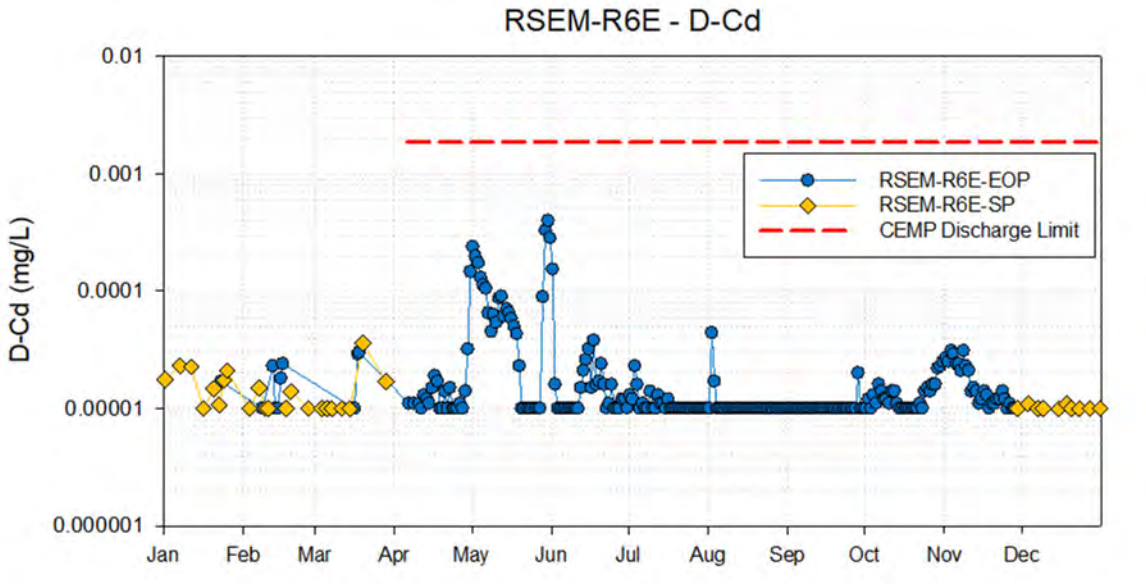

Figure 3-44: Concentrations of dissolved cadmium (Cd) for RSEM-R6 East compared to RSEM EOP Limits in 2022. D-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; D – Dissolved Concentrations.

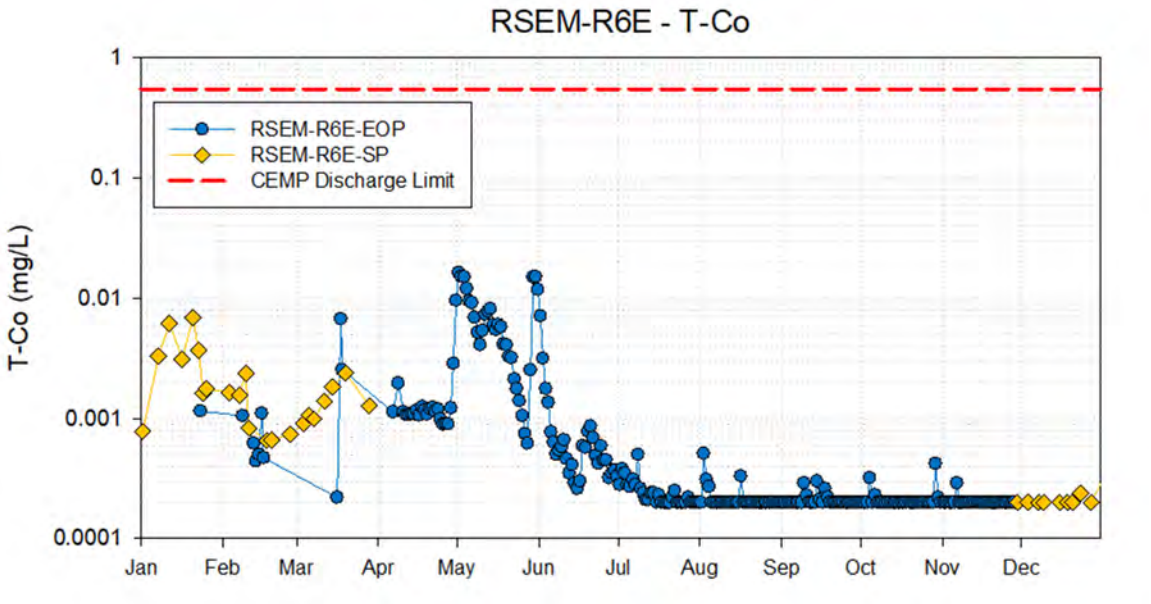

Figure 3-45: Concentrations of total cobalt (Co) for RSEM-R6 East compared to RSEM EOP Limits in 2022. T-Co is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

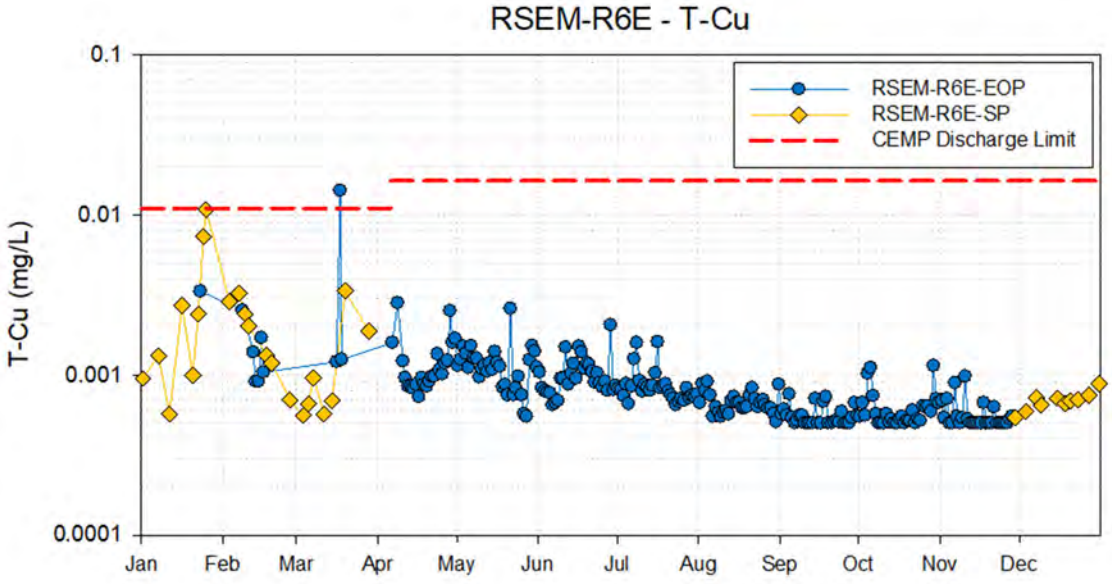

Figure 3-46: Concentrations of total copper (Cu) for RSEM-R6 East compared to RSEM EOP Limits in 2022. T-Cu is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

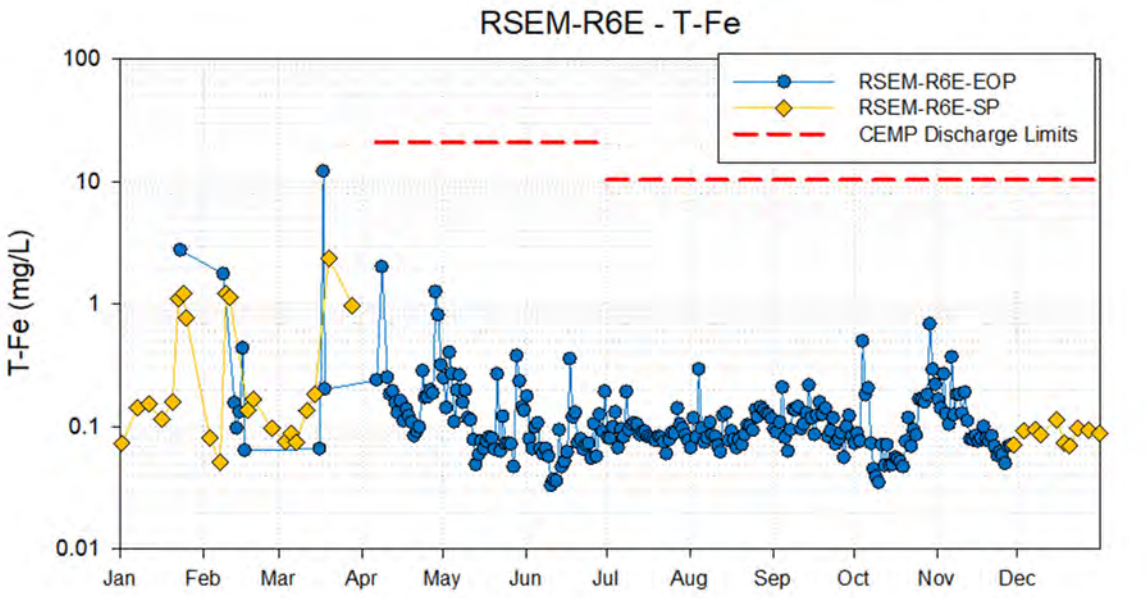

Figure 3-47: Concentrations of total iron (Fe) for RSEM-R6 East compared to RSEM EOP Limits in 2022. T-Fe is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

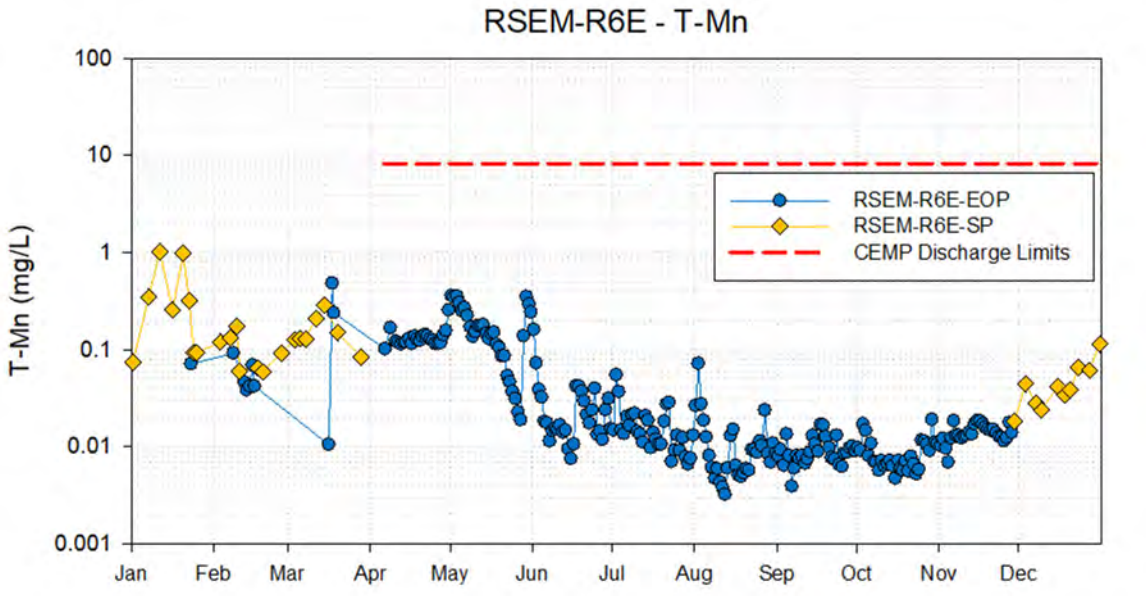

Figure 3-48: Concentrations of total manganese (Mn) for RSEM-R6 East compared to RSEM EOP Limits in 2022. T-Mn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

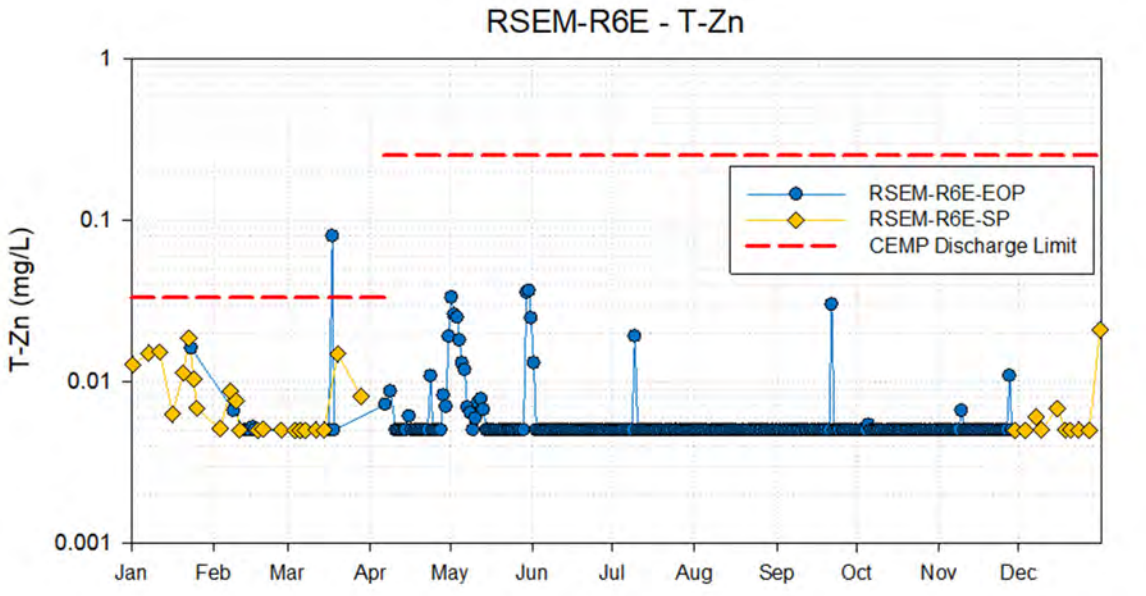

Figure 3-49: Concentrations of total zinc (Zn) for RSEM-R6 East compared to RSEM EOP Limits in 2022. T-Zn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

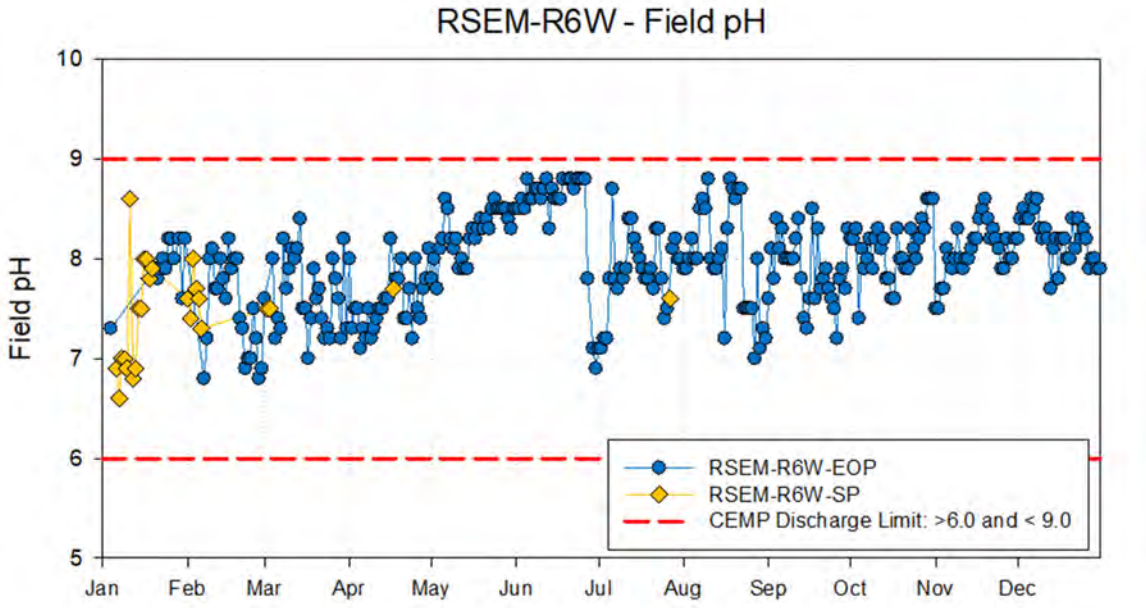

Figure 3-50: Time series profile for field pH in RSEM-R6 West compared to RSEM EOP Limits in 2022. EOP – End of Pipe; SP – Sediment Pond.

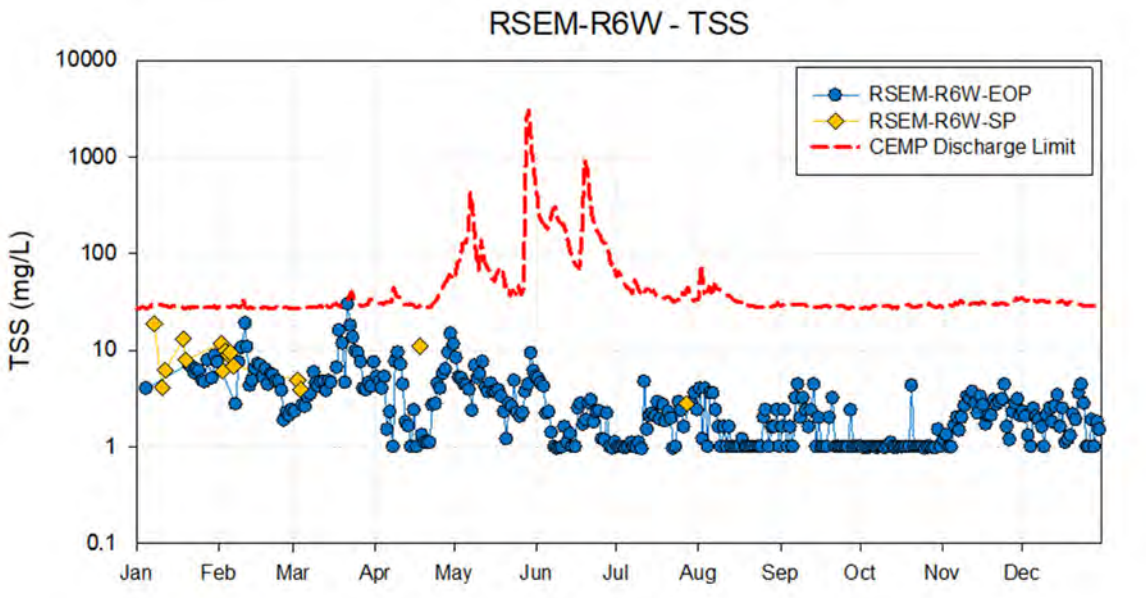

Figure 3-51: Time series profile for total suspended solids (TSS) in RSEM-R6 West compared to RSEM EOP Limits in 2022. TSS is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond.

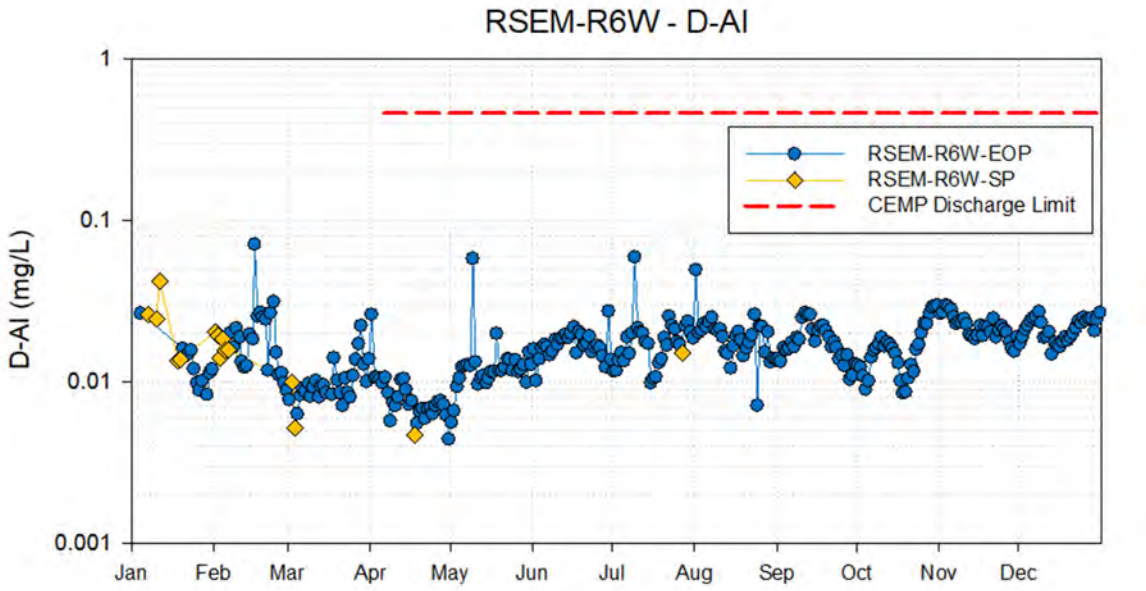

Figure 3-52: Concentrations of dissolved aluminum (Al) for RSEM-R6 West compared to RSEM EOP Limits in 2022. D-Al is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; D – Dissolved Concentrations.

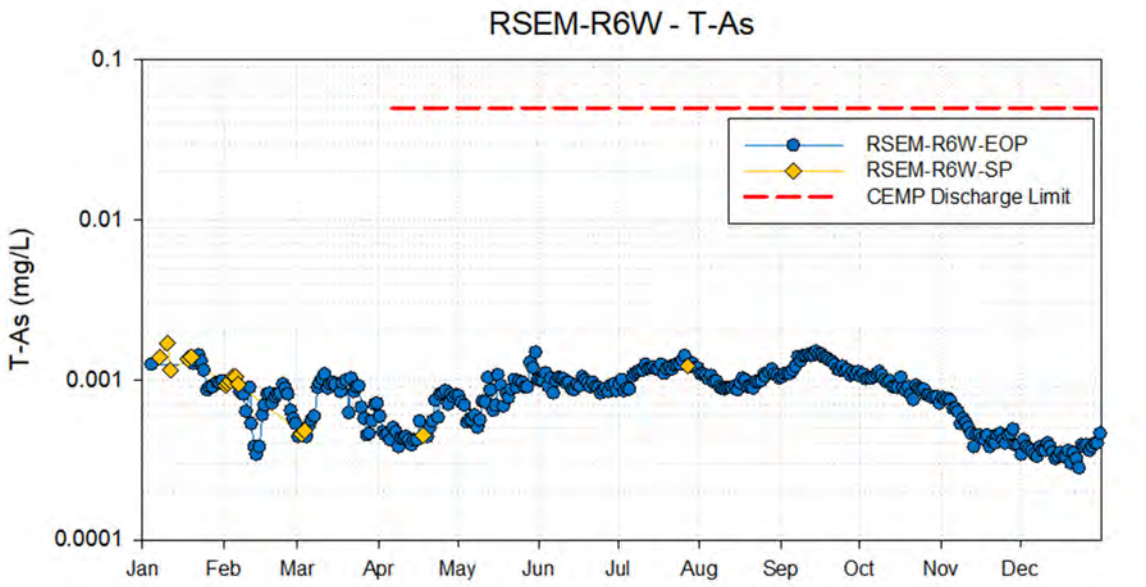

Figure 3-53: Concentrations of total arsenic (As) for RSEM-R6 West compared to RSEM EOP Limits in 2022. T-As is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

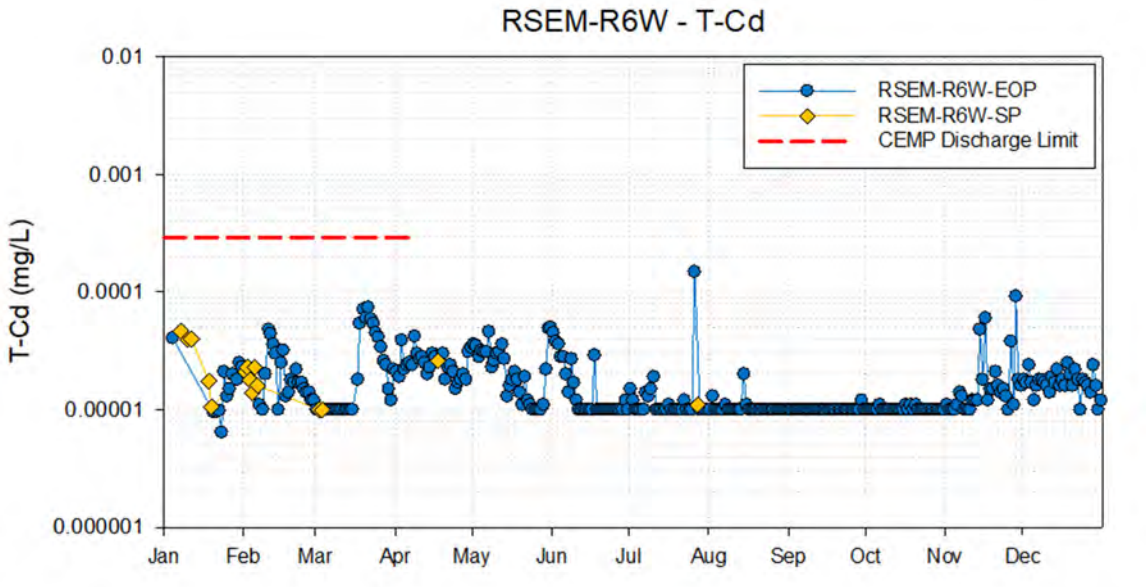

Figure 3-54: Concentrations of total cadmium (Cd) for RSEM-R6 West compared to RSEM EOP Limits in 2022. T-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Dissolved Concentrations.

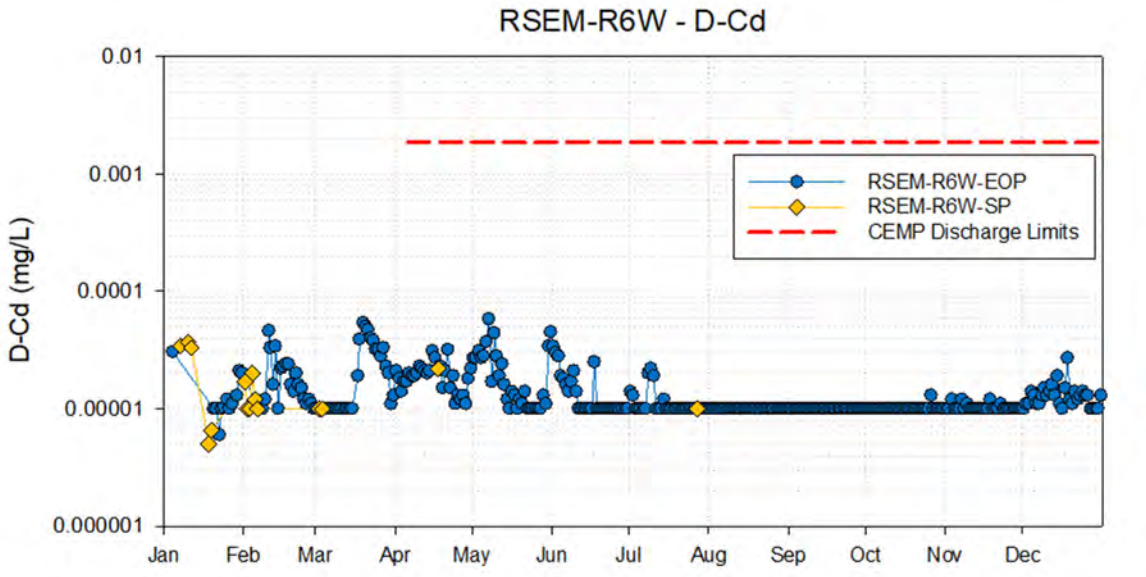

Figure 3-55: Concentrations of dissolved cadmium (Cd) for RSEM-R6 West compared to RSEM EOP Limits in 2022. D-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; D – Dissolved Concentrations.

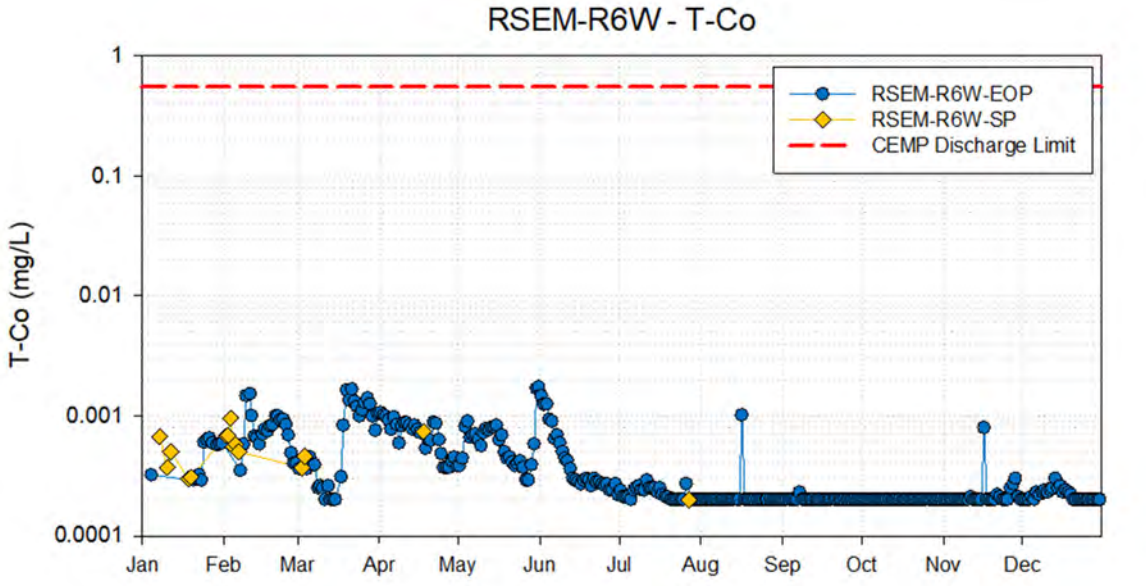

Figure 3-56: Concentrations of total cobalt (Co) for RSEM-R6 West compared to RSEM EOP Limits in 2022. T-Co is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

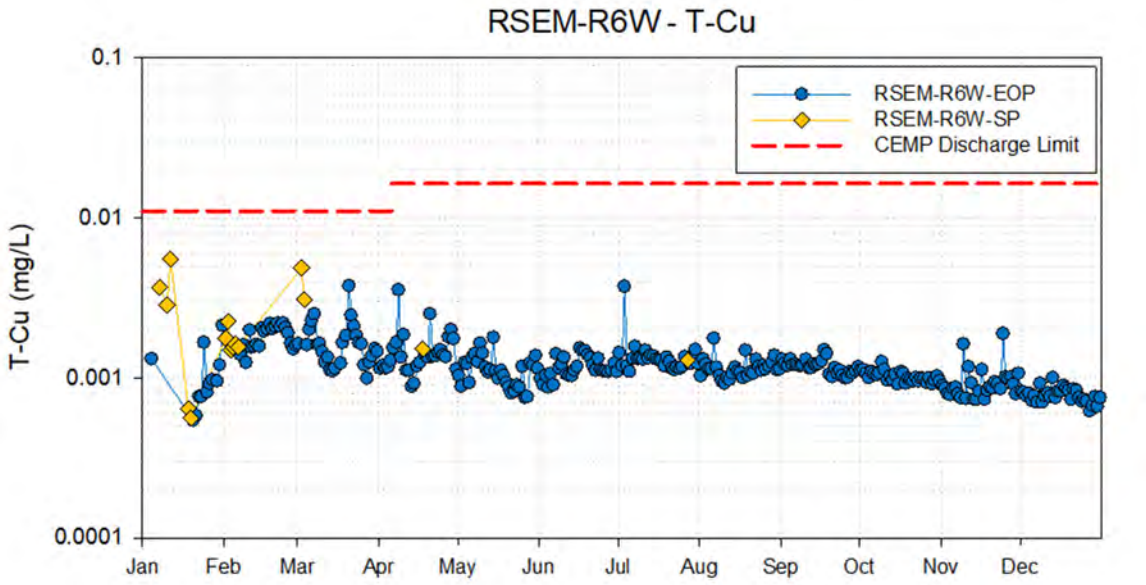

Figure 3-57: Concentrations of total copper (Cu) for RSEM-R6 West compared to RSEM EOP Limits in 2022. T-Cu is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

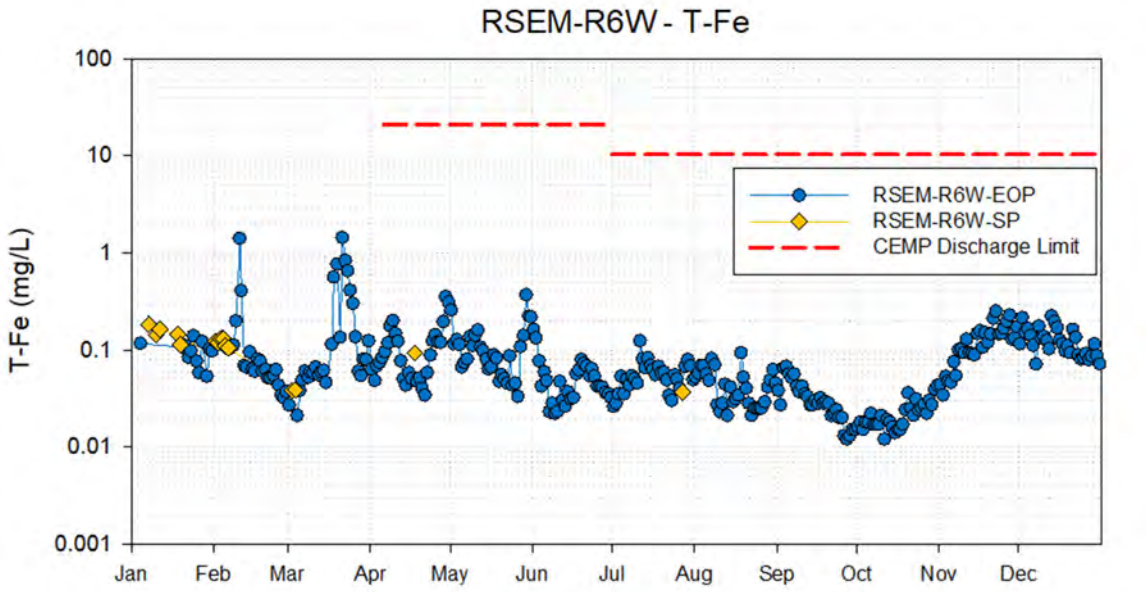

Figure 3-58: Concentrations of total iron (Fe) for RSEM-R6 West compared to RSEM EOP Limits in 2022. T-Fe is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

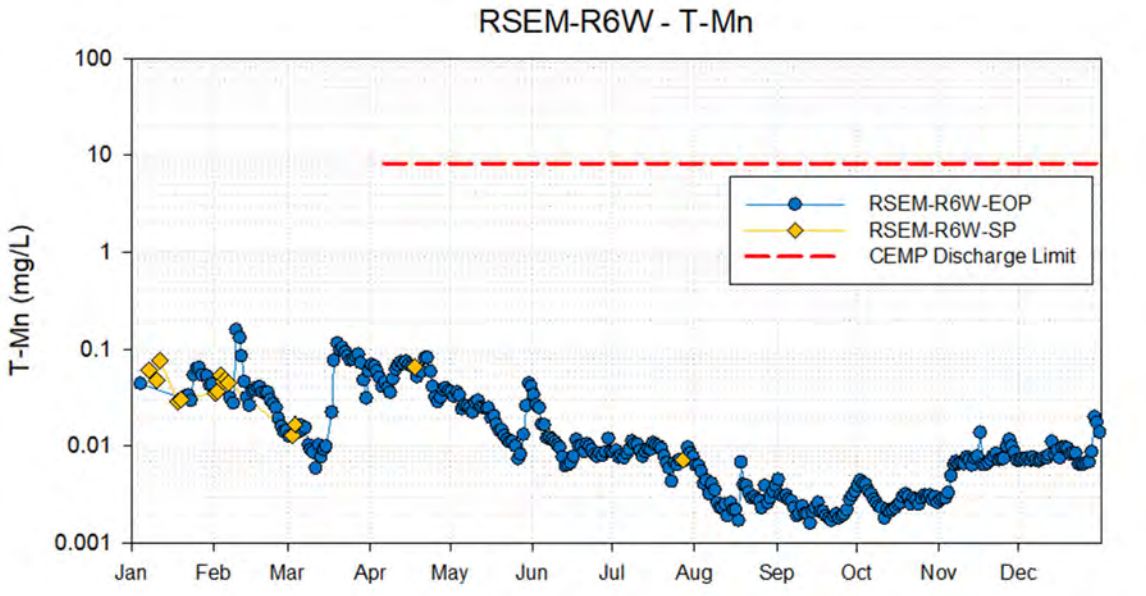

Figure 3-59: Concentrations of total manganese (Mn) for RSEM-R6 West compared to RSEM EOP Limits in 2022. T-Mn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

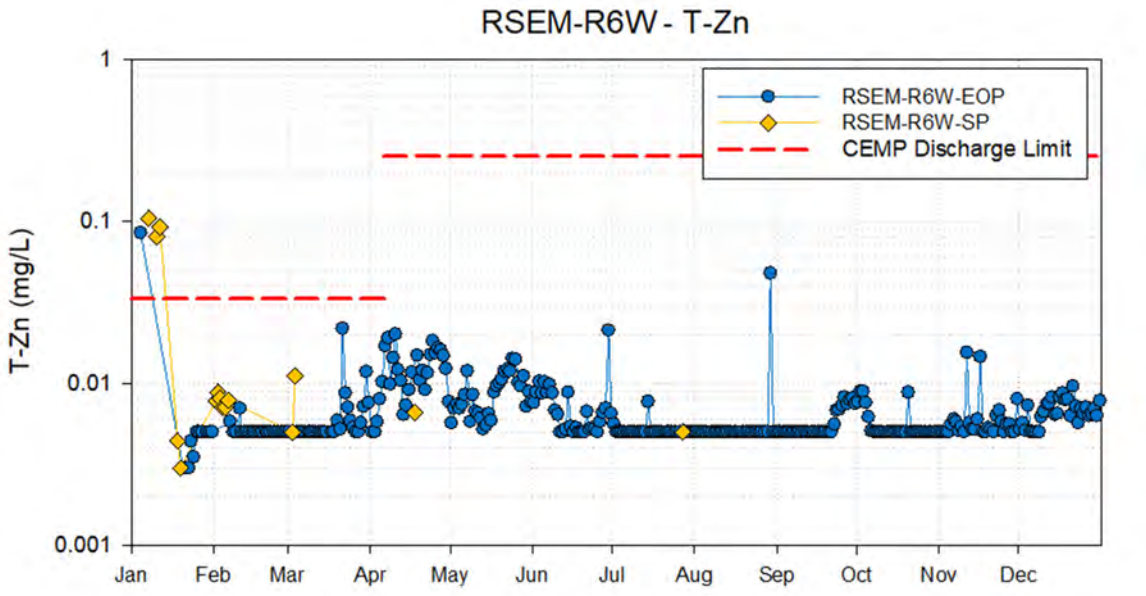

Figure 3-60: Concentrations of total zinc (Zn) for RSEM-R6 West compared to RSEM EOP Limits in 2022. T-Zn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

3.2.4.7 RSEM Area R5A Sediment Control Ponds

Construction of the RSEM Area R5A Phase 2 sediment control ponds and spillways was completed in the latter half of 2020, and the ponds have been used to manage water in the RSEM R5A Phase 2 catchment since 2020 Q3. Throughout 2022, R5B Phase 2 sump water was periodically transferred to RSEM R5A Pond A.

Two ponds (A and B) receive runoff from the southeastern RSEM area, whereas surface flows from the northwestern extent are directed to ponds C and D (Figure 3-37). The paired ponds are separated by a berm, have separate discharge pipes and share a rip-rap lined outfall that extends to the mainstem of the Peace River. Ponds A and B share one outfall and ponds C and D share another. For each RSEM R5A pond, water quality monitoring stations are located in-pond (the SP station) and at EOP.

Periodic discharge from Pond A was reported in March through October. Water levels in RSEM R5A Phase 2 Ponds B, C and D generally remained low and did not discharge, with discharge only from Pond B reported in March. Occasionally, water was pumped sequentially from pond D to C to B to A in order to direct discharge through the Pond A outfall.

Analytical water quality data and field pH measurements for RSEM R5A Phase 2 stations are summarized in Table 3-22. Trends in water quality from the RSEM R5A Pond A Sediment Control Pond are illustrated in Figure 3-61 through Figure 3-71. Water quality in RSEM R5A Pond A discharges were circumneutral to alkaline and show TSS and sulphate concentration maxima of 42 mg/L and 1,140 mg/L, respectively. Analytical and *in situ* field pH results for RSEM R5A Pond A met the RSEM EOP limits, with exceptions reported in Q1. Exceedances were observed for total Cd and Zn on March 22nd and 23rd, and for total Zn on March 24th. RSEM R5A Pond B discharges show circumneutral conditions and TSS and sulphate concentration maxima of 9.3 mg/L and 237 mg/L, respectively. Analytical and *in situ* field pH results for RSEM R5A Pond B met the RSEM EOP limits, with the exception of total Cd and Zn on March 21st. Dissolved species accounted for the majority of the total metal inventory when the EOP concentrations were above the EOP discharge limits.

Contact water reflecting ARD influence was collected in Pond D to be used as influent for the commissioning trials (June 12th to 19th) for PRHP's self performed WTP. Water quality in Pond D showed a minimum pH of 3.4 and elevated concentrations for dissolved Al and Cd, and total Co, Cu and Zn in both the May 7th and June 1st samples.

Table 3-22:
RSEM R5A Phase 2 Pond 2022 Annual Water Quality Summary

Parameter		Field pH	Lab Conductivity	Field Conductivity	TSS	Sulphate	D-Al	T-As	T-Cd	D-Cd	T-Co	T-Cu	T-Fe	T-Mn	T-Zn
Units		**-**	**µS/cm**	**µS/cm**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
RSEM EOP Limit[1]		**6.0-9.0**	**-**	**-**	**WQG**	**-**	**0.46**	**0.05**	**0.00029**	**0.00186**	**0.55**	**0.0163**	**10.3 (July-March), 20.9 (April-June)**	**8.29**	**0.251**
RSEM-R5A-P2-A-SP (n=30 lab, 56 field)	Max	10.3	2,450	2,540	248	1,140	0.473	0.0107	0.000534	0.000173	0.0118	0.0339	23.8	0.524	0.102
	Min	6.4	177	243	1.2	43	<0.003	0.00079	<0.00001	<0.00001	0.00023	0.00078	0.080	0.0068	<0.005
	Median	8.5	1,255	1,251	9.9	353	0.0131	0.00251	0.000020	0.000010	0.00070	0.00203	0.575	0.0139	0.0069
RSEM-R5A-P2-A-EOP (n=51 lab, 54 field)	Max	8.8	2,400	2,270	42	1,140	0.0774	0.00304	***0.000650***	0.000576	0.0180	0.00283	1.07	0.319	***0.0962***
	Min	7.6	349	380	2.0	110	<0.003	0.00026	<0.00001	<0.00001	<0.0002	0.00108	0.097	0.0049	<0.005
	Median	8.5	1,270	1,274	12	348	0.0160	0.00187	0.000017	0.000010	0.00075	0.00160	0.376	0.0203	0.0053
RSEM-R5A-P2-B-SP (n=6 lab, 37 field)	Max	9.2	2,550	2,310	158	1,210	0.134	0.00614	0.00133	0.00122	0.0515	0.0179	12.5	0.941	0.232
	Min	7.4	177	378	2.9	44	0.0095	0.00058	0.000038	<0.00001	0.00076	0.00119	0.174	0.0291	<0.005
	Median	8.4	1,705	1,679	5.9	621	0.0141	0.00089	0.000219	0.000051	0.00492	0.00267	0.358	0.184	0.0354
RSEM-R5A-P2-B-EOP (n=2 lab, 3 field)	Max	8.2	591	560	9.3	237	0.0101	0.00073	***0.00102***	0.000846	0.0239	0.00310	1.28	0.356	***0.159***
	Min	7.7	372	234	9.1	138	0.0084	0.00038	0.000226	0.000175	0.00644	0.00293	0.836	0.138	0.0324
	Median	8.0	482	371	9.2	188	0.0093	0.00056	0.000623	0.000511	0.0152	0.00302	1.06	0.247	0.0957
RSEM-R5A-P2-C-SP (n=4 lab, 34 field)	Max	9.1	2,120	2,440	4.9	1,110	0.0777	0.00369	0.00378	0.00372	0.0664	0.00803	1.24	0.878	0.673
	Min	7.5	285	342	3.6	94	<0.003	0.00031	0.000182	0.000149	0.00820	0.00252	0.075	0.164	0.0367
	Median	8.3	2,030	1,589	4.1	858	0.0197	0.00066	0.00109	0.00102	0.0218	0.00297	0.190	0.338	0.157
RSEM-R5A-P2-D-SP (n=2 lab, 31 field)	Max	8.5	4,110	4,150	8.7	2,690	18.1	0.00104	0.0306	0.0324	0.612	0.268	12.3	6.77	9.25
	Min	3.4	2,410	405	4.4	1,240	0.0420	<0.0001	0.00508	0.00492	0.130	0.0276	0.200	1.73	1.31
	Median	7.7	3,260	1,917	6.5	1,965	9.1	0.00057	0.01784	0.0187	0.371	0.148	6.25	4.25	5.28

Notes: TSS = Total suspended solids.
WQG = BC water quality guideline for aquatic life. The BC WQG for TSS is used as the discharge limit for PAG-containing RSEM pond EOP limits, per the CEMP, Appendix E Rev. 5.2, Section 7, Table 2, page 23. TSS guideline is dependent on background TSS readings in Peace River.
[1]RSEM EOP Limit only applies to RSEM sediment control pond discharge (-EOP samples). Only revised RSEM EOP Limits (Revision 10.1, dated April 6, 2022) are shown in the table, with the exception of T-Cd, which shows the original RSEM EOP Limit (Appendix E Revision 5.2, dated July 26, 2016) that applies from January 1st to April 6th, 2022. The revised RSEM EOP Limits (Revision 10.1, dated April 6, 2022) apply from April 6th, 2022 onwards and have been revised from those applied previously to RSEM pond discharges (Appendix E Revision 5.2, dated July 26, 2016).
Water quality for station RSEM-R5A-P2-A-EOP and RSEM-R5A-P2-B-EOP is screened against RSEM EOP limits. ***Gold italics*** indicate the result is elevated relative to the revised RSEM EOP Limit (Revision 10.1, dated April 6, 2022). ***Blue italics*** indicate the result is elevated relative to the original RSEM EOP Limits (Appendix E Revision 5.2, dated July 26, 2016).

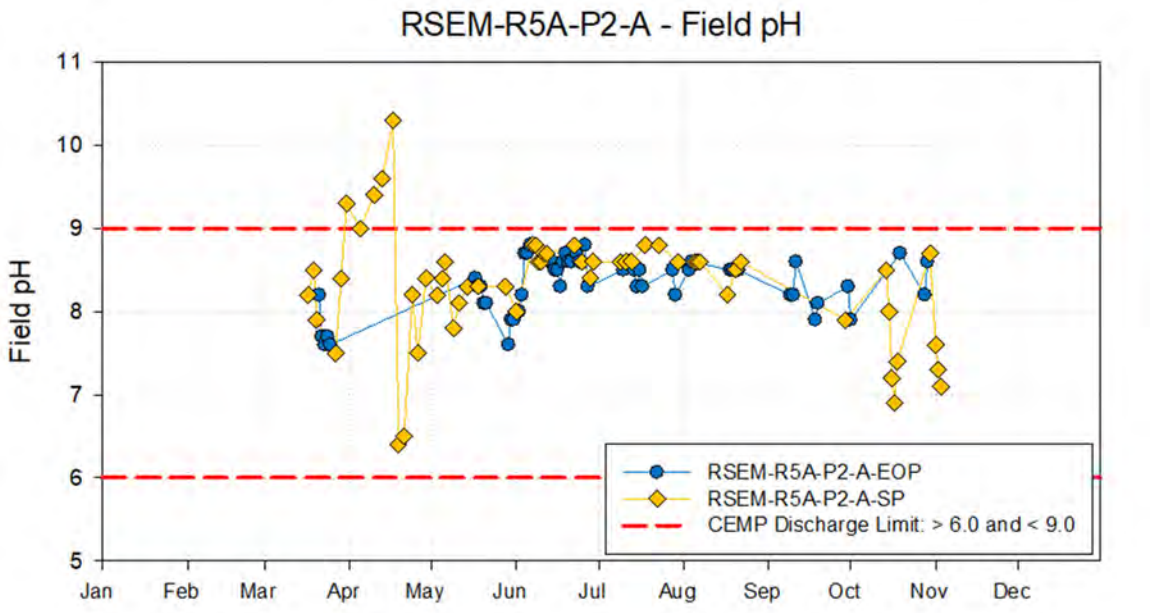

Figure 3-61: Time series profile for field pH in RSEM-R5A-P2 Pond A compared to RSEM EOP Limits in 2022. EOP – End of Pipe; SP – Sediment Pond.

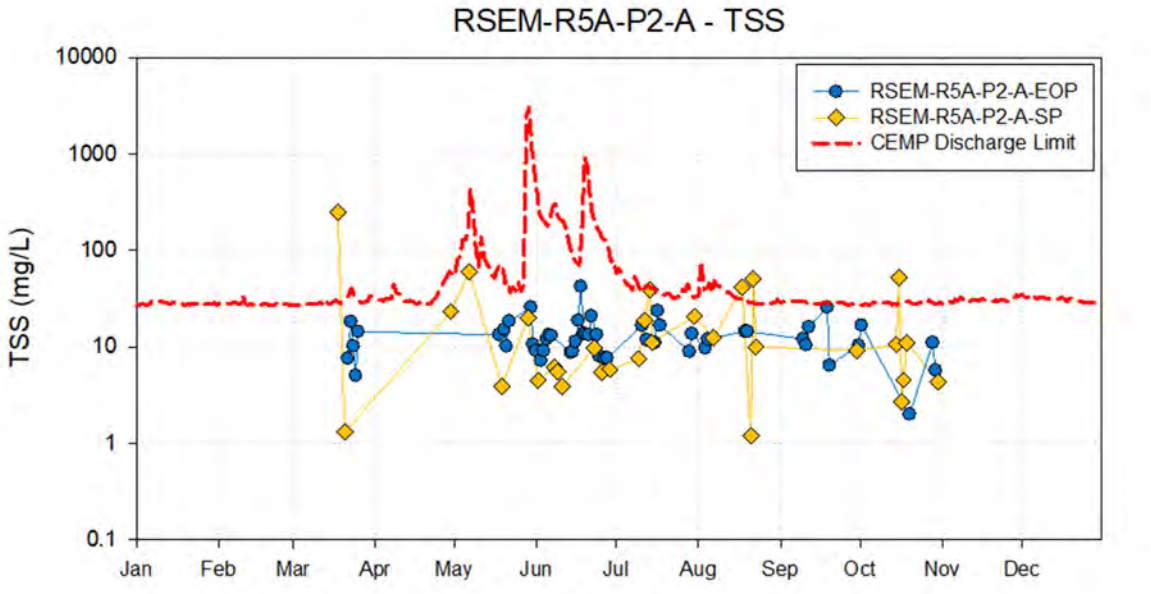

Figure 3-62: Time series profile for total suspended solids (TSS) in RSEM-R5A-P2 Pond A compared to RSEM EOP Limits in 2022. TSS is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond.

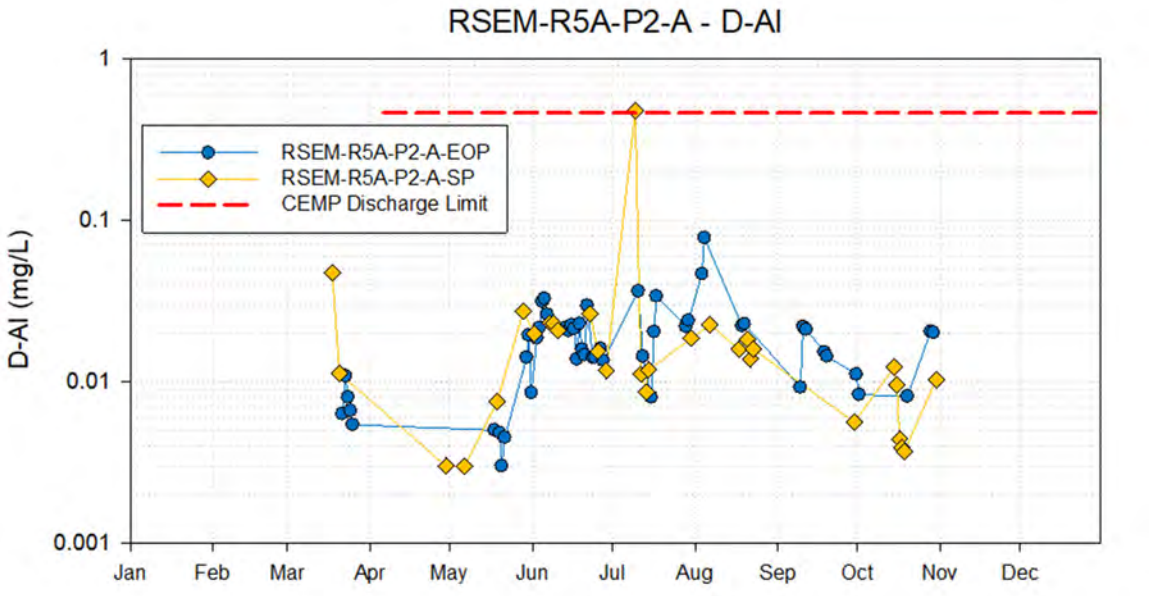

Figure 3-63: Concentrations of dissolved aluminum (Al) for RSEM-R5A-P2 Pond A compared to RSEM EOP Limits in 2022. D-Al is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; D – Dissolved Concentrations.

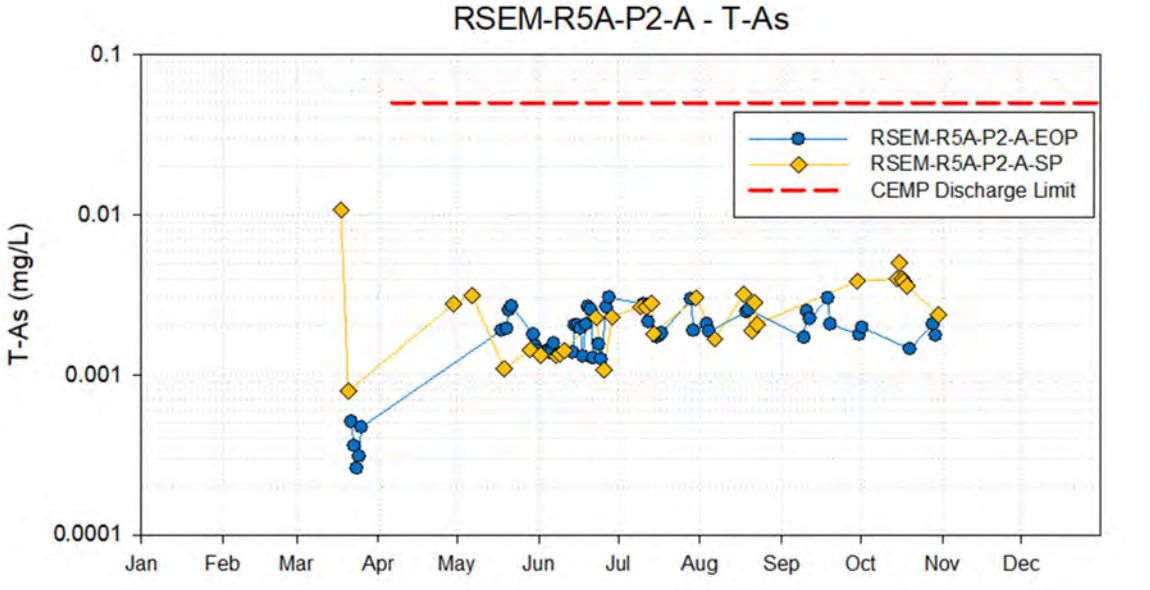

Figure 3-64: Concentrations of total arsenic (As) for RSEM-R5A-P2 Pond A compared to RSEM EOP Limits in 2022. T-As is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

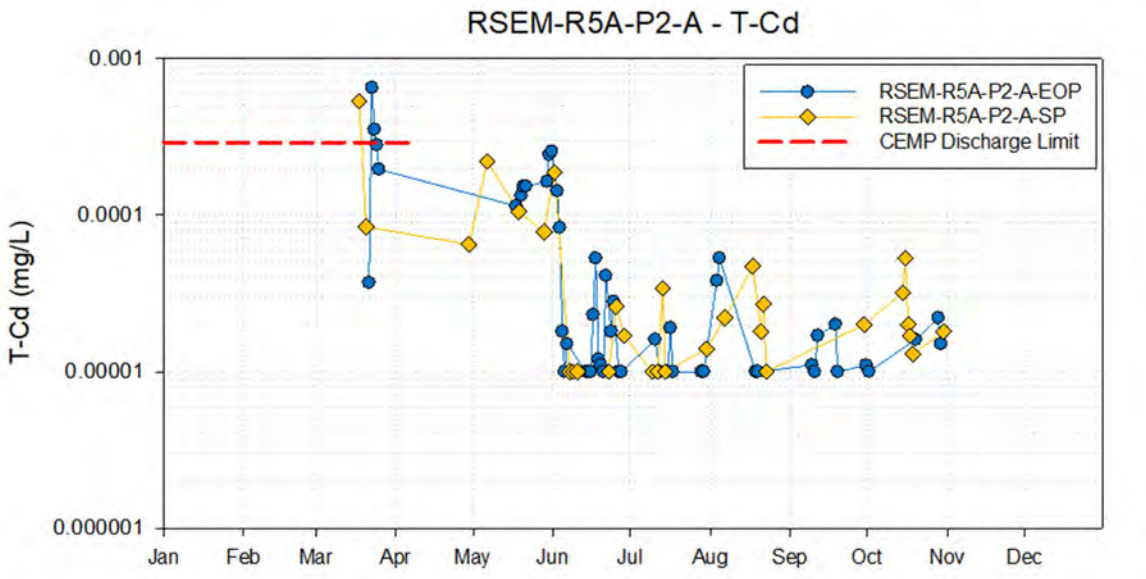

Figure 3-65: Concentrations of total cadmium (Cd) for RSEM-R5A-P2 Pond A compared to RSEM EOP Limits in 2022. T-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

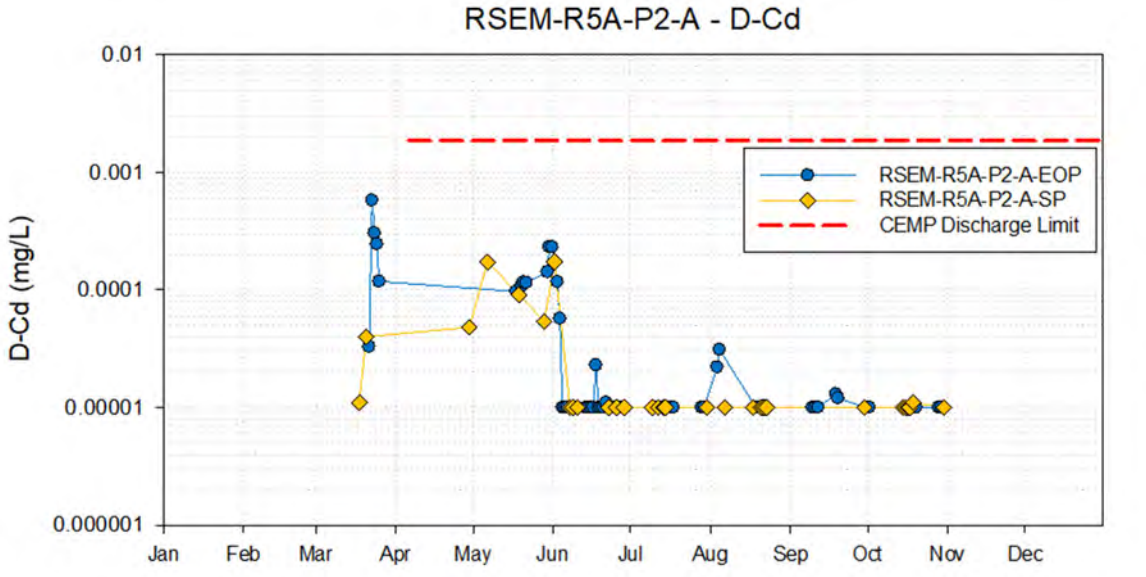

Figure 3-66: Concentrations of dissolved cadmium (Cd) for RSEM-R5A-P2 Pond A compared to RSEM EOP Limits in 2022. D-Cd is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; D – Dissolved Concentrations.

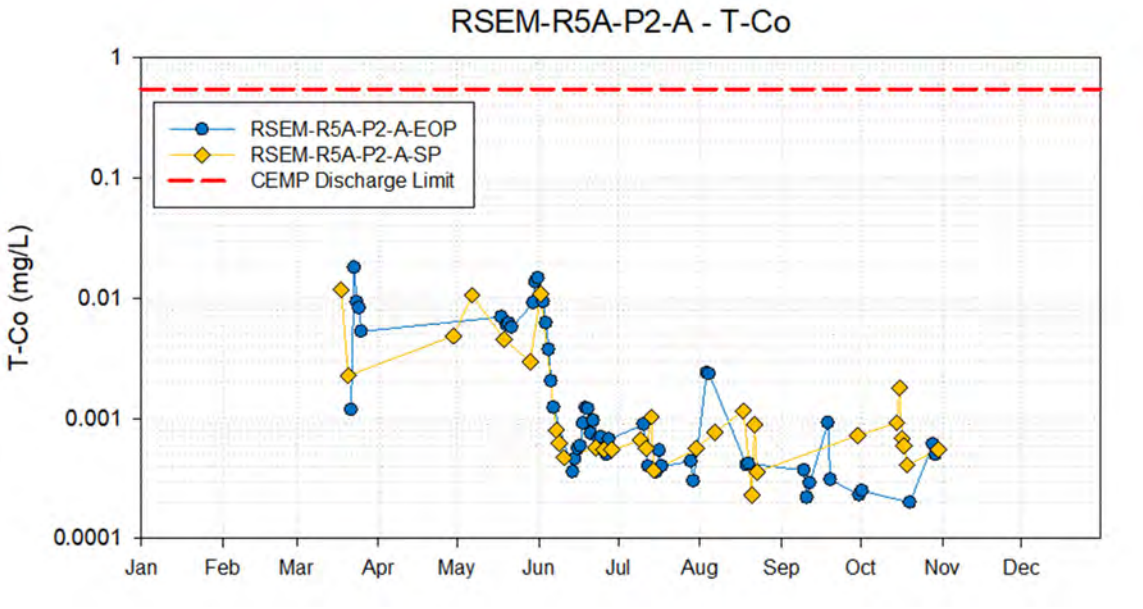

Figure 3-67: Concentrations of total cobalt (Co) for RSEM-R5A-P2 Pond A compared to RSEM EOP Limits in 2022. T-Co is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

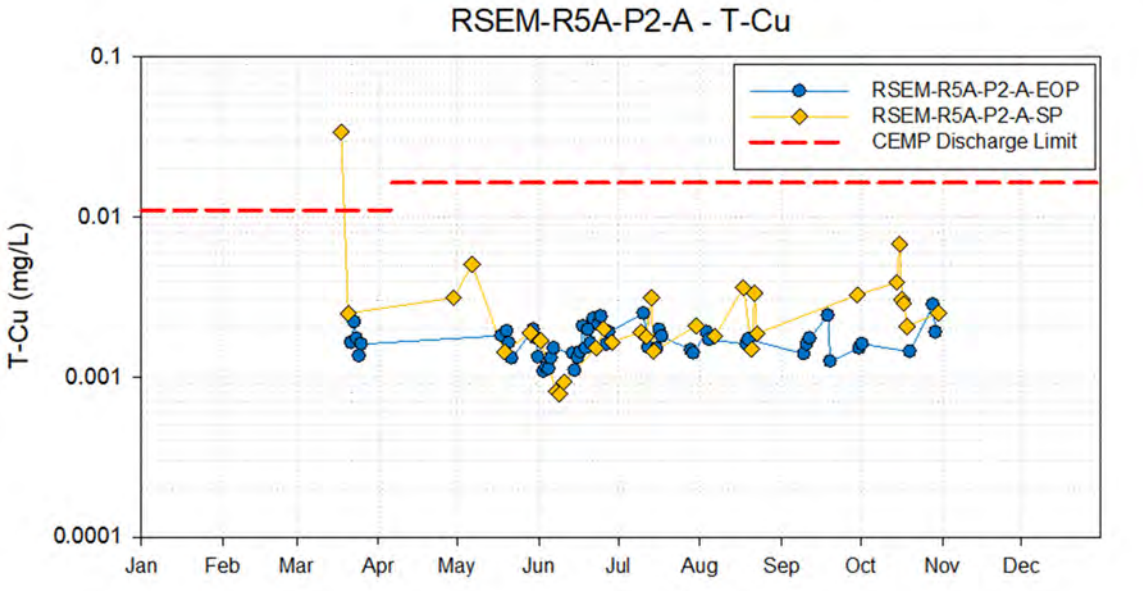

Figure 3-68: Concentrations of total copper (Cu) for RSEM-R5A-P2 Pond A compared to RSEM EOP Limits in 2022. T-Cu is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

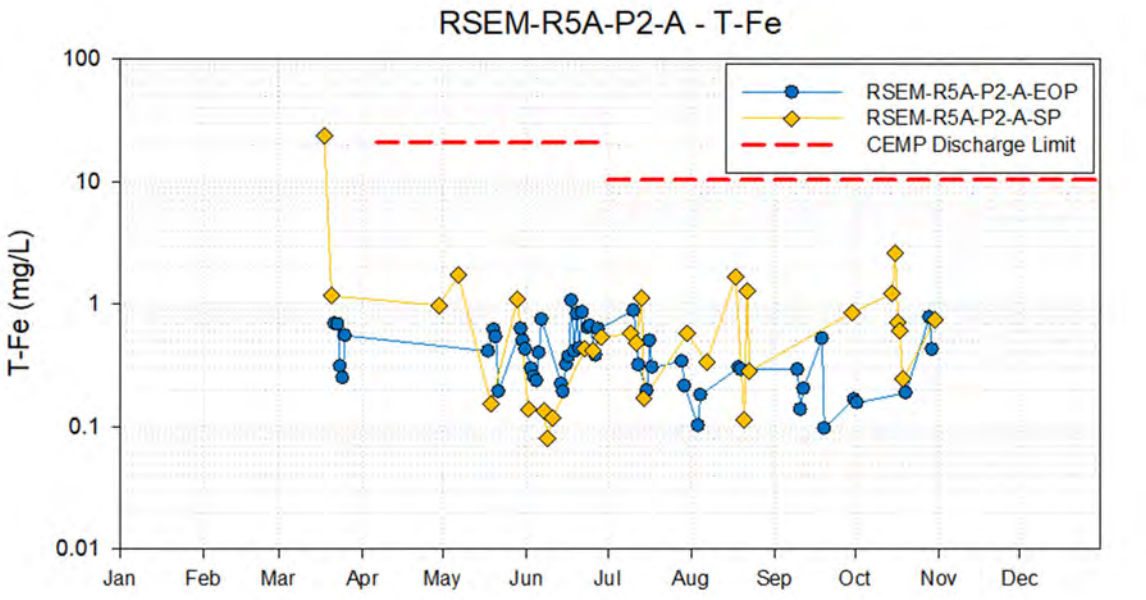

Figure 3-69: Concentrations of total iron (Fe) for RSEM-R5A-P2 Pond A compared to RSEM EOP Limits in 2022. T-Fe is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

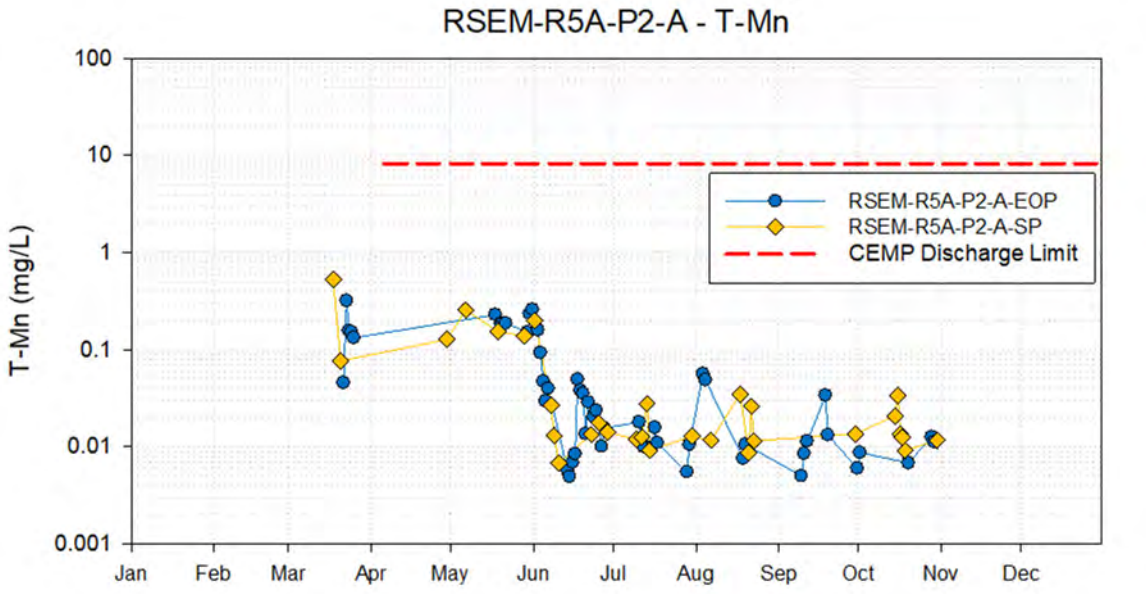

Figure 3-70: Concentrations of total manganese (Mn) for RSEM-R5A-P2 Pond A compared to RSEM EOP Limits in 2022. T-Mn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

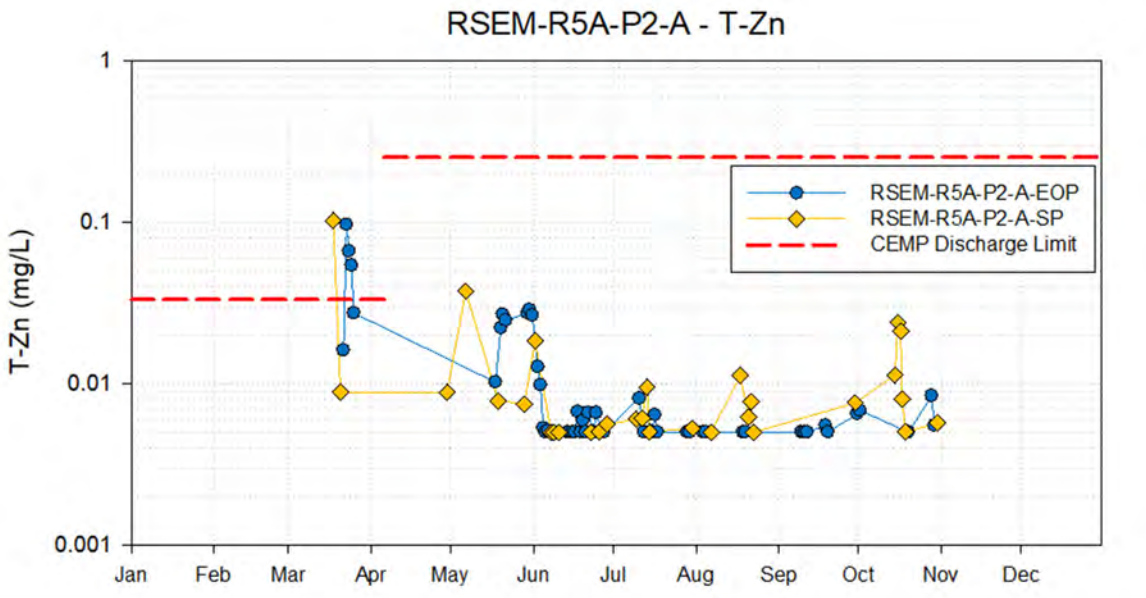

Figure 3-71: Concentrations of total zinc (Zn) for RSEM-R5A-P2 Pond A compared to RSEM EOP Limits in 2022. T-Zn is plotted on a logarithmic scale. EOP – End of Pipe; SP – Sediment Pond; T – Total Concentrations.

3.2.5 Quality Assurance and Quality Control

A quality assurance / quality control (QA/QC) program has been developed and implemented for ARD/ML-related surface water quality monitoring for PRHP's Main Civil Works contract. It is intended to validate monitoring data and to identify potential deficiencies of the monitoring program.

QA/QC practices are conducted at various stages of sample collection through to analytical testing. Validated-clean sample bottles and preservatives are received from the analytical laboratory, and are stored in a controlled, clean environment prior to use. Calibration of field equipment (*i.e.*, hand-held and continuous data loggers) is regularly conducted using fresh calibration standards to ensure accurate *in situ* field readings.

Collection of field quality control (QC) samples including field blanks allows for evaluation of potential contamination from the sample collection method, handling, filtration, preservation and exposure to the environment. Additionally, field duplicates are collected as independent samples to characterize environmental variability and the precision of the entire sampling and analytical process. The field QA/QC program is described in Appendix 3-E and indicates that the general industry practice for field QC samples (*e.g.*, field blanks and duplicates) is that they constitute 10% of the samples collected (*i.e.*, one field QC sample per ten monitoring samples). However, the actual field QC frequency may vary due to the quantity of monitoring samples included with each sampling event or other considerations (BC ENV, 2013).

For 2022, a total of 138 QC samples were obtained (66 blanks and 72 duplicates) and 1323 monitoring samples were collected as part of the PRHP ARD water quality monitoring program. QC samples therefore represented approximately 10% of the monitoring samples collected, indicating that the 2022 field QC program was implemented consistent to the general industry practice.

Due to a cyberattack on November 20th, 2021 the BV server was taken off-line and the lab was unable to process samples for some period of time. Therefore, samples collected in 2022 Q1 were directed to ALS Environmental (ALS) from January 1st to 24th and to Bureau Veritas (BV) from January 25th onwards. During 2022, water quality samples were submitted to the BV and ALS depots in Fort St. John and were tested at the BV laboratories in Burnaby and Calgary and at ALS Environmental (ALS) in Burnaby. The BV labs use test methods accredited to the ISO 17025 standard for testing and calibration laboratories by the Standards Council of Canada (SCC). The Scope of Accreditation for the Burnaby and Calgary laboratories are included in Appendix 3-F and Appendix 3-G. The ALS test methods are accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA; Appendix 3-H). Both BV and ALS are listed as qualified laboratories under the British Columbia Environmental Data Quality Assurance Regulation (EDQA).

Once samples are submitted to BV and ALS, internal laboratory QC procedures are performed, which include analysis of method blanks, blank spikes, matrix spikes, reference standards and method duplicates at a minimum frequency for each analytical batch (*i.e.*, 1/20 samples; Appendix 2-A and Appendix 3-I). Results from these QC samples are not discussed in this report; however, the data quality objectives for laboratory QC samples outlined in Appendix 2-A and Appendix 3-I need to be met by the analytical laboratory before a final report is issued.

Laboratory reporting involves screening of water quality data against RSEM EOP limits and discharge exceedances to flag results where applicable. This approach has been useful to ensure rapid detection of potential exceedances in site or discharged water, and to trigger root cause investigation and regulatory notification processes.

A secondary data import screening system is applied on a weekly basis when laboratory data are transferred by Lorax into an EQWIN database. The following QC flags are included in the data transfer files, which are imported into the EQWIN database:

- Dissolved metals measurably higher than totals;
- Nitrite higher than nitrate;
- Calculated charge balance greater than 10%;
- Hold time exceedances; and
- Raised detection limits.

The occurrence of any of these flags prompts further action for closer review of the results or reanalysis of the samples. The EQWIN database is updated with all laboratory revisions to previously reported data if data revisions are issued by BV or ALS.

As an additional quality control evaluation for field parameters, *in situ* field measurements collected by hand-held instrumentation and continuous in-pond data loggers are compared to corresponding laboratory analytical data on a weekly and quarterly basis.

The following sections include an evaluation of sample receipt temperatures, detection limits and hold time exceedances, and results for field blanks, field duplicates, total versus dissolved metals, *in situ* field measurements and *in situ* continuous in-pond measurements.

3.2.5.1 Sample Receipt Temperature Monitoring

Sample temperature is one of the factors which influence the stability of parameters to be tested, particularly for parameters for which chemical preservation is not possible. Therefore, environmental staff collect and store samples in coolers with icepacks and submit samples to the BV and ALS service depots in Fort St. John on the same day they are collected. The BV and ALS depots are open during regular business hours (Monday to Friday) and also offer a 24-hour secure drop-off service. The depots are an extension of the respective laboratories and assume custody of the samples upon receipt. After-hour sample submissions are processed (*i.e.,* received) on the next business day. Sample temperature is measured upon receipt and the BV and ALS depots ensure received samples are stored in accordance with the temperature requirements set out by BC ENV (2013, 2020). For parameters included in the ARD water quality monitoring program, the optimal sample temperature range during shipping and upon receipt is between 0 to 10 °C, with the exception of total and dissolved metals which do not have a specified temperature requirement (BC ENV; 2013, 2020).

Review of the sample submission records indicate samples were appropriately packaged for submission to the laboratory and that icepacks were used for cooling, with few exceptions. Throughout 2022, 351 sample submissions were made to the BV and ALS service depots. Of these submissions, 302 (86%) met the sample temperature requirements, 14 (4%) had no temperature records and 35 (10%) were received with package(s) showing sample temperatures outside the optimal range. For the majority of instances where sample receipt temperatures were >10°C, temperatures were comparable to or lower than the temperature recorded during sample collection.

Overall, the records indicate appropriate sample shipment protocols were followed, and therefore sample integrity is not considered to have been compromised between sample collection and receipt by the laboratory. However, considering the elevated ambient water

temperatures observed in June through September, it is recommended that additional measures be implemented to accelerate and maintain sample cooling during warmer periods. This may include the use of additional ice packs, or refrigeration, in particular for after hour sample submissions which are not received into laboratory custody until the next regular business day.

3.2.5.2 Detection Limit Screening

For this project, the detection limits for reported results are compared to the standard detection limits for the BV lab. Detection limits are increased, for example, when a sample is diluted prior to analysis to eliminate interferences or to reduce a parameter concentration to within the instrument working range. The QA/QC evaluation included (1) an assessment of the frequency for raised detection limits in 2022 samples; and (2) screening to determine which parameters are most influenced by this occurrence.

During 2022 the percentage of parameters with raised detection limits increased from Q1 to Q3 (1.6% to 5.1%, respectively, Table 3-23). In Q4, detection limits were raised for 1.5% of all parameters, similar to the percentage observed in Q1.

Table 3-23:
Summary of Laboratory Detection Limit Changes in 2022

Quarter	# Parameters with raised DLs	Total # parameters	% Parameters with Raised DLs
Q1	364	23,041	1.6
Q2	964	37,135	2.6
Q3	1,525	29,828	5.1
Q4	353	22,800	1.5

Parameters exhibiting changes in detection limits are summarized in Table 3-24. Detection limits were most frequently increased for sulphate and nitrate; however, most reported concentrations were above detection limit values. With the exception of bromide, detection limits were raised in less than 6% of samples. Note that reported concentrations for bromide were also mostly above the detection limits. For the 2022 period, there were no parameters for which a non-detect result with a raised detection limit exceeded the RSEM EOP discharge limits. Overall, changes in detection limits were not found to affect the interpretation of non-detect results.

Table 3-24:
Number and Percentage of Samples Showing Raised Detection Limits per Parameter in 2022

Parameter or Grouping of Parameters	Number of Samples with Raised Detection Limits/Parameter	Total Number of Samples/ Parameter	% Samples with Raised Detection Limits
Turbidity	86	1,372	6.3%
TDS	5	1,209	0.41%
TSS	73	1,376	5.3%
DOC	2	1,207	0.17%
TOC	6	1,207	0.50%
Sulphate	661	1,207	55%
Nitrate	505	1,207	42%
Ammonia	1	1,207	0.08%
Anions (Br)*	133	1,205	11%
Dissolved Metals	16	1,214	1.3%
Total Metals	14	1,207	1.2%

Notes:
* Raised detection limits were disproportionately observed for bromide only and not for other parameters within the anions suite (Cl and F), thus counts and percentages are provided only for bromide are provided.
Median counts are presented for the total and dissolved metals suite.

3.2.5.3 Hold Time Exceedances

PRHP makes every effort to have samples delivered to BV and ALS within recommended hold times, and in 2022 all samples met this criterion. Once delivered to the BV and ALS service depots, samples enter a queue for processing and analysis, and are sometimes analyzed outside of recommended hold times (*e.g.*, usually by one to four days). For 2022, the parameters most commonly analyzed by the laboratory outside the recommended hold times were turbidity (175 samples), TDS (132 samples), TSS (145 samples), nitrite (189 samples), nitrate (39 samples), nitrite-nitrate (186 samples) and orthophosphate (192 samples). Analysis of these parameters exceeded the respective hold times by an average of 2 to 3 days, which does not mean that the sample is compromised, but may increase the uncertainty of sample results.

Field measurement of pH is required within 15 minutes of sample collection (BC ENV, 2020). Analytical laboratory measurements of pH do not meet this requirement due to shipping constraints; therefore, analytical measurements are used for reference only. Field pH measurements are considered to best represent pH of the water at the time of sampling. Comparison of analytical and field pH measurements indicates analytical measurements are often biased low relative to the field values. It is speculated this may be due to carbon dioxide dissolution during transport and handing at the lab, which would reduce pH.

3.2.5.4 Field Blanks

A total of 66 field blanks were collected as part of the 2022 surface water quality monitoring program (Appendix 3-D). These data indicate good overall contamination control, with the majority of parameter values (approximately 98%, not including pH, which is always detectable) in blank samples falling below the laboratory reported detection limit (RDL) as shown in Table 3-25. In total, 20 parameter values out of the 6,089 measured (*i.e.,* <0.4%) were greater than the data quality objective (DQO) of 2-times the RDL. The proportion of parameters exceeding the DQO ranged from <0.1% to 0.8% per quarter.

Overall, ammonia was most frequently outside the field blank DQO (Table 3-25). This anomaly may result from contributions associated with sampling supplies (*e.g.,* deionized water used for blanks, laboratory bottles, preservation reagents, gloves), the sampling procedure, sources from transportation and storage, or from sources at the laboratory. In general, these measurements do not alter the interpretation of environmental monitoring data and suggest good control of potential contamination sources to the water samples.

Table 3-25:
Comparison of number and type of detected parameters in field blanks in 2022

Quarter	Number of Field Blanks Collected	Number of Parameters Analyzed in Field Blanks	Number of Detected Parameters > RDL	Number of Detected Parameters > 2x RDL	Parameters with Detected Values > 2x RDL (Number of Times)
1	15	1,386	36	5	NH_3 (1), T-Cd (1), D-Ca (1), D-Na (1), D-Zn (1)
2	11	1,023	41	8	NH_3 (3), TSS (1), PO_4 (1), T-Al (1), T-Mo (1), D-Mo (1)
3	15	1,380	26	5	NH_3 (3), T-Fe (1), D-Al (1)
4	25	2,300	24	2	T-Fe (1), T-Tl (1)

Notes: RDL- Reported Detection Limit.

3.2.5.5 Field Duplicates

A total of 72 field duplicates were collected as part of the 2022 surface water quality sampling program (Appendix 3-C). Water quality results were generally similar between the majority of field duplicates. Table 3-26 shows the number of duplicates containing parameters with Relative Percent Difference (RPD) values greater than the acceptability criteria of 20% and 50% (calculated only if the reported parameter value was greater than five-times the RDL in at least one of the sample duplicates). Overall, the relative proportion of analyte pairs with RPDs greater than 50% was low throughout the program, ranging

from 0.3% to 2.6%. Turbidity, ammonia and total Fe shows the greatest variability between samples (inferred from multiple instances of RPD values greater than 50%).

For the Earthfill Dam-DS-Out samples collected on March 10th, 35 analyte pairs showed RPD values greater than 20% while 29 analyte pairs showed RPD values greater than 50% (Table 3-27). Since conductivity measurements for the monitoring (212 µS/cm) and duplicate (456 µS/cm) samples are within the range of one-day field conductivity changes, it is inferred that the results may reflect in situ variability associated with temporal changes in water quality which occur in the interval between collection of monitoring and duplicate samples.

Of the parameters for which RSEM EOP discharge limits are approved (pH; TSS; dissolved Al and Cd; total As, Cd, Co, Cu, Fe, Mn and Zn), several duplicate pairs showed RPD values greater than 50% including: total Co at RSEM-R6E-SP on January 7th; TSS at RSEM-L5E-P2-SP on April 2nd; dissolved Al at RSEM-R6E-EOP on July 9th; and, total Fe at RSEM-R6E-EOP on July 27th and September 4th (Table 3-27). In all instances, both duplicate pairs show analytical results below the RSEM EOP limits.

Discrepancies between monitoring and duplicate samples overall reflect sample variability over the course of the monitoring program and likely reflects the non-homogeneous distribution of TSS. Variability may also be introduced by contamination (as previously noted in field blanks) and imprecision in laboratory measurements. Importantly, large variability (*i.e.*, RPD > 50%) is infrequent with 2.6 %, and typically fewer duplicate pairs exceeding the 50% RPD objective as shown in Table 3-26. Although the proportion of duplicate pairs exceeding the 50% RPD objective is low, it is somewhat elevated in Q1 (2.6%) relative to the balance of the year (0.5% or lower), as shown in Table 3-26. Most of the elevated RPDs in Q1 were observed in a single sample collected from Earthfill Dam-DS-Out on March 10th. Overall, the RPD results indicate that the monitoring data generally met the field duplicate precision objectives for all parameters.

Table 3-26:
Comparison of Duplicate and Parameter Counts with RPDs Greater Than 20% and 50% by Quarter

Quarter	Total Number of Duplicates	Total Number of Parameters Analyzed in Duplicates	Number of Parameters with RPD > 20%	Percentage of Parameters with RPD > 20%	Number of Parameters with RPD > 50%	Percentage of Parameters with RPD > 50%
1	15	1,395	63	4.5	36	2.6
2	11	1,023	29	2.8	5	0.5
3	21	1,953	20	1.0	8	0.4
4	25	2,325	34	1.5	8	0.3

Notes: RPD- Relative Percent Difference

Table 3-27:
Summary of Field Duplicate RPDs Greater than 50%.

Station Code	Collection Date	Lab ID (Sample)	Lab ID (Duplicate)	Parameter	Units	Concentration			RPD %
						RDL	Sample	Duplicate	
RSEM-R6E-SP	7-Jan-22	FJ2200035-001	FJ2200035-002	T-Al	mg/L	0.003	0.0591	0.0253	80
				T-Co	mg/L	0.0001	0.00331	0.00148	76
				T-Fe	mg/L	0.01	0.143	0.072	66
RSEM-R6W-EOP	10-Feb-22	AOM662	AOM663	$N\text{-}NH_3$	mg/L	0.001	0.0134	0.0061	75
				D-Mo	mg/L	0.001	0.0118	0.006	65
				T-Mo	mg/L	0.015	0.19	0.36	62
Earthfill Dam-DS-Out	10-Mar-22	APZ004	APZ005	Br	mg/L	0.01	0.01	0.065	147
				Cl	mg/L	0.5	0.5	4.56	160
				Conductivity	µS/cm	2	212	456	73
				D-Ca	mg/L	0.05	33.5	65.5	65
				D-Hard	mg/L	0.5	113	219	64
				D-K	mg/L	0.05	0.486	1.53	104
				D-Mg	mg/L	0.05	7.14	13.5	62
				D-Mn	mg/L	0.001	0.001	0.0061	144
				D-Na	mg/L	0.05	1.66	15.9	162
				D-S	mg/L	3	5.1	23.7	129
				D-Se	mg/L	0.0001	0.00061	0.00333	138
				D-Si	mg/L	0.1	2.18	3.77	53
				$D\text{-}SO_4$	mg/L	1	19	74.5	119
				D-U	mg/L	0.0001	0.00053	0.00126	82
				$N\text{-}NH_3$	mg/L	0.015	0.189	0.047	120
				$N\text{-}NO_2\text{+}NO_3$	mg/L	0.01	0.08	0.18	77
				$N\text{-}NO_3$	mg/L	0.01	0.08	0.18	77
				T-Ca	mg/L	0.05	34.9	68.7	65
				TDS	mg/L	10	104	272	89
				T-Hard	mg/L	0.5	118	232	65
				T-K	mg/L	0.05	0.49	1.57	105
				T-Mg	mg/L	0.05	7.51	14.7	65
				T-Mn	mg/L	0.001	0.001	0.0066	147
				T-Na	mg/L	0.05	1.77	17	162
				T-S	mg/L	3	5	25.8	135
				T-Se	mg/L	0.0001	0.00047	0.00315	148
				T-Si	mg/L	0.1	2.38	4.04	52
				T-U	mg/L	0.0001	0.00056	0.00134	82
				Turbidity	NTU	0.1	0.61	0.26	80
RSEM-R6W-EOP	25-Mar-22	AQP914	AQP915	T-Fe	mg/L	0.01	0.299	0.15	66
RSEM-L5E-P2-SP	2-Apr-22	ARB516	ARB517	$N\text{-}NH_3$	mg/L	0.015	0.277	0.141	65
				TSS	mg/L	1	5.1	1.84	94
				T-Zr	mg/L	0.0001	0.00013	0.00138	166
RSEM-R6E-EOP	5-May-22	ASR003	ASR004	$N\text{-}NH_3$	mg/L	0.015	0.165	0.41	85
RSEM-R6W-EOP	13-May-22	ATB012	ATB013	T-Zr	mg/L	0.0001	0.00151	0.0001	175
RSEM-R6E-EOP	9-Jul-22	AWZ514	AWZ515	D-Al	mg/L	0.003	0.0488	0.116	82
RSEM-R6E-EOP	27-Jul-22	AYK060	AYK061	$D\text{-}SO_4$	mg/L	10	417	104	120
				Br	mg/L	0.1	1.29	0.434	99
				T-Fe	mg/L	0.01	0.141	0.078	58
RSEM-R6E-EOP	31-Jul-22	AYO872	AYO873	Turbidity	NTU	0.1	0.59	1.4	81
RSEM-R6E-EOP	2-Aug-22	AYU375	AYU376	Turbidity	NTU	0.1	0.13	2	176
				D-Fe	mg/L	0.01	0.107	0.01	166
RSEM-R6E-EOP	4-Sep-22	BBI404	BBI407	T-Fe	mg/L	0.01	0.209	0.121	53
RSEM-R6W-EOP	4-Oct-22	BDR436	BDR437	$N\text{-}NH_3$	mg/L	0.015	0.019	0.089	130
				Turbidity	NTU	0.1	0.96	0.55	54
RSEM-R6E-EOP	13-Oct-22	BEN617	BEN619	DOC	mg/L	0.5	1.18	2.65	77
				TOC	mg/L	0.5	1.3	2.79	73
RSEM-R6W-EOP	16-Oct-22	BER095	BER097	TOC	mg/L	0.5	1.01	2.5	85
RSEM-R6E-EOP	27-Oct-22	BFU904	BFU905	T-Zr	mg/L	0.0001	0.0001	0.0005	133
RSEM-R6E-EOP	6-Nov-22	BGO251	BGO253	DOC	mg/L	0.5	1.27	3.03	82
				TOC	mg/L	0.5	1.53	2.8	59

Notes:
RDL- Reported Detection Limit
RPD- Relative Percent Difference

3.2.5.6 Total versus Dissolved Metals

Total metals are field-acidified and undergo acid digestion at the lab, whereas dissolved metals are lab- or field-filtered prior to acidification of the filtrate. Dissolved and total metal pairs are evaluated for possible contamination during the filtration process. By definition, total metals analysis account for all dissolved and particulate-bound metals present in a sample; therefore, a dissolved metal concentration should not exceed the corresponding total metal concentration. In practice, due to measurement error, dissolved metal concentrations are occasionally reported greater than the corresponding total metal concentration. Therefore, field duplicate DQOs of 120% and 150% are applied to flag outlier and suspect data points, respectively.

Out of 38,935 total and dissolved parameter pairs compared in the 2022 dataset, 222 dissolved metal values, representing 0.6% of the pairs, were more that 120% higher than the corresponding total metal concentrations (Table 3-28). This proportion was considerably higher in Q1 (0.8%) and Q2 (0.9%) compared to Q1 and Q2 (0.3% and 0.1%, respectively). Dissolved parameters which most frequently exceeded their total values were Se and Sr, followed by S, K, Sr, Na and Mg.

For the present data evaluation, a second DQO of 150% was also used to identify parameters with the greatest magnitude of exceedances (Table 3-28). The proportion of dissolved parameters values that are greater than 150% of the total metal concentration is highest in Q1 (0.2%) and decreases over 5-fold in the remaining quarters, showing a minimum in Q4 (0.03%).

Table 3-28:
Number of Sample Metal Pairs in 2022 for Which the Dissolved Concentration Exceeded the Total by 120% and 150%

Quarter	Number of Total and Dissolved Metal Parameters	Number of Parameters with D>120% T	Percentage of Parameters with D>120% T	Number of Parameters with D>150% T	Percentage of Parameters with D>150% T
1	7,595	64	0.8	14	0.2
2	13,019	118	0.9	13	0.1
3	9,800	32	0.3	6	0.06
4	6,825	8	0.1	2	0.03

3.2.5.7 In Situ Field Measurements

In situ field measurements are typically collected with hand-held probes at the same location and time during which an analytical sample is collected (Appendix-3-B). These

measurements are valuable for capturing the general chemistry of site water without potential artifacts that can be introduced during collection and transport of samples to the lab (*e.g.*, CO_2 dissolution in the case of pH). In 2019, it was confirmed that *in situ* field pH values at EOP would be used to evaluate pH compliance with the RSEM EOP limit in order to meet the 15-minute hold time for analytical pH measurements.

Comparison of *in situ* field data to laboratory analytical results collected during the same time period serves as an independent check of field measurements. An *in situ* field value that is measurably different than the analytical value may be indicative of variability due to specific environmental conditions that occur during the *in situ* field measurement, technical error with the hand-held logger, or potentially chemical changes that occur following sample collection.

In situ field data are generally consistent with corresponding analytical measurements. In Table 3-29, a positive median difference suggests that field measurements tended to be biased higher than analytical results, while a negative median difference suggests field measurements tended to be biased lower. The results indicate that pH shows a positive bias for field measurements relative to analytical results. By comparison, conductivity and turbidity values do not show a consistent bias across RSEM locations (Figure 3-72).

In 2022, *in situ* field pH at the sediment ponds were elevated by 0.26 to 0.96 units above analytical pH measurements (Table 3-29). This is consistent with the increased dissolution of CO_2 and a subsequent decrease in sample pH observed in laboratory samples (relative to field pH) as a result of exposure to aerated conditions in a sample bottle prior to taking an analytical reading in the lab. This finding shows that *in situ* field measurements are particularly meaningful for evaluating pH compliance in alkaline waters, as an analytical laboratory reading taken hours or days following sample collection might not capture an exceedance event.

Median *in situ* field conductivity and turbidity values show a difference of up to 5.8% and 65% relative to their respective analytical conductivity and turbidity measurements in the RSEM ponds. Turbidity measurements are generally more prone to variability. Differences between *in situ* field measurements and analytical test results may be attributed to variability in suspended solid characteristics within the sample and differences in the analytical instrumentation used for testing. Overall, field and lab turbidity values are generally comparable indicating that the field turbidity measurements are suitable for informing TSS management decisions.

Table 3-29:
Comparison of 2022 Field and Analytical Measurements for pH, Conductivity and Turbidity

Station ID	Number of Samples					Annual Median Difference*	Annual Median Relative Percent Difference**
	Q1	Q2	Q3	Q4	Total		
pH						s.u.	%
RSEM-L5E-P2-SP/EOP	21	31	4	0	56	0.44	5.3
RSEM-L5W-P2-SP/EOP	16	22	4	0	42	0.40	4.9
RSEM-L6-SP/EOP	2	6	0	2	10	0.96	12
RSEM-R5A-P2-A/B/C/D-SP/EOP	10	45	25	10	90	0.38	4.5
RSEM-R6E-SP/EOP	31	83	92	69	275	0.26	3.3
RSEM-R6W-SP/EOP	75	89	92	92	348	0.35	5.5
Conductivity						µS/cm	%
RSEM-L5E-P2-SP/EOP	21	31	4	0	56	-14	2.4
RSEM-L5W-P2-SP/EOP	16	22	4	0	42	-2.0	2.6
RSEM-L6-SP/EOP	2	6	0	2	10	16	4.9
RSEM-R5A-P2-A/B/C/D-SP/EOP	10	45	25	10	90	-7.0	2.3
RSEM-R6E-SP/EOP	31	83	92	69	275	19	5.8
RSEM-R6W-SP/EOP	75	89	92	92	348	-5.0	5.0
Turbidity						NTU	%
RSEM-L5E-P2-SP/EOP	21	31	4	0	56	0.65	28
RSEM-L5W-P2-SP/EOP	16	22	4	0	42	0.72	25
RSEM-L6-SP/EOP	2	6	0	2	10	1.3	29
RSEM-R5A-P2-A/B/C/D-SP/EOP	10	45	25	10	90	-1.0	26
RSEM-R6E-SP/EOP	31	83	92	69	275	3.4	65
RSEM-R6W-SP/EOP	75	89	92	92	348	1.4	46

Notes:
* Median difference between corresponding *in situ* field measurements (results reported by PRHP staff from hand-held data loggers) and analytical measurements. Difference was calculated by subtracting the analytical value from the *in situ* field value.
**Median absolute relative percent difference between corresponding *in situ* field and analytical measurements. Relative difference was calculated by dividing the difference between corresponding *in situ* field and analytical measurements, by the average of the corresponding *in situ* field and analytical measurements.

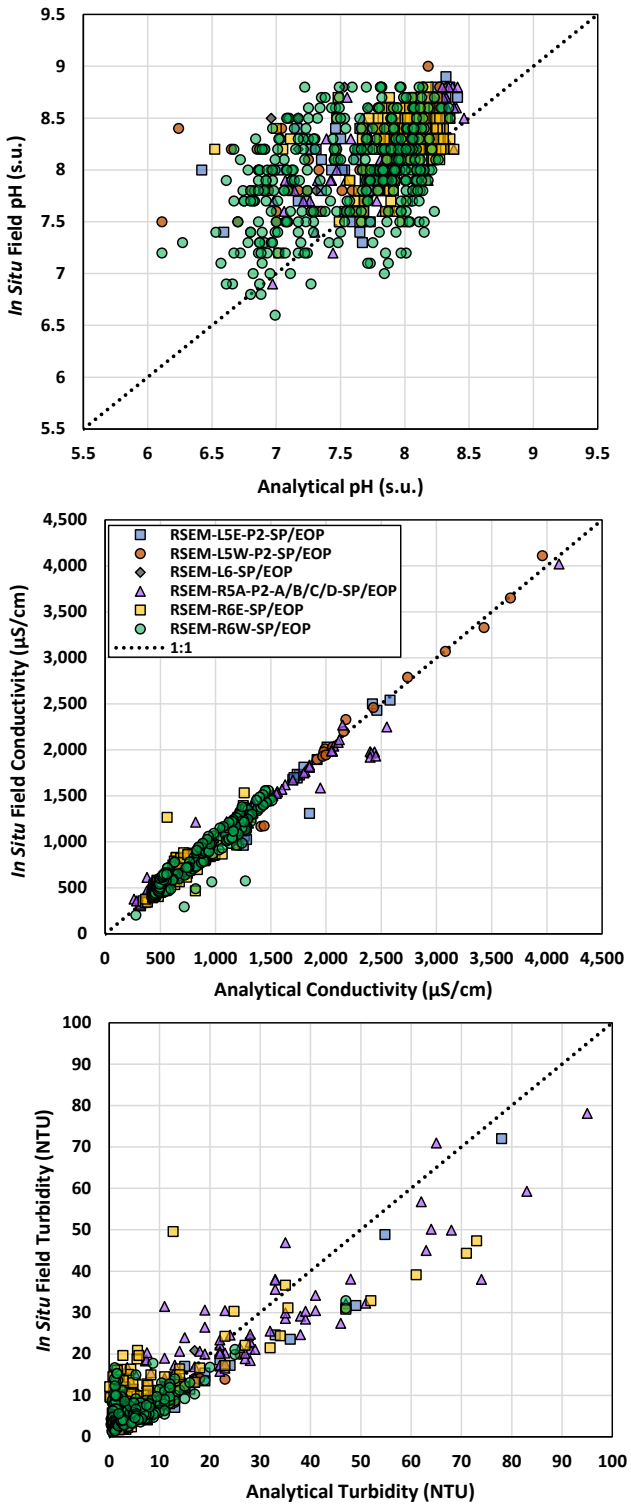

Figure 3-72: *In situ* field versus analytical measurements for pH, electrical conductivity and turbidity for 2022. (Note individual samples with measurements outside the typical range are not shown in the figure above.)

3.2.5.8 In Situ Sonde Measurements

In situ continuous sonde measurements for pH, conductivity and turbidity are monitored using a fixed in-pond sonde probe which regularly logs a data point every 15 minutes (Appendix 3-A). In comparison to *in situ* field measurements which are typically collected at the same location and time as an analytical end-of-pipe sample is collected, *in situ* sonde measurements are taken at a fixed point located approximately 5 to 10 metres from the discharge pipe inlet at a depth of approximately 0.3 m. The static deployment of the sonde can result in disagreement of water quality measurements compared to the end of pipe location due to spatial differences and potential temporal lags between the time that the sonde encounters a water plume to the time the clarified surface layer discharges through the end of pipe location.

As an independent check of sonde readings, sonde pH measurements are compared to field pH measurements that most closely correspond to the time period of collection. Field pH measurements rather than analytical pH measurements are used for comparison as they more accurately describe end of pipe water quality at the time of sampling (as described in the previous section). Sonde conductivity and turbidity measurements are compared to analytical results using the sonde readings that most closely correspond to the sample collection time recorded for an analytical sample.

Sonde pH measurements do not show a consistent bias relative to field pH across the sediment ponds (Table 3-30 and Figure 3-73). Median sonde pH shows a maximum difference of 0.11 units from their field measurement counterparts. The positive bias observed at RSEM L5 East and West ponds suggests that sonde readings may slightly overestimate pH values at EOP relative to hand-held meter measurements. Alternatively, conductivity results indicate that sonde and analytical measurements generally align to a 1:1 relationship in all sediment ponds.

Sonde turbidity measurements in 2022 show a median relative percent difference ranging between 28% to 126% (Table 3-30). Sonde readings predominantly show a positive bias relative to analytical measurements, with measurements variably diverging from the 1:1 relationship (Figure 3-73). Elevated sonde turbidity readings may be associated with the sonde location, with sensors at approximately 0.3 m depth in the pond water column, upstream of the inlet to the discharge pipe. Only the surface layer of the pond passively spills into the discharge pipe, it is likely the surface layer has lower turbidity than deeper layers due to particle settling. The sonde probe is located within the interior of the pond and is more likely to detect sediment plumes which may extend to the sonde, but not to the discharge pipe intake. These findings suggest that sonde turbidity measurements are not a reliable indicator of turbidity in the pond discharge.

Table 3-30:
Comparison of 2022 *In Situ* Continuous and Analytical Measurements for pH, Conductivity and Turbidity

Station ID	Number of Samples					Annual Median Difference*	Annual Median Relative Percent Difference**
	Q1	Q2	Q3	Q4	Total		
pH						s.u.	%
RSEM-L5E-P2-SP/EOP	16	46	2	0	64	0.01	1.5
RSEM-L5W-P2-SP/EOP	11	11	0	0	22	0.11	2.7
RSEM-R5A-P2-A/B/C/D-SP/EOP	4	42	19	11	76	-0.07	1.5
RSEM-R6E-SP/EOP	84	89	92	89	354	-0.02	1.7
RSEM-R6W-SP/EOP	80	88	91	91	350	-0.05	4.2
Conductivity						µS/cm	%
RSEM-L5E-P2-SP/EOP	16	22	1	0	39	-33	5.2
RSEM-L5W-P2-SP/EOP	11	8	0	0	19	16	3.7
RSEM-R5A-P2-A/B/C/D-SP/EOP	4	28	16	10	58	26	6.5
RSEM-R6E-SP/EOP	32	83	92	68	275	2.0	1.6
RSEM-R6W-SP/EOP	72	89	91	91	343	-1.6	1.7
Turbidity						NTU	%
RSEM-L5E-P2-SP/EOP	16	22	1	0	39	15	93
RSEM-L5W-P2-SP/EOP	11	8	0	0	19	2.4	28
RSEM-R5A-P2-A/B/C/D-SP/EOP	4	28	16	10	58	30	83
RSEM-R6E-SP/EOP	32	83	92	68	275	3.5	116
RSEM-R6W-SP/EOP	72	89	91	91	343	1.3	126

Notes:
*Median difference between corresponding *in situ* continuous measurements and *in situ* field (pH) or analytical (conductivity and turbidity) measurements. Difference was calculated by subtracting the *in situ* field (pH) or analytical (conductivity and turbidity) measurements from the *in situ* continuous value.
**Median absolute relative percent difference between corresponding *in situ* continuous *in situ* field (pH) or analytical (conductivity and turbidity) measurements. Relative difference was calculated by dividing the difference between corresponding *in situ* continuous and *in situ* field (pH) or analytical (conductivity and turbidity) measurements, by the average of the corresponding *in situ* continuous and *in situ* field (pH) or analytical (conductivity and turbidity) measurements.

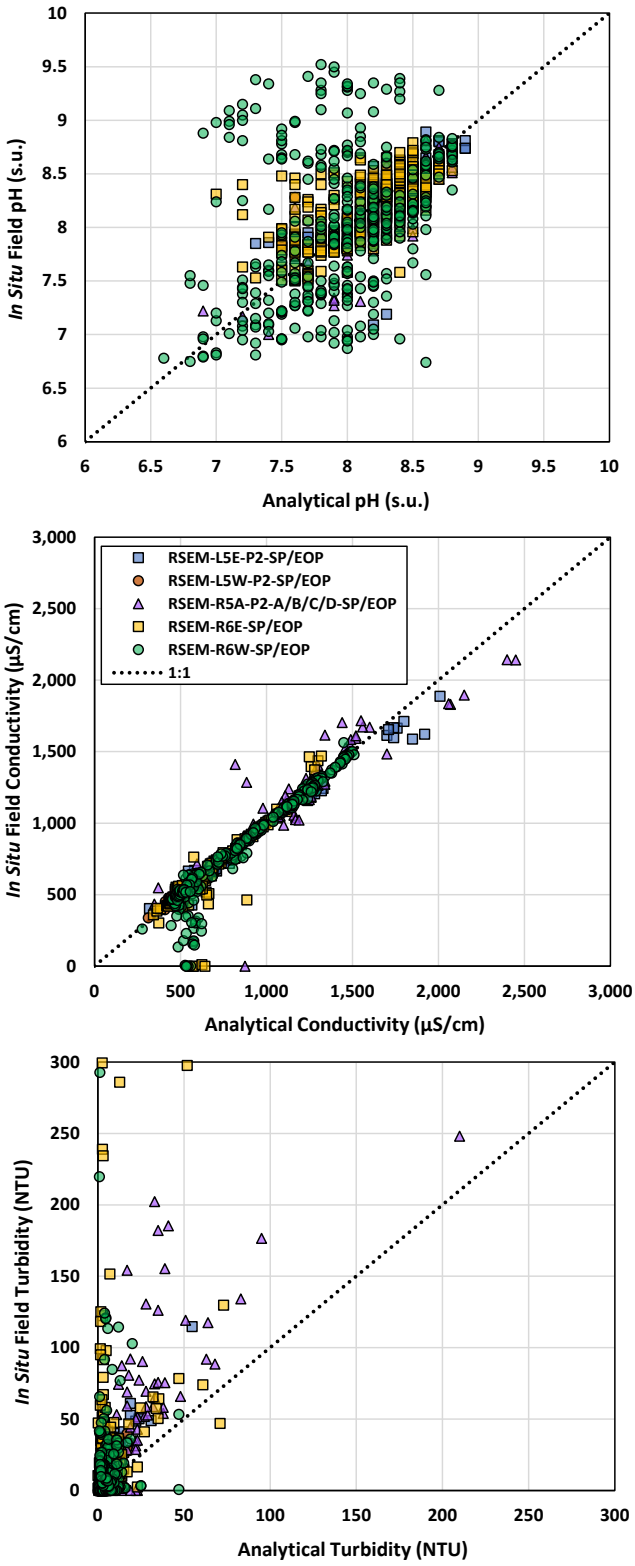

Figure 3-73: *In situ* sonde versus field measurements for pH, and sonde versus analytical measurements for electrical conductivity and turbidity for 2022. (Note individual samples with measurements outside the typical range are not shown in the figure above.)

3.2.5.9 Conclusions

Overall, the QA/QC results for the 2022 sampling program provide confidence in the water quality data for analytical and field (hand-held and continuous) measurements. Minor issues associated with sample representativeness are noted but are not expected to measurably alter the interpretation of sampling data with some exceptions. Turbidity measurements from *in situ* sondes were found to diverge from corresponding analytical end of pipe measurements. Therefore, EOP field turbidity measurements rather than *in situ* sonde readings are recommended for estimating TSS in discharges. Observations noted in the sections above will continue to be monitored and appropriate action will be taken to minimize sources of error during sampling and analysis.

4. Key Findings

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4. Key Findings

The purpose of this section is to provide additional information that is required by the BC Hydro ARD/ML Management Plan or has been specifically requested by BC Hydro. It includes the updated relationship between turbidity and TSS, an assessment of the onset of ARD/ML, a summary of mitigation measures that were employed in 2022, a ML/ARD risk evaluation, a summary of exceedances of project-specific discharge limits that occurred in 2022, and an estimation of metal loads discharged to the Peace River.

4.1 Turbidity – TSS Relationship

PRHP makes water management decisions based on estimates of TSS calculated from field turbidity measurements. An ongoing evaluation of the turbidity – TSS relationship is conducted for each RSEM sediment pond to ensure the relationship used to estimate TSS remains valid. The turbidity-TSS relationship established in 2019 for the RSEM L5E/L5W and R6E/R6W sediment control ponds is currently in use by PRHP field staff. Table 4-1 presents the 2019 TSS-turbidity relationships compared to the relationships developed using the 2022 monitoring data for the L5 and R6 RSEM sediment control ponds.

Table 4-1:
Turbidity to TSS Conversion Relationships for In Situ Monitoring Equipment

Location	2019 Relationship	2022 Relationship
RSEM-L5-SP	TSS = 0.8738 × (Turbidity) + 1.8301	*TSS = 0.6904 x (Turbidity) – 1.6128
RSEM-R6-SP	TSS = 0.7617 × (Turbidity) + 1.2223	TSS = 0.4643 x (Turbidity) + 0.0184

Notes:
1. Turbidity is calculated at PAM stations (Peace River, above Moberly River); Ganshorn *et al.*, (2019)
2. Linear relationship for RSEM-L5E/L5W-P2-SP (Phase 2) in 2022.

Plots of the 2022 *in situ* field turbidity vs. analytical TSS measurements for RSEM L5 (Phase 2) and RSEM R6 sediment pond water are illustrated in Figure 4-1 and Figure 4-2, respectively. The best fit linear relationships for both the 2019 and 2022 data are included on the plots.

Monitoring results for the RSEM L5 Phase 2 ponds show a strong correlation (R^2= 0.82) between field turbidity and analytical TSS. A linear relationship is observed even at low turbidity values (<20 NTU) in the majority of samples collected in 2022. A weaker correlation (R^2 = 0.45) is observed for the RSEM R6 monitoring results, with measurements showing turbidity <20 NTU clustering above and below the best fit line. The weak correlation is in part attributed to the limited number of measurements at the higher turbidity range.

For both the RSEM L5 and R6 sediment ponds, the 2022 turbidity – TSS relationships diverge from the 2019 relationships with the slopes of the latter regressions being lower than the slopes of the earlier regressions. Therefore, the application of linear relationships developed in 2019 typically overestimated TSS for 2022, thus providing a conservative estimate of TSS.

Note that the 2019 turbidity – TSS relationship was developed for the RSEM L5 Phase 1 ponds, which may contribute to the lack of agreement with the 2022 correlation developed from monitoring results for the L5 Phase 2 ponds. The dispersal and settling tendencies of particulates within the ponds can be influenced by variability in construction specifications for both the conveyance systems and sediment ponds. In regards to the RSEM R6 sediment ponds, variability in turbidity – TSS conversions between 2019 and 2022 is attributed to modifications in water management which introduced different source waters to the ponds in more recent years.

Establishing a consistent turbidity – TSS conversion across a wide range of turbidity levels requires continued validation of monitoring data. This is particularly relevant considering the potential variability in source water chemistry associated with increased construction activity. Turbidity – TSS relationships will continue to be reviewed and updated if warranted to provide more robust estimates of TSS from *in situ* turbidity measurements.

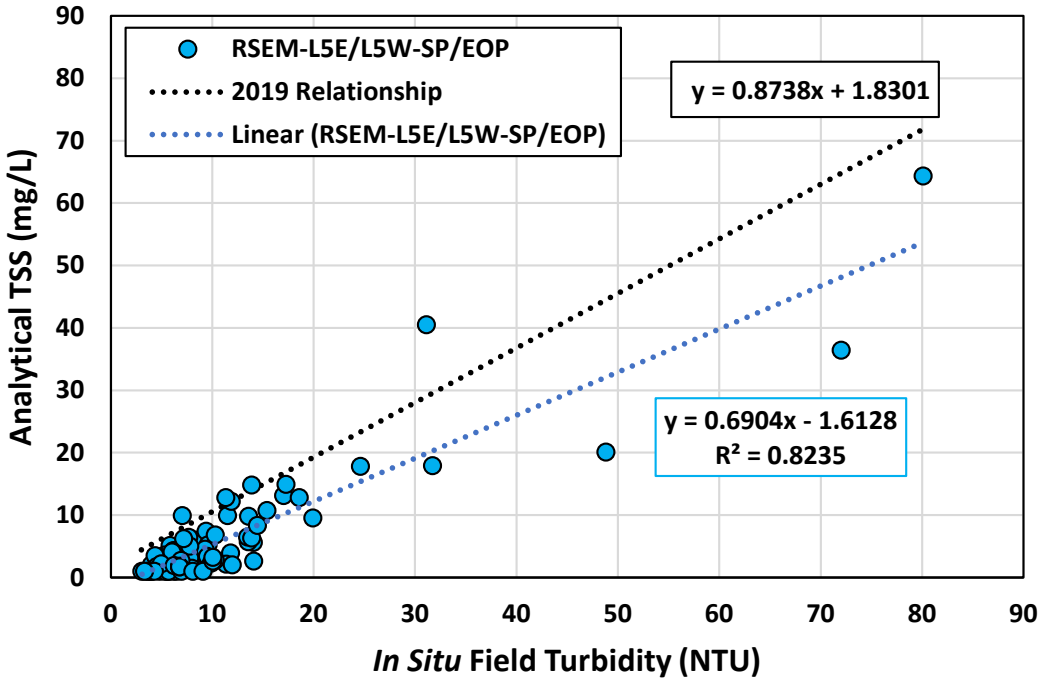


Figure 4-1: Analytical TSS versus *in situ* field turbidity at RSEM-L5E/L5W-P2 (Phase 2) for 2022. A line of best of fit for the annual data is presented along with 2019 turbidity – TSS conversion.

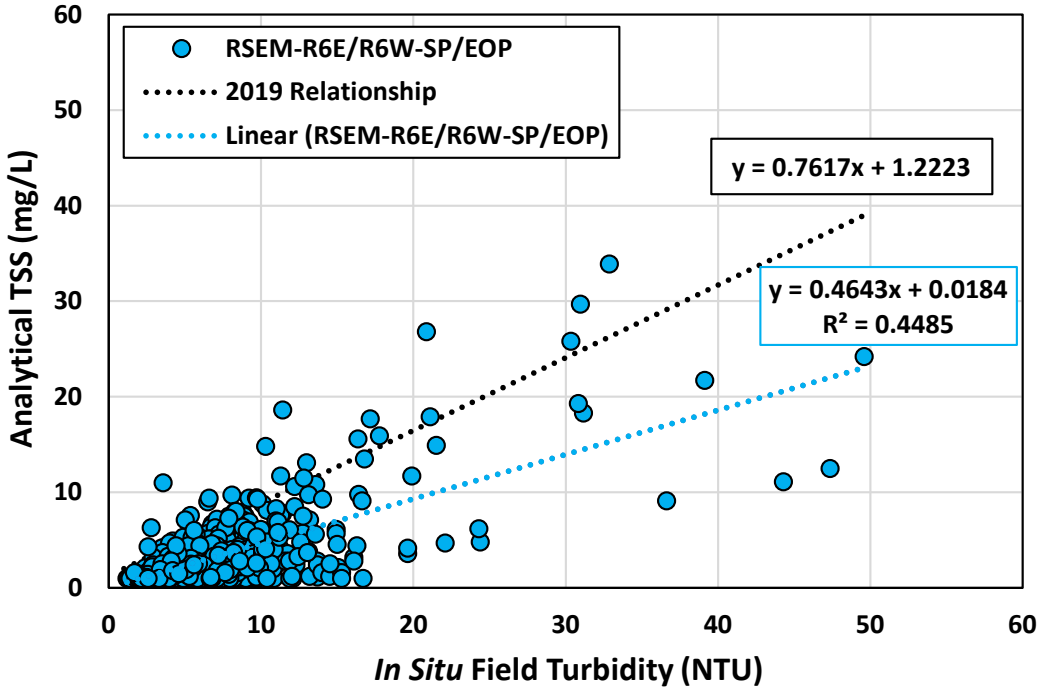


Figure 4-2: Analytical TSS versus in situ field turbidity at RSEM-R6E/R6W for 2022. A line of best of fit for the annual data is presented along with the 2019 turbidity – TSS conversion. Note an R6E-EOP sample collected on March 17th showing exceedingly high turbidity (1354 NTU) and TSS (629 mg/L) values is excluded from the figure above.

4.2 Onset of ARD/ML

Surface water quality and geochemical monitoring data are reviewed on a bi-weekly and quarterly basis, respectively, to identify trends in the onset of ARD/ML. Monitoring results confirm previous evidence of localized acidic rock exposures on the Left Bank, Right Bank and Earthfill Dam. In 2022, AG samples were identified on the Left Bank (n = 9), Earthfill Dam (n=8) and the Right Bank (n = 54) (Section 2.4).

4.2.1 Left Bank

Key observations with respect to the onset of ARD/ML on the Left Bank in 2022 are as follows:

- Two AG samples were collected in RSEM Area L5 in 2022. Water quality in the RSEM L5 Phase 2 East and West sediment control ponds remained circumneutral to alkaline throughout 2022. The metal concentrations remained below the discharge limits when there was discharge from these sediment ponds, however, cadmium and zinc concentrations spiked to and above discharge limits when the

ponds were not discharging, which may indicate early signs of PAG weathering in RSEM Area L5.

- The RSEM L6 sediment control pond remained circumneutral to slightly alkaline with low metal concentrations. PAG material remains covered in this area and no rinse pH samples were collected in 2022.
- Five AG samples were collected from Bench 0 and two AG samples were collected from the western portion of the LBEX in 2022. Although bedrock exposures in the LBEX are small relative to the total LBEX catchment these weathered surfaces generate acidic runoff. Runoff from the lower LBEX benches that report to the LBEX Bench-0 sump and runoff from bedrock exposed in the western portion of the LBEX that reports to the LBEX-PAG-SUMP were occasionally acidic and had elevated metal concentrations.

4.2.2 Earthfill Dam

Monitoring results that relate to the onset of ARD/ML on the Earthfill Dam from 2022 are listed below:

- PAG rock was placed and left exposed in Zone 8 early in the year and the proportion of acidic rinse pH samples from this area increased as the year progressed. Although there was exposed AG weathered bedrock in Q4 2022, there were no significant precipitation events that produced acidic runoff prior to onset of winter and freezing conditions.
- Earthfill Dam water quality for samples were circumneutral to slightly alkaline, with low sulphate and metals concentrations.

4.2.3 Right Bank

AG material was identified in the bedrock exposures within the RSEM Area R5B catchment, RSEM Area R5A and the Approach Channel West Temporary Stockpile in 2022. Water quality and ARD monitoring on the Right Bank led to the following key observations:

- The AG bedrock exposures identified in the RSEM Area R5B catchment in 2022 are consistent with previous monitoring results. These exposures are scheduled to be excavated and covered non PAG material in 2023. Water quality sampling stations in RSEM Area R5B (R5B-P2-W-Sump and R5B-P2-Sump) that receive water from this area remained circumneutral to slightly alkaline. In addition, sulphate and metal concentrations measured in R5B-P2-Sump were moderate to low, indicating limited ARD influenced runoff was required to be discharged.

- PAG material that was stockpiled in RSEM Area R5A during Q1 and Q2 displayed progressive acidification over the year. The proportion of AG samples increased from 24% in Q2 to 43% in Q3 and 65% in Q4. The RSEM R5A Ponds remained circumneutral to slightly alkaline except RSEM R5A Pond D where acidic water was noted. Sulphate levels were moderate and on occasion metal concentrations exceeded the EOP discharge limits, resulting from the ARD influence on runoff water. The exposed PAG rock in RSEM Area R5A was partially relocated to the West Expansion and Central Expansion areas in Q4 2022. Additional material currently stockpiled in the area is scheduled to be relocated and covered with non-PAG material in the West and Central Expansion areas of RSEM Area R5A in 2023.
- The AC West Temporary PAG Stockpile located at the west end of the Approach Channel displayed progressive acidification as the Q3 and Q4 2022 monitoring indicated that 11 of 14 samples were classified as AG. The temporary stockpile was relocated to Zone 8 and RSEM R5A in Q4 2022.
- The RSEM R6 East and West sediment ponds remained circumneutral to slightly alkaline. Sulphate concentrations remained low to moderate. The metal concentrations that exceeded the EOP discharge limits in 2022; were not attributed to PAG-influenced runoff (see Section 4.5).
- The Area 30 sediment control pond was circumneutral to alkaline. Although elevated sulphate and zinc concentrations were periodically measured in the sediment pond, associated with weathering of the stockpiled limestone aggregate under neutral conditions, concentrations in the Beaver Pond generally remained within water quality guidelines, and exceedances are attributed to sediment contamination during sampling (Section 3.2.4.1).

4.3 Mitigation

Given the onset of ARD/ML in exposed PAG material on both the Left Bank and Right Bank, mitigation has been implemented to minimize effects on surface water and groundwater quality. Potential environmental effects from ARD/ML are mitigated primarily through three strategies. The first strategy is to minimize generation of ARD/ML by covering weathered PAG material with unweathered PAG or NPAG material. The second strategy that is employed is to minimize the volume of PAG-contact water that is generated, by diverting runoff upgradient of areas that contain PAG material and collecting water that contacts PAG material. The third strategy is to treat the residual volume of water for which contact with PAG material is unavoidable. These key mitigation measures are discussed in more detail below.

4.3.1 Material Management

The timely excavation or cover of weathered material is a key mitigation strategy where relatively large volumes of PAG material have been deposited to date. Weathered PAG material was excavated or covered to minimize potential ARD/ML on both the Earthfill Dam and Right Bank.

PAG material placement in 2022 was primarily in the Earthfill Dam (Zone 8) and in RSEM Area R5A. The risk from PAG exposed in Zone 8 and RSEM R5A was partially mitigated through the ongoing placement of fresh PAG to limit exposure of weathered material. Total coverage was not achieved due to the high rate of material placement in these locations early in the year and there were signs of progressive acidification at both locations. The weathered PAG rock in RSEM Area R5A was partially relocated to the West Expansion and Central Expansion areas in Q4 2022. Additional material relocation is scheduled within RSEM Area R5A in 2023.

Weathered bedrock was also excavated from the Approach Channel in preparation of placing the final channel surface layers. Although PRHP has passed the control of the Approach Channel construction to AFDE, PRHP control ponds and sumps receive PAG contact water from this construction area. A large area of exposed PAG bedrock in the Approach Channel was covered by the construction and placement of the final Approach Channel surfaces in Q2, Q3 and Q4.

4.3.2 Water Management

This section summarizes water movements that are undertaken to segregate potentially ARD/ML influenced PAG contact water from other contact waters (*i.e.,* non-PAG contact water and PAG contact water that is not ARD/ML influenced) within PAG containing construction areas. Transfers within and between Project area catchments are conducted to improve water management efficiency and to ensure contact waters are routed through an appropriate treatment facility prior to discharge. This is achieved with a network of sumps, ponds, baker tanks, ditches and pipelines, and active water management (*i.e.,* pumps, hoses and water trucks). Water quality monitoring data are used to identify potentially ARD/ML influenced water that requires treatment using the WTP. RSEM sediment control ponds are used to treat suspended sediments (*i.e.,* TSS).

The general water management objectives are to:

- Segregate ARD/ML influenced water that must be treated by the WTP;
- Maximize storage capacity for surges of ARD/ML influenced PAG contact water associated with heavy runoff from rainfall or snowmelt; and,

- Minimize the number of treatment facilities (*i.e.*, sediment control ponds) that require daily management.

A quarterly summary of water transfers in 2022 to PAG containing RSEM sediment control ponds, and to the WTP Pre-Treatment Pond, from Left Bank and Right Bank catchment areas, is provided in Table 4-2. The source areas and destinations of relocated waters are also shown in Figure 4-3. Notable details regarding water transfers are summarized below:

- The water management approach is to direct contact water to the appropriate facility for discharge. Non-PAG contact water is generally discharged to Peace River or to vegatated areas. PAG contact water with confirmed or suspected ARD/ML influence is directed to the MWTF or WTP for treatment, otherwise, if water quality monitoring indicates there is no ARD/ML influence, the PAG contact water is directed to a RSEM sediment control pond.
- The wells placed in the granular shell upstream of the earthfill dam (Earthfill Dam West Sump) were periodically pumped and directed to the MWTF until they were decommissioned on May 23. The wells in the granular shell downstream of the earthfill dam (Earfill Dam East Sump) were dewatered to the Peace River and were decommissioned on May 15.
- Beginning April 1, AFDE assumed responsibility for water management within the Approach Channel. The Approach Channel runoff from the areas controlled by AFDE were directed to the PRHP controlled R5B Phase 2 Sump for PAG-contact water management and discharge.
- Pipelines were constructed by PRHP in 2022 Q2 and Q3 to facilitate the pumping of R5B Phase 2 Sump water to RSEM R5A pond A, the RSEM R6 ponds or to the MWTF, as needed.
- Dewatering of the RCC area from three (3) dewatering wells was conducted by AFDE in 2022, at a rate that maintains the water level approximately10 m below ground level at the well locations. The AFDE water was directed to the Pre-Treatment Pond until October 3rd, when it was redirected to Cell 3 of the Sludge Pond. It is speculated the groundwater is Peace River water that migrates to the dewatering wells through notches in the downstream cofferdam. The AFDE well dewatering flows were approximately 10 L/s at the end of 2022.

Table 4-2:
Quarterly Summary of PAG and Non-PAG Contact Water Transfer to PAG Containing RSEM Sediment Control Ponds and the WTP Pre-Treatment Pond in 2022

Receiving Facility	Type of Water and Source Area			
	Q1	**Q2**	**Q3**	**Q4**
RSEM L5 East Phase 2 Sediment Control Pond	Non-PAG contact from LBEX	Non-PAG contact from LBEX	Non-PAG contact from LBEX	Non-PAG contact from LBEX
RSEM R6 East Sediment Control Pond	PAG contact from R5B	PAG contact from R5B	Non-PAG contact from Area 20/21/54	Non-PAG contact from Area 20/21/54
RSEM R6 West Sediment Control Pond	MWTF discharge, PAG contact from R5B	MWTF discharge	MWTF discharge, Non-PAG contact from Area 20/21	MWTF discharge, Non-PAG contact from Area 20/21
RSEM R5A Phase 2 Sediment Control Pond A	-	PAG contact water from R5B	PAG contact water from R5B	PAG contact water from R5B
WTP Pre-Treatment Pond	PAG contact from LBEX, RSEM Area L5, EDUW, AC, RBDT and RCC(AFDE)	PAG contact from LBEX, RSEM Area L5, EDUW, AC, R5B, RBDT and RCC(AFDE)	PAG contact from LBEX, RSEM Area L5, R5B, RBDT and RCC(AFDE)	PAG contact from LBEX, RSEM Area L5, RBDT. RCC(AFDE) wells dewatered into Cell 3 of the Sludge Pond

Notes:
LBEX = Left Bank Excavation; CVC = CVC Batch Plant; AC = Approach Channel; RBCT = Right Bank Core Trench, LBCT = Left Bank Core Trench, EDUW=Earthfill Dam Upstream Wells (East Sum); RBDT=Right Bank Drainage Tunnel, R5B=R5B Sump.
PAG-contact is defined as contact water with a possible ARD influence.
Non-contact is defined as runoff, construction water and groundwater that are not ARD influenced.

627,000 628,000 629,000 630,000 631,000

6,231,000

6,230,000

6,229,000

RSEM L5W-P2

RSEM L5 ponds dewatered to Pre-Treatment Pond

RSEM L5E-P2

RSEM R5A-P2

LBEX-B2 sump dewatered to RSEM L5E-P2

LBEX-B0 sump dewatered to Pre-Treatment Pond

R5B Sump dewatered to WTP, and RSEM R5A-P2 and R6E ponds

Earthfill Dam Upstream Wells to WTP

Approach Channel Sumps dewatered to WTP

Isolation Zone dewatered to River

RCC Wells (AFDE) to WTP or Sludge Pond Cell 3

RSEM R6E

Cell 3

RSEM R6W

WTP

Pre-Treatment Pond

RBDT to WTP

Area 20/21 to RSEM R6 ponds

Area 54 to RSEM R6E pond

627,000 628,000 629,000 630,000 631,000

LEGEND

PAG Contact Water Collection Areas

Note: Site C aerial imagery collected September 2022

Coordinate System: *NAD 1983 UTM Zone 10N*
Projection: *Transverse Mercator*
Datum: *North American 1983*
Units: *Meter*

1:15,000

0 200 400 Meters

DATE SAVED:	Feb 21, 2023
DRAWN BY:	AL
REVIEWED:	NM
VERSION:	1

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project
ARD/ML 2022 Annual Report

TITLE:

Overview of PAG and Non-PAG Contact Water Transfer to the MWT and Between Catchment Areas

PROJECT #: A416-1 *FIGURE:* 4-3

P:\@Drafting\Site C\Drafting Figures\MXD\2022_Annual Report\Figure 4-3 Water Transfer.mxd

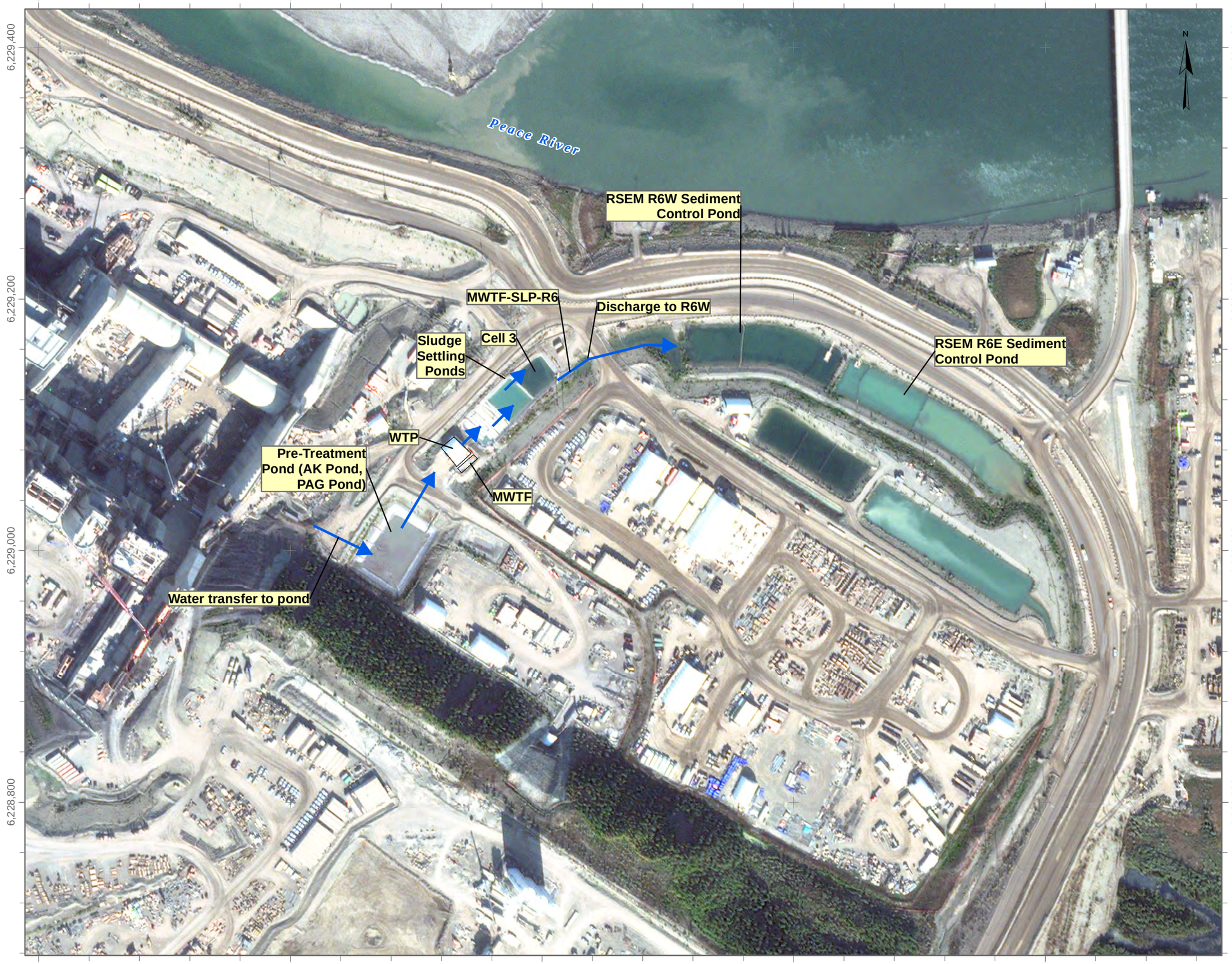
4.3.3 Water Treatment

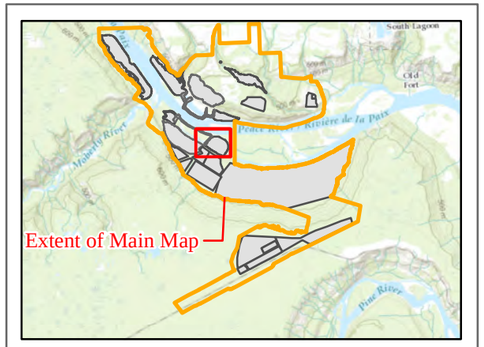
Water treatment is implemented for ARD/ML influenced contact waters from PAG containing excavations and RSEM deposition areas. Treatment is used to mitigate contact waters influenced by ARD/ML (*i.e.*, low pH and dissolved metals), cement products such as shotcrete (*i.e.*, elevated pH) and suspended sediments (*i.e.*, TSS). Different systems are used for each type of influence. Cement-influenced alkaline contact waters are generally treated within the source area using carbon dioxide to reduce pH to a circum-neutral level. Waters possibly influenced by ARD/ML are directed to the WTP, and suspended sediments are removed by the RSEM sediment control ponds. This section describes the MWTF and the WTP systems used to treat ARD/ML influenced contact waters.

The MWTF was commissioned by Ensero in Q3 2018 with the pre-treatment and metal precipitation facilities located at the west end of the Approach Channel, and the sludge pond located within RSEM Area R5B. Treated effluent was directed to the RSEM R5B sediment control pond until late April 2020, when the MWTF was relocated to RSEM Area R6 in advance of the transition to Phase 2 of the Project. From May 2020 to early July 2022, the MWTF discharged treated effluent to RSEM R6 West sediment control pond. The MWTF was operated by Ensero Solutions from July 2018 through July 7th, 2022. The configuration of the MWTF system components is illustrated in Figure 4-4.

During Q2 2022, PRHP constructed and commissioned a WTP metal precipitation facility that replaced the MWTF on July 8th, 2022, when the PRHP self-operated WTP commenced operations. The WTP facility is located beside and to the west of the MWTF facility shown in Figure 4-4.

The requirements of Section 7.2.4 of Appendix E (BC Hydro, 2016a) related to the disposal of accumulated sediment from a PAG contact sediment pond, and previously described in Section 2.5, were triggered late Q3 in advance of dredging. On October 13th and 14th, approximately 25 m^3 of sludge was removed from Cell 1 of the Sludge Pond, using a vacuum truck, and was deposited in RSEM R5A for dewatering and long term storage. Cell 1 is where the majority of the MWTF/WTP solids are settled. Samples of the MWTF/WTP solids were collected from Cell 1 on February 13th and September 25th. The testing and assessment of these materials is described in Section 2.5.4.





Legend

Direction of Flow

Note: Site C aerial imagery collected September 2022

0 50 100 Meters

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DATE SAVED: Feb 06, 2023 **REVIEWED:** NM

DRAWN BY: AL **VERSION:** 1

CLIENT:

PEACE RIVER HYDRO PARTNERS

LORAX ENVIRONMENTAL

PROJECT:

Site C Clean Energy Project
ARD/ML 2022 Annual Report

TITLE:

MWTF and WTP Layout
in the RSEM Area R6W Catchment

PROJECT #: A416-1 *FIGURE:* 4-4

Coordinate System: *NAD 1983 UTM Zone 10N* ***Datum:*** *North American 1983* ***Units:*** *Meter*

Path: *P:\@Drafting\Site C\Drafting Figures\MXD\2022_Annual Report\Fig 4-4 MWTF layout.mxd*

4.3.3.1 *Mobile Water Treatment Facility (MWTF)*

The overall treatment system shown in Figure 4-4 consists of three facilities: an influent storage pond, the metal precipitation facility, and a sludge pond, and is designed for the continuous treatment of influent flows that range between approximately 3 to 10 L/s. The "MWTF" or "WTP" acronym generally refers to the overall treatment system, however, for the following discussion, MWTF and WTP are defined as the intermediate facility where the metal precipitation reagents are mixed with the water being treated.

ARD influenced PAG-contact water is directed by pumping or trucking to the Pre-Treatment Pond for storage and from which water is withdrawn for treatment. Inside the MWTF, the treatment process adds a lime slurry to the influent to increase pH into the target range of 9.6 - 9.8, which precipitates dissolved metals as insoluble metal hydroxides. A flocculant is added to facilitate the coagulation and settling of the freshly precipitated solids. Klearwater Hydrofloc 403 is normally used and HaloSource Haloklear BHR-P50 is used when TSS is elevated in MWTF influent. The resulting slurry mixture is transferred from the MWTF to the Sludge Pond for polishing (*i.e.*, settling solids) and final pH adjustment. The process produces a gelatinous lime sludge that accumulates in the Sludge Pond.

The Sludge Pond is comprised of three cells which are used to settle suspended particulates in the discharge from the MWTF. Sludge is periodically removed by vacuum truck and is dewatered in RSEM Area R5A for long-term storage in the stockpile. The clarified water is adjusted to circum-neutral pH by sparging carbon dioxide into the final cell of the sludge pond. The treated water discharges passively to the RSEM R6 sediment control pond along a lined channel. A portion of the discharge channel passes under a road crossing through a zinc plated corrugated steel culvert.

Due to cold conditions in 2021 Q4, flow rates through the road crossing culvert were low and it was determined in early January 2022 that dissolved Zn was released from the culvert to the treated effluent in the discharge channel. The total Zn concentrations elevated to approximately 0.1 mg/L in RSEM R6W pond waters in early January 2022. Therefore, water discharged from the WTP was temporarily routed around the culvert from early January through early May, 2022. No further Zn influence from the road crossing culvert was observed for the balance of 2022 when higher flows (>10 L/s) discharged through the culvert compared to 2021 Q4 (<10 L/s).

The MWTF was operated by Ensero Solutions from Q3 2018 through July 7th, 2022, when operation of the MWTF permanently ceased. From January 1st to July 7th, 2022 the MWTF treated ARD influenced PAG-contact water from the LBEX, RSEM Area L5, Earthfill Dam upstream wells (Earthfill Dam West Sump), Approach Channel and the Right Bank

Drainage Tunnel. The MWTF process was effective at buffering pH and producing treated effluent with TSS and metal concentrations that are within the project-specific discharge limits based on observations of water quality in effluent from the MWTF and RSEM R6 West sediment control pond (Section 3.2.4.5 and Section 3.2.4.6, respectively). A summary of the removal efficiency for TSS and key total and dissolved metal parameters is provided in Table 4-3 below.

Table 4-3:
MWTF Removal Efficiency for Key Parameters (2022 Q1 and Q2)

Parameter (mg/L)	Median Influent (Pre-Treatment Pond; n=24)	Median Treated Effluent (MWTF-Cell-3; n=25)	% Removal (using median values)
pH (pH units)	8.21	7.12	-[1]
TSS	18.0	5.80	68%
T-Al	0.590	0.0817	86%
D-Al	0.0193	0.0202	-[2]
T-As	0.00173	0.00091	47%
D-As	0.00096	0.00076	20%
T-Cd	0.000097	<0.00001	90%
D-Cd	0.000029	<0.00001	66%
T-Co	0.00341	0.00060	82%
D-Co	0.00248	0.00050	80%
T-Cu	0.00596	0.00155	74%
D-Cu	0.00215	0.00114	47%
T-Fe	0.932	0.112	88%
D-Fe	<0.005	<0.005	-[3]
T-Mn	0.142	0.0157	89%
D-Mn	0.111	0.0102	91%
T-Zn	0.0362	<0.005	86%
D-Zn	0.0104	<0.005	52%

Notes:
Non-detect results were assigned the detection limit value for statistical and % removal calculations (0.00001, 0.0002, 0.0005, 0.005 and 0.005 mg/L for Cd, Co, Cu, Fe and Zn, respectively).
[1] Percent removal is not calculated for pH.
[2] The influent and effluent median values for D-Al similar, indicating no removal, therefore percent removal for D-Al was not calculated.
[3] The influent and effluent median values for D-Fe are non-detect results, therefore percent removal for D-Fe was not calculated.

4.3.3.2 *Water Treatment Plant (WTP)*

The treatment system constructed by PRHP has similar treatment components as the MWTF that was operated by Ensero Solutions. The Pre-Treatment Pond and Sludge Pond remain unaltered and are incorporated into the overall WTP system. However, the intermediate MWTF metal precipitation facility is replaced by the PRHP constructed facility. The PRHP and Ensero metal precipitation systems use the same reagents (*i.e.*, lime and flocculant) that are described in Section 4.3.3.1. The WTP is located beside and to the

west of the MWTF metal precipitation facility shown in Figure 4-4. The "WTP" acronym generally refers to the overall treatment system (*i.e.*, pre-treatment pond, metal precipitation facility and sludge pond). However, for the following discussion WTP is defined as the intermediate facility where the metal precipitation reagents are mixed with the water being treated.

Similar to the MWTF treatment system, ARD influenced PAG-contact water is directed by pumping or trucking to the Pre-Treatment Pond for storage and from which water is withdrawn for treatment. For the WTP, slaked lime is prepared in the Lime Slurry Tank and added to the influent water (pumped from the Pre-Treatment Pond) upstream of the Reactor Tank to adjust pH to a target pH 10.0 to 10.5 range. Flocculant (*i.e.*, Klearwater Hydrofloc 403) is added to the Reactor Tank effluent as it overflows to Cell #1 of the Sludge Pond for particle settling. A final pH adjustment is conducted using carbon dioxide in Cell #3 of the Sludge Pond. Treated effluent passively discharges from Cell #3 of the Sludge Pond at monitoring station MWTF-SLP-R6 and flows along a channel to the RSEM R6 West sediment control pond (Figure 4-4). A portion of the discharge channel passes under a road crossing through a zinc plated corrugated steel culvert.

Commissioning of the WTP was successfully conducted from June 12th to 19th, and PRHP initiated self-performed treatment using the WTP on July 8th, 2022, in accordance with the treatment service outlined in Change Order 573. The commissioning evaluations and results are described in the Evaluation and Summary of the PRHP Water Treatment Plant Commissioning Trial (Lorax, 2022a) and indicate that the WTP is effective for treating TSS and target dissolved metals to low concentrations below the RSEM EOP limits.

ARD influenced PAG-contact waters from the R5B Sump, RSEM Area L5 and LBEX, as well as drainage from the Right Bank Drainage Tunnel were directed to the Pre-Treatment Pond in 2022 Q3 and Q4. Groundwater wells in the RCC area were dewatered by AFDE to the Pre-Treatment Pond until October 3rd, 2022, when this water was re-directed to Cell 3 of the Sludge Pond. Subsequently, the inflows of PAG contact water decreased and the Pre-Treatment Pond water level remained low (at or below 1.2 m on the staff gauge) to the end of the year. The WTP was operated intermittently and as needed in Q3 and early Q4. Due to reduced inflows to the Pre-Treatment Pond in Q4, the WTP was not operated from October 6th through December 31st, and therefore treatment performance data summarized in Table 4-4 are not available for 2022 Q4. The Q3 operational monitoring data from the treatment system summarized in Section 3.2.4.5 and in Table 4-4 below, and the RSEM R6 West sediment control pond (Section 3.2.4.6) indicate the treatment process was effective at buffering pH and reducing TSS and metal concentrations to low concentrations and within the RSEM EOP limits.

Table 4-4:
WTP Metal Removal Efficiency for Key Parameters (2022 Q3)

Parameter (mg/L)	Median Influent (Pre-Treatment Pond; n=9)	Median Effluent (MWTF-SLP-R6; n=10)	% Removal (using median values)
pH (pH units)	8.35	7.78	-[1]
TSS	16.8	2.2	87%
T-Al	0.725	0.0694	90%
D-Al	0.0543	0.0350	36%
T-As	0.00196	0.00126	36%
D-As	0.00143	0.00124	14%
T-Cd	0.000021	<0.00001	52%
D-Cd	<0.00001	<0.00001	-[2]
T-Co	0.00063	<0.0002	68%
D-Co	0.00025	<0.0002	20%
T-Cu	0.00263	0.00113	57%
D-Cu	0.00116	0.00105	9%
T-Fe	0.487	0.054	89%
D-Fe	<0.01	<0.01	-[2]
T-Mn	0.0153	0.0033	79%
D-Mn	0.0027	0.0018	33%
T-Zn	0.0069	<0.005	28%
D-Zn	<0.005	<0.005	-[2]

Notes:
The WTP was not operated from October 6th to December 31st, 2022, therefore there are no Q4 treatment results.
Non-detect results were assigned the detection limit value for statistical calculations (0.00001, 0.0002, 0.005 and 0.005 mg/L for Cd, Co, Fe and Zn, respectively).
[1] Percent removal is not calculated for pH.
[2] The influent and effluent median values for D-Cd, D-Fe and D-Zn are non-detect results, therefore percent removal was not calculated for these parameters.

4.4 ML/ARD Risk Levels

4.4.1 Comparison of Predicted and Measured RSEM Discharge Water Quality

A water quality model for the Project was developed as part of the Environmental Assessment (EA), to predict whether discharge from RSEM areas would exceed allowable concentrations (KCB, 2014). Predicted concentrations were initially compared against Metal Mine Effluent Regulations (MMER) Schedule 4 criteria limits, and predictions were only provided for metals with MMER limits. Subsequently, more stringent limits were specified in Appendix E (Revision 5.2, dated July 26, 2016) of the CEMP (BC Hydro, 2016a). These have since been updated (Revision 10.1, dated April 6, 2022; BC Hydro, 2022a). The new (2022) limits are less stringent than the original 2016 values but are still more stringent than the MMER criteria. The predicted concentrations discussed in the following section are limited to T - Cu and T-Zn to demonstrate key observations.

The water quality model indicated that Upper Case loading rates (95th percentile rates for Humidity Cells and Field Bins), which were believed to represent larger rainstorm "flush" events, could result in concentrations exceeding MMER Schedule 4 limits in discharges from RSEM Area R5B and R5A, unless mitigated (KCB, 2014). These predicted exceedances are caused primarily by the area of PAG shale exposed as a result of the excavation of the Approach Channel in the RSEM R5B catchment (assumed to reach a maximum of 17.7 ha), and by the exposed PAG shale expected to be deposited (9.3M m^3) in RSEM Area R5A late in the construction phase of the Project (KCB, 2014).

The mitigation proposed was placement of overburden or recently excavated shale to cover acidic material. It was estimated that 80% to 90% cover of the exposed Approach Channel and of material placed in RSEM Area R5A would be required to meet the MMER criteria (KCB, 2014) in discharge from the RSEM R5B and R5A ponds.

In a subsequent report (KCB, 2016), it was noted that covering the Approach Channel excavations on the Right Bank may be impractical. Therefore, only the unmitigated scenario for R5B (0% of PAG material covered) and both the unmitigated and mitigated scenario for R5A (0% and 100% of PAG material covered) were modelled. The results for these scenarios (Table 4-5) indicate that the discharge limits would be exceeded with 0% cover of acidic material in both the Approach Channel and of material deposited in RSEM R5A, without additional mitigation (water treatment), as noted above.

The predictions cited above are for the maximum monthly average concentrations for the period included in the water quality model, from October 2014 through 2024. The predictions are based on the assumptions (KCB, 2014) that:

- A maximum extent of 17.7 ha of PAG shale would be exposed in the Approach Channel in the RSEM Area R5B catchment; and
- Approximately 10.6 Mm^3 of material, including 9.3M m^3 of (PAG) rock and 1.25M m^3 of overburden, would be placed in RSEM Area R5A.

Table 4-5:
Comparison of Maximum Monthly Water Quality Predictions for T-Cu and T-Zn (from KCB, 2016), CEMP requirements, and MMER Schedule 4 limits for discharge from RSEM Areas R5B and R5A

Parameter	2022 CEMP discharge limit (mg/L)	MMER 30 day limit (mg/L)	R5B maximum prediction (mg/L)	R5A maximum prediction (mg/L)
T-Cu	0.0163	0.3	0.15	2.5
T-Zn	0.251	0.5	0.7	13.3

At the end of 2022 Q1, 17.7 ha was exposed in the Approach Channel, or 100% of the area applied in the water quality model. The base and slopes of the Approach Channel were

progressively covered through the year by the placement of the final Approach Channel surface. The total volume of PAG rock deposited in RSEM Area R5A to the end of 2022 Q3 was approximately 7.4M m^3 (including approximately 57,000 m^3 placed in the RSEM R5A starter dyke).

In 2022 Q4, an additional 175,572 m^3 of PAG material was excavated from the Approach Channel. Most of this material was deposited in the Dam Core, and part of this volume (approximately 59,430 m^3) was deposited in RSEM-R5A.

The total volume of material in RSEM-R5A (including the Starter Dyke) was 7,421,813 m^3 or approximately 80% of the total volume that was expected to be deposited by this time, as shown in Table 4-6 below. The excavation of the Approach Channel is virtually complete, and control of the facility has been passed from PRHP to AFDE.

The discrepancy between the originally scheduled and actual volume of waste rock in RSEM-R5A is due primarily to permanent placement of excavated PAG rock (approximately 1,653,609 m^3) within Zone 8 of the Earthfill Dam. The total of these volumes (9,166,600 m^3) is equal to 99% of the volume of PAG material that was originally expected to be placed in RSEM-R5A.

Table 4-6:
Comparison of scheduled and reported volumes of material placed in RSEM Area R5A (scheduled volumes, KCB, 2014, Page 80, Table 39)

Construction Stage	Time	Scheduled Rock (PAG) Material added[1] (m^3)	Reported PAG material added[2,3] (m^3)	Scheduled Cumulative volume of Rock (PAG) stockpiled (m^3)	Reported Cumulative volume of PAG stockpiled (m^3)	%
Diversion Stage 1	4Q15 – 3Q16	2,827,600	0	2,827,600	0	0%
	4Q16 - 3Q17	4,151,200	3,541,397	6,978,800	3,541,397	38%
	4Q17 - 3Q18	487,300	454, 045	7,466,100	3,995,442	43%
	4Q18 - 3Q19	1,818,800	1,122,639	9,284,900	5,118,081	55%
	4Q19 - 3Q20	-	361,882	9,284,900	5,479,963	59%
Diversion Stage 2[4]	4Q20 - 3Q21	-	336,263	9,284,900	5,847,764	63%
	4Q21 - 3Q22	21,000	1,574,049	9,305,900	7,421,813[5]	80%
	4Q22 – 3Q23[6]	0	59,430	9,305,900	7,481,243[5]	80%

[1] Values from KCB, 2014; Table 39.
[2] Values from Lorax Quarterly ARD/ML Reports.
[3] It is assumed that all rock volumes are PAG.
[4] Originally planned for 3Q19, deferred to 3Q20
[5] This includes 7,423,703 m^3 deposited in RSEM R5A and 57,540 m^3 deposited in the RSEM R5A starter dyke. It excludes 363,847 m^3 of material permanently disposed in RSEM R5B and 31,748 m^3 temporarily stored in the AC West Temporary Stockpile.
[6] Deposition in RSEM-R5A was originally scheduled to be completed in 3Q22.

The predicted (KCB, 2016) and measured concentrations for total Cu and Zn for RSEM Area R5B (no mitigation) are shown in Figure 4-5 and Figure 4-6. Predicted total Cu and Zn concentrations (KCB, 2016) for RSEM Area R5A (0% and 100% cover) and the measured concentrations for RSEM R5A Pond C are shown in Figure 4-7 and Figure 4-8. The MMER and CEMP discharge limits are shown for comparison.

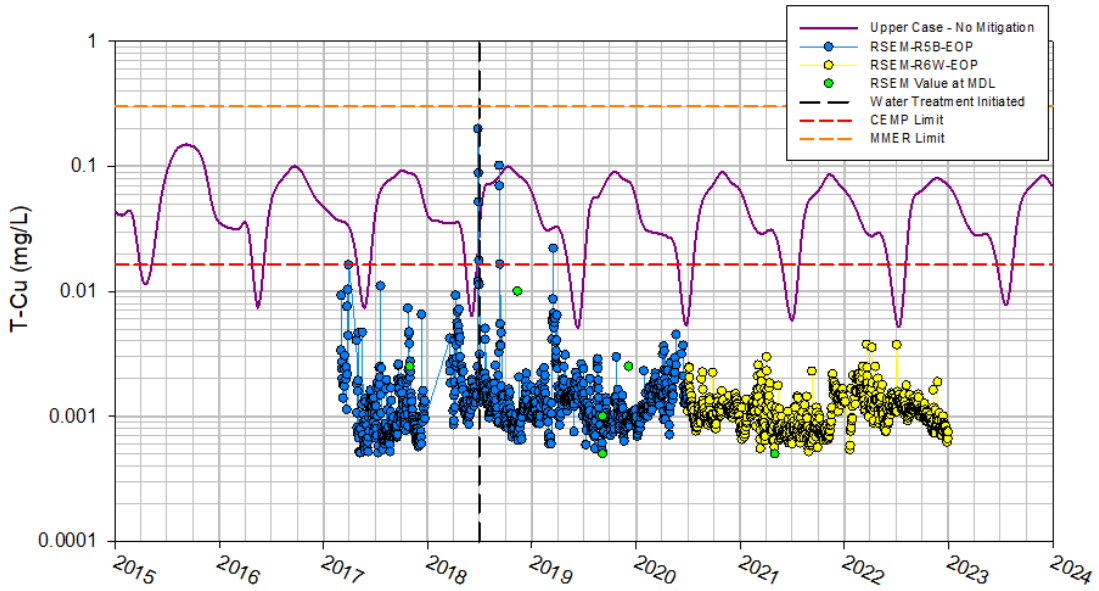

Figure 4-5: Cu Predicted at RSEM R5B / R6 (Upper Case – No Mitigation) and Measured at RSEM-R5B (through 2020 Q2) and R6 (through 2022 Q4)

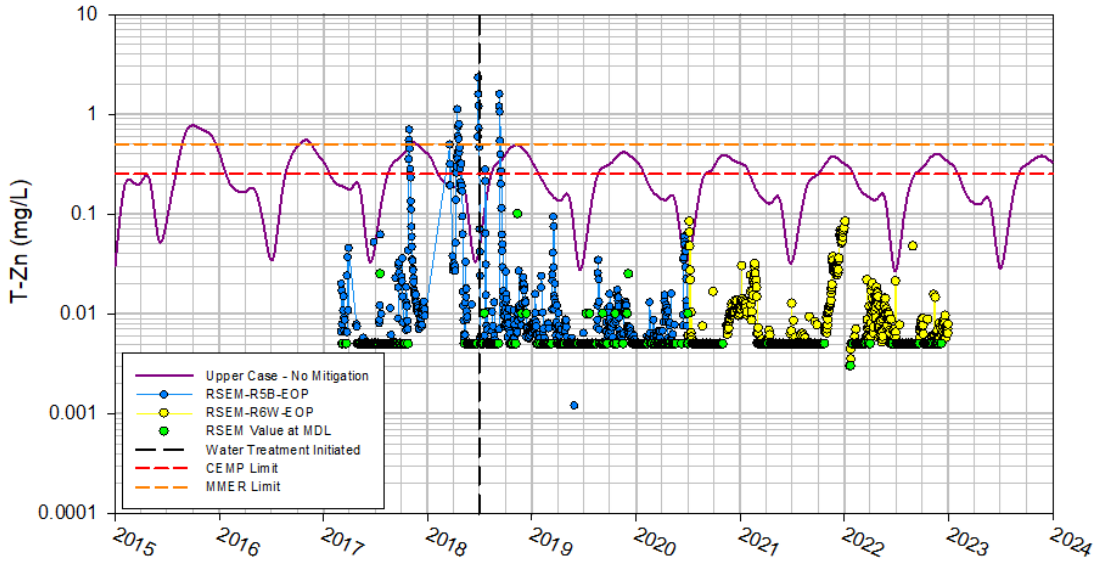

Figure 4-6: Zn Predicted at RSEM R5B / R6 (Upper Case – No Mitigation) and Measured at RSEM R5B (through 2020 Q2) and R6 (through 2022 Q4)

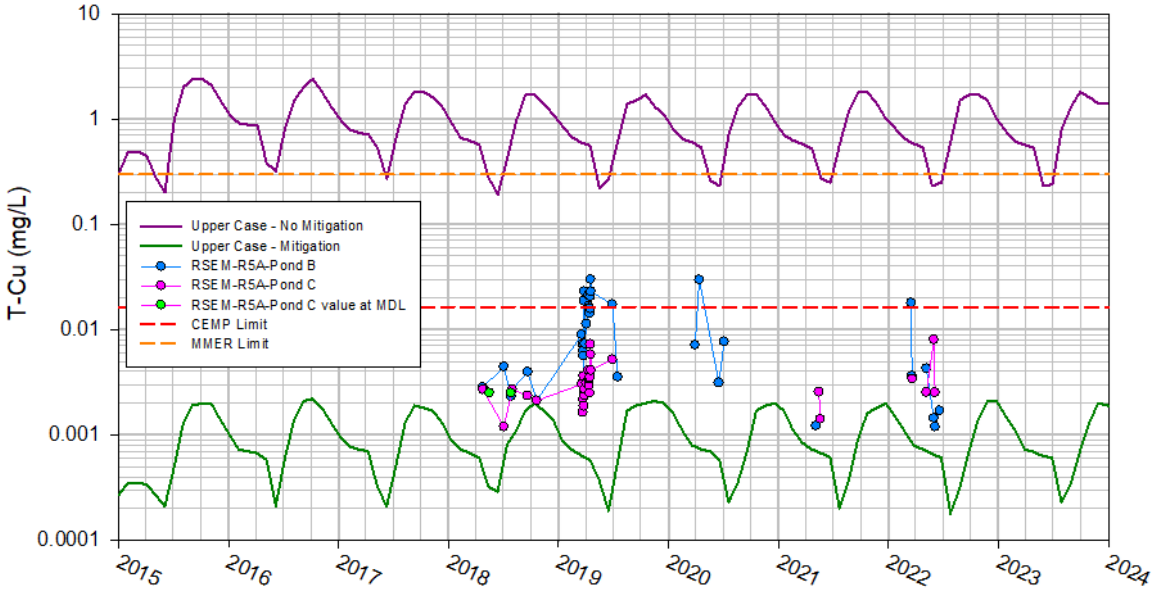

Figure 4-7: T-Cu Predicted at RSEM R5A (No Mitigation and 100% Mitigation) and Measured at RSEM R5A Pond B and Pond C

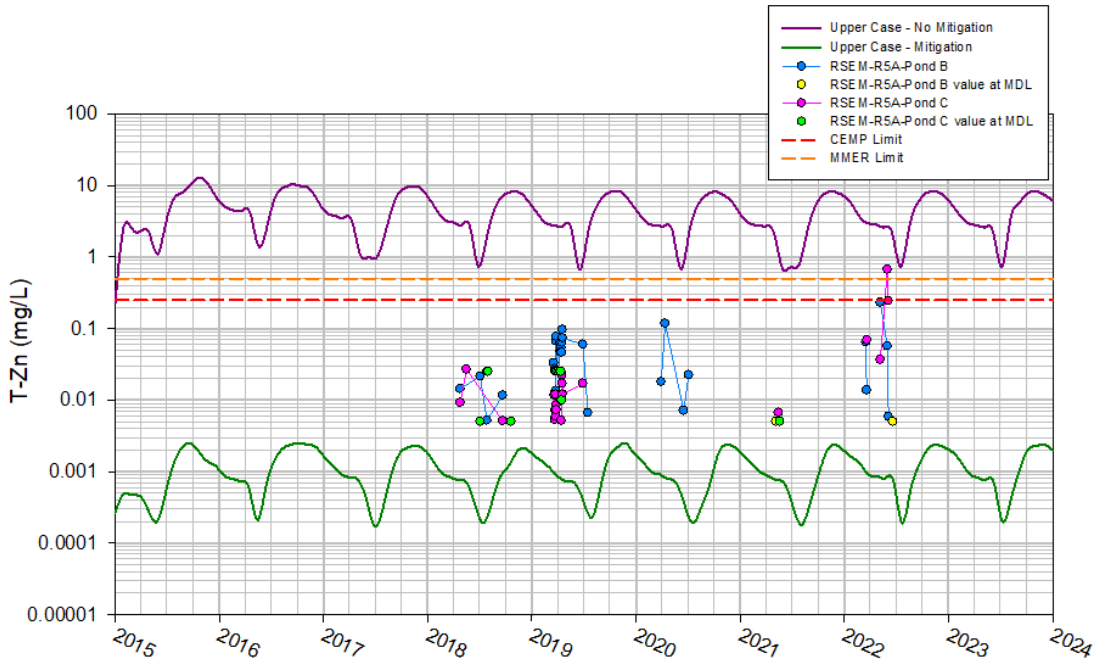

Figure 4-8: Zn Predicted at RSEM R5A (No Mitigation and 100% Mitigation) and Measured at RSEM R5A – Pond B and Pond C

The water quality model results for RSEM Area R5B indicate that Cu and Zn concentrations could exceed the CEMP discharge limits without mitigation, assuming upper case geochemical source terms, which were stated to be representative of large precipitation events. Water treatment was initiated in July 2018 and the water management system was modified in October 2018 to capture PAG impacted surface water during large storm events and direct it to the MWTF. The runoff from the Approach Channel is now directed to the MWTF in RSEM Area R6 via the R5B Phase 2 Sump.

The water quality monitoring results for RSEM Area R5A indicate that Cu and Zn concentrations are generally slightly elevated relative to the concentrations predicted with implementation of mitigation (100% cover), which is consistent with actual conditions in the field (the % AG material exposure in Q4 2020 is estimated to be approximately 60%). These plots also indicate that Cu and Zn concentrations approach or exceed RSEM sediment pond discharge limits and underscore the importance of continued mitigation in RSEM Area R5A.

These results confirm that the inherent risk in the Right Bank catchments is high, and that avoiding exceedances in both catchments (now the R5A and R6 catchments) will require diligent and consistent implementation of mitigation measures. It is necessary to collect and treat contact water from weathered bedrock in the Approach Channel excavation. The surface area of this excavation increased substantially in Q1 2022, although it has been reduced significantly in the latter portion of 2022 with the placement of the final surface material on the base and slopes of the Approach Channel. In the RSEM Area R5A catchment, relocating PAG shale and covering with non-PAG material in the West and Central Expansion areas will be necessary, due to the large volume of PAG material deposited in the facility that was associated with the completion of the excavation of the Approach Channel in 2022.

A consideration for RSEM Area R5A in 2022 through to the establishment of the permanent reservoir behind the dam is the ability to cover exposed PAG surface to limit the extent of AG surfaces. It is currently Lorax's understanding that there are now only small volumes of additional material scheduled to be placed and stored in the RSEM area to cover the PAG exposure and limit weathering of the PAG surface and reduce the amount of PAG runoff.

In the event of continued PAG material exposure in RSEM-R5A, the RSEM R5A sediment ponds will temporarily receive a higher proportion of PAG contact water that would require management and treatment until placement of the final cover layer. Although a high proportion of PAG runoff is initially expected to discharge into the Phase 2 ponds, the smaller surface area of exposed PAG above the Phase 2 ponds will decrease the total

volume of runoff water that may require special management or transport to the MWTF. Relocation of the PAG to the West Expansion and Central Expansion areas and covering of exposed PAG will be required and during the final phases of construction, an interim strategy will need to be developed to allow for a small area of active PAG placement while the majority of the RSEM will be covered.

4.4.2 Risk Rating Matrix

A risk rating matrix was initially prepared for the Exceedance Response Plan (PRHP, 2017c) that was finalized in June 2017. An updated matrix based on an assessment of the 2022 data is presented in this section. It is intended to facilitate the advanced planning and strategic implementation of water treatment, recognizing that procurement, construction and commissioning of a water treatment facility requires some lead time.

A water quality risk rating of low, moderate or high is assigned to each of the water collection systems on site. Consideration has been given to active PAG-containing RSEM sediment ponds including the RSEM Area L5, R6 and R5A sediment ponds and the R5B Sump.

The rating system employed for the RSEM ponds reflects:

- The current geochemical risk in the catchment area upgradient of the sediment pond, as determined primarily from the proportion of exposed material with low (< 5.5) rinse pH values;
- The quality of the water that has accumulated in the pond, as determined primarily by the sulphate concentration, field pH and field conductivity; and
- Other information determined to be relevant.

The current risk ratings are summarized in Table 4-7 below. The general intent of the risk ratings is to trigger action when the onset of ARD/ML is evident (moderate rating) and when water treatment may soon be required to maintain compliance with EOP discharge limits (high rating).

On the left bank the cumulative volume of PAG material that was placed in RSEM areas at the end of 2022 is as follows:

- 1,017,124 m^3 in RSEM Area L5;
- 495,792 m^3 in the RSEM Area L5 Extension; and
- 4,869 m^3 in the RSEM Area L5 Starter Dyke;

In addition, there was:

- 64,345 m^3 in RSEM Area L6;

- 24,240 m^3 in the L5 Garbage Creek area; and
- 12,345 m^3 in the Left Bank Dam Core.

The RSEM Area L5 is rated as moderate risk at the end of 2022 due to the larger than anticipated volume of PAG rock stored in it and given that the maximum concentrations of sulphate and conductivity remain elevated (<1,950 mg/L and >3,960 µs/cm respectively) in the L5E pond. It is anticipated that the risk level will decline in 2023 as the majority of PAG material in this area has been redistributed and the final NPAG cover material is scheduled to be placed.

The RSEM Area L6 sediment pond has a small catchment area and is managed not to discharge to the Peace River. It is excluded from the Risk Rating Matrix as the water in this pond would be transferred to the MWTF, if treatment was required, rather than installing a water treatment facility specifically for this pond.

On the Right Bank, the cumulative volumes of material placed in RSEM areas at the end of 2022 were:

- 7,481,243 m^3 of PAG bedrock in RSEM Area R5A and Starter Dyke; and
- 363,847 m^3 remaining in RSEM Area R5B, which is covered by NPAG material.

A High-risk rating is assigned to R5B Phase 2 Sump catchment that includes PAG exposures in the Approach Channel and the area between the eastern extent of the Approach Channel and the Moberly River on the slopes above RSEM Area R5B. Most samples from PAG bedrock exposed in this area have had a rinse pH of less than 5.5. Inflows to the RSEM R5B sump are redirected to the WTP, RSEM Area R5A or the RSEM Area R6 sediment ponds as required. A High risk rating is assigned due to the area of exposed PAG rock within its catchment. The risk is mitigated by 7,480 m^3 of surge capacity of the R5B Phase 2 Sump that provides water storage from a storm event and the completion of a pipeline from the sump that may direct contact water to the pre-treatment pond at a rate that can be treated by the WTP.

A Moderate risk rating is assigned to RSEM Area R6 sediment control pond as this pond receives PAG runoff from the RSEM R5B Sump. The lower risk rating is due to the mitigation measures afforded by the R5B West Sump that can be used to store runoff water that originally reported directly to the RSEM Area R6 ponds and the pipeline that can be used to divert the water to the WTP which produces water that meets the RSEM EOP limits. Although there is some exposed PAG material along the South Bank Initial Access Road (SBIAR), this relatively minor risk is managed by BC Hydro.

Excavation of the Approach Channel was essentially completed in 2022, which relocated weathered near-surface material to RSEM-R5A and exposed ‘fresh’ bedrock. PAG

influenced runoff from the Approach Channel is monitored in the RSEM R5B Sump and if necessary, diverted to the WTP for treatment prior to discharge to RSEM R6W pond, as noted above. The treatment process was effective throughout 2022 and will continue for as long as necessary. The base and slopes of the Approach Channel are being lined with concrete and final cover, which will continue to progressively mitigate this risk. Bedrock exposure in the RCC excavation is reduced by cover with roller compacted concrete. ARD that may be produced in the area is neutralized by the alkaline water released by concrete structures being built in this area.

In 2022, the total volume of PAG material deposited in RSEM Area R5A reached more than 7.4M m^3 (including the material in the R5A starter dyke). At the end of 2022, this risk was being mitigated through water management and monitoring indicated much of the PAG material had become AG, particularly in the West portion of the RSEM area.

A risk rating of ‘moderate’ is assigned to the RSEM R5A area for Phase 2 ponds A, B and C., while a risk rating of ‘high) is assigned to Pond D. A significant number of samples obtained in 2022 had a rinse pH of less than 5.5 and there was an increasing trend in the latter half of the year. In addition, some samples from Pond D had low pH and elevated sulphate and conductivity. The maximum dissolved concentrations of Cd (0.0324 mg/L), Cu (0.268 mg/L) and Zn (8.83 mg/L) were elevated but below EOP discharge limits.

The RSEM R5A Phase 2 sediment control ponds were managed to not passively discharge, and active pumping from between the different R5A ponds was used as needed to maintain low water levels in the ponds. This is reflected in the pond water quality which generally meets RSEM EOP limits and BC WQGs. However, water quality in Pond D was acidic in several samples, with a median pH of 5.44.

Management measures to mitigate risk include: 1) minimizing exposures of acid generating surfaces by placement of fresh PAG and non-PAG material in Q1 and Q2 2022 to cover weathered PAG materials, which will limit contact of surface runoff with acid generating materials; and 2) active management of water levels in the RSEM R5A ponds to prevent discharges. Active management options could include adding additional temporary water storage or transporting water by truck to the MWTF and WTP or other sediment ponds on site.

Table 4-7:
Risk Rating Matrix for PAG-Containing RSEM Sediment Ponds in 2022

Factor	Sediment Pond(s)				
	L5	**R6**	**R5B P2 Sump**	**R5A[1]**	
% of exposed material with rinse pH < 5.5	7% (2 / 29 samples)	57% (12 / 21 samples)	57% (8/14 samples)	45% (34 / 75 samples)	
Field pH (in sediment pond)	≥ 7.3 in all samples	≥ 5.8 in all samples	≥ 7.2 in all samples	≥ 6.4 in ponds A, B, C; ≥3.4 in Pond D	
Sulphate (in sediment pond)	≤ 1,950 mg/L in all samples	≤ 588 mg/L in all samples	≤ 732 mg/L in all samples	≤ 1,210 mg/L in ponds A, B, C; ≤ 2,690 in Pond D	
Lab Conductivity (in sediment pond)	≤ 3,960 µS/cm in all samples	≤ 1,510 µS/cm in all samples	≤ 1,860 µS/cm in all samples	≤ 2,550 µS/cm in ponds A, B, C; ≤ 4,110 µS/cm) in Pond D	
Rinse pH of exposed material in catchment	Low	Moderate[4]	High	High	
pH (in sediment pond)	Low	Moderate	Low	Moderate (Ponds A, B, C)	High (Pond D)
Sulphate (in sediment pond)	Moderate	Low	Moderate	Moderate (Ponds A, B, C)	High (Pond D)
Conductivity (in sediment pond)	High	Moderate	Moderate	Moderate (Ponds A, B, C)	High (Pond D)
Overall Risk Rating	Moderate	Moderate	High	Moderate (Ponds A, B, C)	High (Pond D)

Notes:
1. Water quality sampling at RSEM R5A is less frequent than the R5B Sump and R6 sediment ponds.
2. Eastern portion of Approach Channel runoff directed to the WTP and discharged via RSEM-R6W sediment pond
3. Western portion of Approach Channel and slope above RSEM Area R5B runoff reports to the R5B P2 Sump and directed either to the MWTF and discharged via RSEM-R6W sediment pond or directly to the RSEM-R6E sediment pond
4. Contact water from areas with low rinse pH is directed to WTP prior to dischage through R6 sediment ponds

4.5 Water Quality Exceedances

Any exceedance of EOP discharge limits in laboratory analysis of water discharged from PAG-containing RSEM sediment ponds to the Peace River is reported within 24 hours of receiving the analytical water quality results. Exceedances are also noted in weekly reports.

In 2022, there were exceedances in the discharge from RSEM-R6W in January during a period of very cold weather, and exceedances in February (from RSEM-L5E) and March (from RSEM-R6E and from RSEM-R5A) that occurred during periods of rapid snowmelt. There were no other exceedances in 2022.

There were exceedances in 2022 Q1 for:

- Total zinc in the RSEM R6W sediment control pond in January 2022;
- Total cadmium in RSEM L5E sediment control pond in February 2022;
- Total iron, zinc and cadmium in RSEM R6E sediment control pond in March 2022; and
- Total copper, zinc and cadmium in the discharge from RSEM R5A, Ponds A and B, in mid to late March, 2022.

These exceedances are discussed in more detail below.

4.5.1 T-Zn in discharge from RSEM-R6W - January 2022

There were exceedances of the discharge limit for total zinc in the discharge from the RSEM R6W sediment control pond in January 2022. The exceedances are summarized in in Table 4-8 below.

Table 4-8:
Summary of Metal Exceedances for RSEM-R6W-Pond –2022 Q1

Sample No.	Date Sampled	Date Results Received	Parameter	Measured Concentration (mg/L)	Discharge Limit (mg/L)	Volume Discharged on Day of Exceedance (m^3)
FJ2200037-001	04/01/2022	20/01/2022	T-Zn	0.0842	0.033	68
FJ2200044-003	10/01/2022 10:30	13/01/2022	T-Zn	0.0801	0.033	497
FJ2200088-001	11/01/2022 17:00	21/01/2022	T-Zn	0.0922	0.033	120

Frozen site conditions are linked to the increased T-Zn in the RSEM R6W pond. The T-Zn concentration since mid-November 2021 was at higher concentrations relative to previous months. This is similar to observations during the February 2021 cold period when T-Zn concentrations also increased.

A corrugated metal culvert directly upgradient of the RSEM R6W pond was determined to be the source of T-Zn. The only reported input to the R6W pond is Mobile Water Treatment Facility (MWTF) effluent, however weekly monitoring from the MWTF sludge ponds indicates T-Zn does not originate from the treated MWTF effluent. The source of the T-Zn in the R6W sediment pond was suspected to originate from low flows from the MWTF discharging through a corrugated metal culvert. To evaluate this, water quality samples were collected on January 10 at the outlet of MWTF Cell 3 and at the inlet to the RSEM R6W pond directly below the culvert. These results show that water discharging from the MWTF had low T-Zn concentrations (<0.003 mg/L) while the T-Zn concentration at the inlet to the RSEM R6W pond had increased to 0.412 mg/L. These results confirm that the culvert is the source of elevated T-Zn concentrations in the R6W pond.

On January 11 site staff reported the R6W pond water was directed to the Pre-treatment Pond (AK Pond) to treat for T-Zn. Subsequently, treated MWTF effluent during Q1 2022 was pumped to R6W pond, bypassing the culvert that has now been confirmed as the source of Zn.

4.5.2 T-Cd in discharge from RSEM-L5E – February 11

Total cadmium exceeded the limit in discharge from the RSEM L5E sediment control pond in one sample obtained on February 11, 2022. The exceedance is summarized in in Table 4-9 below.

Table 4-9:
Summary of Metal Exceedances for RSEM-L5E-Pond –2022 Q1

Sample No.	Date Sampled	Date Results Received	Parameter	Measured Concentration (mg/L)	Discharge Limit (mg/L)	Volume Discharged on Day of Exceedance (m^3)
AOM647	11/02/2022 12:10:00	24/02/2022	T-Cd	0.000408	0.00029	104

The elevated T-Cd concentration is attributed to rinsing of water-soluble oxidation products from PAG exposures in the LBEX during a period of warmer temperatures when significant snowmelt occurred. This runoff reported to the LBEX-B1-Sump, which was pumped to the RSEM L5 Phase 2 East Pond. Water accumulated rapidly in the RSEM pond at this time due to snowmelt.

4.5.3 RSEM Area R6E Pond – March 28

There were exceedances of discharge limits for T-Cu, T-Zn and T-Cd on March 17th, 2022. These exceedances are summarized in Table 4-10 below.

Table 4-10:
Summary of Metal Exceedances for RSEM R6E Pond – 2022 Q1

Sample No.	Date Sampled	Date Reported	Parameter	Measured Concentration (mg/L)	Short-Term BC WQG (mg/L)	Volume Discharged on Day of Exceedance (m^3/day)
AQH796	17/03/2022 16:30	28/03/2022	T-Cu	0.0142	0.011	31,833
			T-Zn	0.0795	0.033	
			T-Cd	0.000559	00029	

The elevated concentrations of T-Cu, T-Zn and T-Cd are attributed to TSS derived from erosion along the flow path. Moderate flow of silty runoff from the west SBIAR ditch (R6-EP-US-SD) to RSEM R6 East Pond was observed and is attributed to erosion along the flow paths to and along the SBIAR ditch.

4.5.4 RSEM R5A P2-B / P2-A – March 2022

There were exceedances of -day. These exceedances are summarized in Table 4-11 below.

Table 4-11:
Summary of Metal Exceedances for RSEM R5A Sediment Ponds - 2022, Q1

	Sample No.	Date Sampled	Date Reported	Parameter	Measured Concentration (mg/L)	Short-Term BC WQG (mg/L)	Volume Discharged on Day of Exceedance (m^3/day)
RSEM-R5A P2-B-EOP	AQH803	17/03/2022 19:00	28/03/2022	T-Cu	0.0179	0.011	432
				T-Zn	0.0649	0.033	
				T-Cd	0.000343	00029	
	AQL269	21/03/2022 14:55:00	29/03/2022	T-Zn	0.159	0.033	389[A]
				T-Cd	0.00102	0.00029	
RSEM-R5A P2-A-EOP	AQN714	22/03/2022 18:20	31/03/2022	T-Cd	0.000650	0.00029	562[A]
				T-Zn	0.0962	0.033	
	AQP261	23/03/2022 17:15	31/03/2022	T-Cd	0.000352	0.00029	562[A]
				T-Zn	0.0661	0.033	
	AQP980	24/03/2022 14:25	04/01/2022	T-Zn	0.0539	0.033	562[A]

On the days when there was discharge from the RSEM R5A A and B ponds, PRHP daily reports indicate that the maximum and minimum temperatures remained above freezing, which encouraged snow melt and runoff. The total suspended particulate (TSS) was elevated on the day the discharges were observed and are attributed to increased runoff and erosion due to warmer temperatures and significant snowmelt. Water accumulated rapidly in the RSEM ponds due to snowmelt.

The pumping of water from ponds D, C and B to pond A beginning March 21 was conducted to directed excess water to pond A for discharge. The ARD influenced water likely originated from pond B. Investigation by site staff suggests the ARD influence originates from uncovered older PAG material along the sides of the PAG stockpile.

4.6 Metal Loads

Calculation of metal loading to the Peace River on a weekly basis is a requirement of section 7.3.2 of Appendix E of the CEMP. Daily loads for each RSEM sediment pond were calculated by applying the concentration measured in the daily EOP grab sample to the total volume of water discharged on that day, as recorded by the pond's flow meter. Daily loading estimates were then summed for each month to obtain the monthly load discharged to the Peace River, providing an estimate of the total load discharged from the Project site.

For this Annual Report, the metal loads discharged from the Left Bank are summarized on a quarterly basis and for 2022, followed by metal loads from the Right Bank. This is followed by a summary of the metal loads discharged from Site C in 2022 in relation to the metal loads carried by the Peace River.

4.6.1 Left Bank

The metal loads discharged from the Left Bank included discharge from the RSEM-L5E and RSEM-L6 Sediment Control Ponds in Q1 and Q2, as well as from the RSEM-L6 Sediment Control Pond in Q4. These are summarized in Table 4-12, Table 4-13 and Table 4-14 below.

Table 4-12:
Quarterly and Annual Total Metal Load Discharged from RSEM L5E Sediment Control Pond -2022

Parameter	Estimated Load Discharged to Peace River (kg)				
	Q1	**Q2**	**Q3**	**Q4**	**Total**
TSS	52.3	43.0			95.3
Cl	3.53	141			144
F	0.195	1.17			1.36
D-SO_4	163	3999			4162
N-NH_3	0.154	0.893			1.04
N-NO_2	0.0187	0.259			0.277
N-NO_3	1.29	27.0			28.2
T-Sb	0.000400	0.00483			0.00523
T-As	0.00239	0.00349			0.00588
T-Cd	0.000299	0.00195			0.00224
T-Co	0.00470	0.0366			0.0413
T-Cu	0.00974	0.0189			0.0286
T-Fe	4.04	1.78			5.82
T-Pb	0.00254	0.00200			0.00454
T-Mn	0.233	1.60			1.83
T-Mo	0.00349	0.0353			0.0387
T-Se	0.00334	0.0679			0.0712
T-Ag	0.0000448	0.000193			0.000237
T-Zn	0.0299	0.123			0.152
D-Al	0.0391	0.106			0.145
D-Cd	0.000134	0.00168			0.00181
D-Co	0.00216	0.0300			0.0321
D-Cu	0.00369	0.0134			0.0170
D-Fe	0.0154	0.106			0.121
D-Zn	0.00319	0.00319			0.00638

Table 4-13:
Quarterly and Annual Total Metal Load Discharged from RSEM L5W Sediment Control Pond - 2022

Parameter	Estimated Load Discharged to Peace River (kg)				
	Q1	Q2	Q3	Q4	Total
TSS	0.0674	4.12			4.18
Cl	0.113	110			110
F	0.00154	0.748			0.749
D-SO_4	4.19	2650			2654
N-NH_3	0.00312	0.149			0.152
N-NO_2	0.000578	0.0927			0.0932
N-NO_3	0.0319	16.7			16.7
T-Sb	0.0000130	0.00179			0.00180
T-As	0.00000734	0.0473			0.0473
T-Cd	0.00000235	0.000352			0.000354
T-Co	0.0000642	0.00666			0.00672
T-Cu	0.0000809	0.00548			0.00556
T-Fe	0.00350	0.264			0.267
T-Pb	0.00000519	0.000714			0.000719
T-Mn	0.00401	0.225			0.229
T-Mo	0.000057	0.0164			0.0164
T-Se	0.000116	0.0339			0.0340
T-Ag	0.000000519	0.0000714			0.0000719
T-Zn	0.000179	0.0227			0.0228
D-Al	0.000116	0.0187			0.0188
D-Cd	0.00000212	0.000287			0.000289
D-Co	0.0000633	0.00537			0.00543
D-Cu	0.0000666	0.00386			0.00392
D-Fe	0.000259	0.0358			0.0360
D-Zn	0.000135	0.0179			0.0180

Table 4-14:
Quarterly and Annual Metal Load Discharged from RSEM L6 Sediment Control Pond -2022

Parameter	Estimated Load Discharged to Peace River (kg)				
	Q1	Q2	Q3	Q4	Total
TSS		5.69		0.480	6.17
Cl		151		26.8	177
F		0.436		0.112	0.548
D-SO_4		463		131	594
N-NH_3		0.235		0.00456	0.239
N-NO_2		0.0404		0.00152	0.0419
N-NO_3		1.02		0.00607	1.02
T-Sb		0.00167		0.000152	0.00182
T-As		0.000916		0.000219	0.00113
T-Cd		0.0000972		0.00000365	0.000100
T-Co		0.000889		0.0000607	0.000949
T-Cu		0.00409		0.000447	0.00453
T-Fe		0.197		0.0310	0.228
T-Pb		0.000657		0.0000607	0.000717
T-Mn		0.121		0.00198	0.122
T-Mo		0.0149		0.00255	0.0174
T-Se		0.00559		0.000140	0.00573
T-Ag		0.0000657		0.00000607	0.0000718
T-Zn		0.0175		0.00152	0.0190
D-Al		0.0318		0.00143	0.0332
D-Cd		0.0000776		0.00000304	0.0000806
D-Co		0.000660		0.0000607	0.000720
D-Cu		0.00313		0.000365	0.00349
D-Fe		0.0329		0.00304	0.0359
D-Zn		0.0164		0.00152	0.0179

4.6.2 Right Bank

The metal loads discharged from the Right Bank in 2022 included discharge from the RSEM-R6E and RSEM-R6W Sediment Control Ponds. In addition, there was discharge from the RSEM-R5A-A and RSEM-R5A-B ponds. These are summarized in Table 4-15

(RSEM-R6W), Table 4-16 (RSEM-R6E), Table 4-17 (RSEM-R5A-A) and Table 4-18 (RSEM-R5A-B) below.

Table 4-15:
Quarterly and Annual Total Metal Load Discharged from RSEM-R6W Sediment Control Pond - 2022

Parameter	Estimated Load Discharged to Peace River (kg)				
	Q1	**Q2**	**Q3**	**Q4**	**Total**
TSS	684	329	137	386	1536
Cl	2324	3242	4508	2330	12404
F	12.0	27.3	19.5	34.2	93
D-SO_4	11213	28772	21900	21000	82885
N-NH_3	15.7	15.9	3.2	4.28	39.1
N-NO_2	2.94	7.48	0.88	1.96	13.3
N-NO_3	60.5	48.4	24.9	92.0	226
T-Sb	0.0620	0.112	0.085	0.108	0.367
T-As	0.0575	0.0647	0.0779	0.0876	0.288
T-Cd	0.00254	0.00167	0.00070	0.00339	0.0083
T-Co	0.0714	0.0470	0.0141	0.0421	0.175
T-Cu	0.129	0.0956	0.0829	0.162	0.469
T-Fe	25.5	8.56	3.19	22.6	59.8
T-Pb	0.0216	0.0155	0.0136	0.0370	0.0877
T-Mn	4.86	1.96	0.32	1.38	8.52
T-Mo	0.465	0.873	1.059	0.874	3.27
T-Se	0.156	0.527	0.189	0.429	1.30
T-Ag	0.00140	0.00155	0.00136	0.00370	0.00801
T-Zn	0.512	0.702	0.359	1.15	2.72
D-Al	1.02	0.958	1.286	3.68	6.94
D-Cd	0.00199	0.00131	0.00074	0.00211	0.00615
D-Co	0.0587	0.0330	0.0153	0.0370	0.144
D-Cu	0.0887	0.0672	0.0705	0.104	0.330
D-Fe	0.788	0.862	0.766	1.42	3.84
D-Zn	0.447	0.571	0.375	0.954	2.35

Table 4-16:
Quarterly and Annual Total Metal Load Discharged from RSEM-R6E Sediment Control Pond - 2022

Parameter	Estimated Load Discharged to Peace River (kg)				
	Q1	**Q2**	**Q3**	**Q4**	**Total**
TSS	132	431	383	420	1366
Cl	400	5655	4081	1330	11466
F	1.29	25.1	24.7	26.0	77.1
D-SO_4	822	14477	10756	9680	35735
N-NH_3	1.80	11.1	3.5	3.18	19.6
N-NO_2	0.281	1.56	1.02	1.33	4.19
N-NO_3	5.61	87.0	53.2	47.7	193
T-Sb	0.00453	0.0462	0.0708	0.0694	0.191
T-As	0.00550	0.0360	0.0618	0.0467	0.15
T-Cd	0.000331	0.00508	0.00171	0.00263	0.00975
T-Co	0.00829	0.287	0.030	0.0287	0.354
T-Cu	0.0169	0.0999	0.0910	0.0850	0.293
T-Fe	7.40	13.6	14.8	19.1	54.9
T-Pb	0.00386	0.0195	0.0281	0.0288	0.080
T-Mn	0.620	8.92	1.52	1.34	12.4
T-Mo	0.0424	0.349	0.466	0.433	1.29
T-Se	0.00767	0.132	0.102	0.0893	0.331
T-Ag	0.000182	0.00185	0.00281	0.00269	0.00753
T-Zn	0.0689	0.675	0.823	0.678	2.24
D-Al	0.174	2.45	1.11	1.34	5.07
D-Cd	0.000136	0.00404	0.00148	0.00199	0.00764
D-Co	0.00491	0.260	0.030	0.0270	0.322
D-Cu	0.00885	0.0656	0.0779	0.0712	0.223
D-Fe	0.108	1.03	1.75	1.38	4.27
D-Zn	0.0431	0.600	0.716	0.673	2.03

Table 4-17:
Quarterly and Annual Total Metal Load Discharged from RSEM-R5A-A Sediment Control Pond - 2022

Parameter	Estimated Load Discharged to Peace River (kg)				
	Q1	**Q2**	**Q3**	**Q4**	**Total**
TSS	0.324	272	238	105	615
Cl	0.0389	945	1043	297	2285
F	0.00162	7.97	7.36	2.54	17.9
D-SO_4	4.04	8728	5372	1760	15864
N-NH_3	0.00333	6.68	1.55	0.421	8.65
N-NO_2	0.000377	0.953	0.546	0.0864	1.59
N-NO_3	0.0173	14.8	8.7	2.02	25.5
T-Sb	0.0000140	0.0298	0.0300	0.0139	0.0737
T-As	0.0000101	0.0346	0.0370	0.0188	0.0904
T-Cd	0.00000968	0.00120	0.00026	0.000150	0.00162
T-Co	0.000268	0.0698	0.0105	0.00444	0.0850
T-Cu	0.0000479	0.0304	0.0291	0.0193	0.0788
T-Fe	0.0131	9.75	5.31	5.38	20.5
T-Pb	0.00000825	0.00600	0.00455	0.00431	0.0149
T-Mn	0.00503	1.36	0.26	0.0961	1.72
T-Mo	0.0000503	0.211	0.214	0.0882	0.513
T-Se	0.000124	0.167	0.057	0.0180	0.242
T-Ag	0.000000560	0.000555	0.000338	0.000136	0.00103
T-Zn	0.00161	0.189	0.093	0.0616	0.345
D-Al	0.000213	0.349	0.365	0.0721	0.786
D-Cd	0.00000814	0.000980	0.000196	0.0000638	0.00125
D-Co	0.000255	0.0551	0.0047	0.00133	0.0614
D-Cu	0.0000212	0.0126	0.0174	0.00788	0.0379
D-Fe	0.000280	0.291	0.169	0.0626	0.523
D-Zn	0.00131	0.148	0.084	0.0313	0.265

Table 4-18:
Quarterly and Annual Total Metal Load Discharged from RSEM-R5A-B Sediment Control Pond - 2022

Parameter	Estimated Load Discharged to Peace River (kg)				
	Q1	Q2	Q3	Q4	Total
TSS	73.1				73.1
Cl	2.93				2.93
F	0.0778				0.0778
D-SO_4	129				129
N-NH_3	0.167				0.167
N-NO_2	0.0258				0.0258
N-NO_3	0.641				0.641
T-Sb	0.000475				0.000475
T-As	0.00289				0.00289
T-Cd	0.000574				0.000574
T-Co	0.0133				0.0133
T-Cu	0.00932				0.00932
T-Fe	5.89				5.89
T-Pb	0.003519				0.00352
T-Mn	0.283				0.283
T-Mo	0.00271				0.00271
T-Se	0.00440				0.00440
T-Ag	0.0000523				0.0000523
T-Zn	0.0940				0.0940
D-Al	0.0196				0.0196
D-Cd	0.000362				0.000362
D-Co	0.0090870				0.00909
D-Cu	0.000920				0.000920
D-Fe	0.0208				0.0208
D-Zn	0.0541				0.0541

4.6.3 Comparison with Metal Loads Carried in Peace River

To provide context for RSEM pond loading, average monthly metal loads for Cd, Cu, and Zn in the Peace River were calculated using available information on Peace River flows and water quality at station PR-2.81 (formerly PR-3.88) to provide benchmarks to which metal loading from Site C (above) can be compared. The dissolved, rather than total, metal

fraction measured at PR-2.81 was used in the calculation to minimize the potential influence of high turbidity water on the metal loading values. These loads are presented in Table 4-19 below. Flow data is available for all calendar months, with a total of 128 samples available in the dataset.

Table 4-19:
Estimated Mean Monthly Load in Peace River (station PR-2.81) for Dissolved Cd, Cu and Zn - 2022

Parameter	Monthly mean loads (kg)											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	n=3	n=2	n=6	n=14	n=23	n=14	n=12	n=8	n=10	n=23	n=8	n=5
D-Cd	43.8	43.0	65.2	595	376	284	81.1	190	86.3	77.8	103	63.7
D-Cu	2,510	2,660	3,010	14,500	11,600	6,390	3,030	5,200	3,320	2,840	3,240	3,360
D-Zn	6,720	8,070	8,340	46,900	50,188	21,000	8,640	15,300	9,680	6,120	6,710	8,310

Notes: n = the number of water quality samples for a given month, data range is from April 2007 to December 2020. Values reported as less than the detection limit were set equal to the detection limit value for loading calculations.

The analysis is considered adequate to provide approximate 'order-of-magnitude' estimates of metal loads carried in the Peace River in the vicinity of the Site C Clean Energy Project, for the purpose of providing some preliminary context for the metal loads discharged from RSEM area sediment ponds. Overall, the metal load contributed from the ponds in 2022 was very minor relative to the metal loads carried by the Peace River.

A comparison of the estimated total annual load of Cd, Cu and Zn discharged from Site C is compared with the estimated annual load of Cd, Cu and Zn carried by the Peace River at Station PR-2.81 is included as Table 4-20 below.

Table 4-20:
Estimated 2022 Annual Load Discharged from Site C and Carried by Peace River (station PR-2.81) for Dissolved Cd, Cu and Zn

Parameter	Estimated Annual Load Discharged from Site C (From All Sediment Control Ponds) in 2022 (kg)	Estimated Annual Load Carried by Peace River in 2022 (kg)	Estimated Annual Load Discharged from Site C as Proportion of Annual Load Carried in Peace River (%)
D-Cd	0.0176	2,009	0.000875%
D-Cu	0.616	61,660	0.000999%
D-Zn	4.74	195,978	0.00242%

5. Conclusions and Summary

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5. Conclusions and Recommendations

The ARD/ML mitigation measures employed at site has been effective in limiting the frequency of non-compliant discharges to the Peace River. Observations, conclusions and recommendations from the 2022 monitoring program are summarized in this section.

5.1 Geochemical Monitoring

The expectation that all bedrock exposed or excavated as part of the Main Civil Works Contract will be PAG, with most units expected to become acidic within one year of disturbance was confirmed by geochemical monitoring undertaken in 2022. Exposures of bedrock have become acidic at several locations on both the Left Bank, Earthfill Dam and Right Bank. The combined ARD/ML mitigation measures of material placement, water management and water treatment has restricted the exceedance of discharge limits for waters discharging from the site to the Peace River.

A total of 181 ARD samples were collected at the site in 2022 and analysed for rinse pH. Approximately 15% of these samples were submitted to BV analytical laboratory for ABA and metal content. All bedrock ABA samples from both the Left Bank and the Right Bank in 2022 were categorized as AG or PAG. Samples that contained a mixture of bedrock and granular material were categorized as either PAG or non-PAG. General observations from the 2022 monitoring program are noted below, followed by the conclusions from the monitoring undertaken on the Left and Right Banks.

5.1.1 Left Bank

- In 2022, no PAG bedrock was excavated on the Left Bank.
- A portion of RSEM Area L5 above the Phase 2 sediment ponds remained AG as documented by two samples collected in 2022. Recontouring and placement of cover material is scheduled for 2023. The total sulphur content of the bedrock samples collected in 2022 from RSEM Area L5 was > 0.5 %S.
- In the LBEX, AG exposures remain along the northwestern edge and on Bench 0.

5.1.2 Earthfill Dam

- In 2022, the majority PAG bedrock excavation from the Earthfill Dam was associated with the removal of temporary ramps and Dam Core thermal covers. The excavated PAG material was placed in RSEM Area R5A, Zone 8 and temporary stockpiles in R5B.

- PAG rock was placed and left exposed in Zone 8 early in Q1 and Q2. As the year progressed, a greater proportion of rinse pH samples from this area were AG. The total sulphur content of the 2022 bedrock samples collected from the Zone 8 was > 1.0 %S.

5.1.3 Right Bank

- On the Right Bank, a total of 1,936,824 m^3 of PAG bedrock was excavated during 2022, which was predominately removed from the Approach Channel and Spillway. The excavated material was deposited in RSEM Area R5A and Zone 8 of the Earthfill Dam.
- AG material was identified in the bedrock exposures within the RSEM Area R5B catchment, RSEM Area R5A and the Approach Channel West Temporary Stockpile in 2022.
- AG exposures remain in the western extent of the Approach Channel and above the R5B-ACDC Ditch. Runoff from these areas is intercepted and directed to the R5B Phase 2 Sump and ultimately the MTP, if required. The total sulphur content of the 2022 bedrock samples collected from above RSEM Area R5B was > 0.6 %S.
- The exposed PAG rock that was placed in RSEM Area R5A during the first half of the year progressively acidified. The proportion of AG samples increased from 24% in Q2 to 43% in Q3 and 65% in Q4. Only one 2022 bedrock sample from this area had a total sulphur content < 0.4 %S.
- The major excavation from the Approach Channel that occurred in Q1 2022 exposed a large area of bedrock. This area was progressively covered by concrete and fill cover that will form the final surface during operation of the facility.
- The temporary PAG stockpile in the Approach Channel area became progressively AG. Sampling completed in Q3 and Q4 2022 indicated that the 11 of 14 samples were classified as AG. This temporary stockpile was removed from the Approach Channel by the end of 2022 and relocated to permanent storage areas.

5.2 Surface Water Quality Monitoring

The results of surface water quality monitoring have been used to better understand and predict the timing, magnitude and duration of ARD/ML on surface water runoff from the construction site, to measure the effectiveness of mitigation measures, and to verify compliance with RSEM EOP discharge limits and BC WQG. The surface water quality monitoring program is supported by robust QA/QC procedures and includes an intensive

sampling and analysis from a dynamic set of stations across the site, as well as from the Earthfill Dam and RSEM Area L5, L6, R5A, and R6 sediment ponds and discharges.

The surface water quality monitoring program has generally been effective. Overall, the QA/QC procedures are well implemented and provide confidence in the monitoring data. The high frequency sampling and laboratory analyses are reliable to allow trends in the RSEM area sediment ponds, and within upgradient catchments, to be identified, and the magnitude and duration of potential effects from ARD/ML to be verified.

Discharge monitoring identified four events where EOP discharge limits were exceeded:

- three-days of elevated T-Zn from the RSEM Area R6W in mid-January
- a single-day concentration spike of T-Cd from the RSEM Area L5E pond on February 11th;
- a single-day discharge of turbid water with elevated T-Cu, T-Cd and T-Zn from the RSEM Area R6E pond on March 17th; and
- A multi-day discharge with elevated T-Cu, T-Zn and T-Cd from RSEM Area sediment control ponds A and B in March.

Only the one-day February discharge from RSEM L5E and March discharges from RSEM R5A are attributed to ARD/ML.

Water quality monitoring in the Area 30 sediment pond also triggered additional monitoring of the Septimus beaver pond to ensure environmental protection in this area.

5.3 Mitigation

Mitigation measures that are implemented onsite to minimize the exceedance of EOP discharge limits due to ARD/ML include:

- Material management by excavating weathered bedrock and covering weathered rock in RSEM and Earthfill Dam PAG deposition areas,
- Water management to contain or transfer water that may be influenced by ARD/ML, and
- Water treatment to adjust pH and remove total and dissolved metals.

Material management is the primary ARD/ML mitigation strategy that has been implemented on site since 2016. In Q1 2022, a large area of weathered PAG bedrock was excavated from the Approach Channel. This excavation resulted in unweathered PAG bedrock exposures in the Approach Channel excavation area and storage locations in RSEM Area R5A, R5B Temporary Stockpiles and Zone 8 in the Earthfill Dam. During the

remaining portion of 2022 much of the PAG bedrock exposed in the Approach Channel was covered by the construction and placement of the final Approach Channel surface. The R5B Temporary Stockpile was removed and relocated to permanent storage in Q4 2022. PAG rock exposed in Zone 8 within the Earthfill Dam and RSEM Area R5A was partially mitigated through the placement of additional fresh PAG to cover and limit the exposure of weathered material. A portion of the weathered PAG rock in RSEM Area R5A was relocated to the West Expansion and Central Expansion areas in Q4 2022. However, at the end of 2022, significant areas of weathered PAG remained exposed in RSEM Area R5A and Zone 8 within the Earthfill Dam.

Water management is a secondary mitigation strategy. Surface water quality is monitored and the results used to inform water transfers within and between Project area catchments to ensure contact waters are routed appropriately prior to discharge. PAG contact water is generally contained within the site, or directed to RSEM sediment ponds, from which it is discharged to the Peace River. Contact water that is not anticipated to meet RSEM EOP discharge limits is retained and transferred to the pre-treatment pond. Water from this pond was treated by the MWTF or WTP prior to discharge. Notable improvements in the water management system that greatly reduces the risk of non-compliant PAG contact water being discharged during Q2 and Q3 2022 was the construction of two pipelines by PRHP to facilitate the pumping of R5B Phase 2 Sump water to RSEM R5A Pond A, the RSEM R6 ponds or to the WTP.

The MWTF was operated by Ensero Solutions from July 2018 through July 7th, 2022. During Q2 2022, PRHP constructed and commissioned the WTP metal precipitation facility that replaced the MWTF on July 8th, 2022, when the WTP commenced operations. The WTP facility is located beside and to the west of the MWTF facility. The MWTF and WTP effectively treated water to remove dissolved metals and produced RSEM EOP effluent that met the Discharge Limits throughout 2022. The accumulated sludge from Cell 1 of the WTP sludge pond was removed and transferred to RSEM Area R5A in October 2022.

The implementation of various erosion and sediment control measures at site has reduced the frequency of TSS-related exceedance of EOP discharge limits from RSEM Area sediment ponds since the monitoring program was initiated in autumn 2016.

Elevated pH primarily due to cement and shotcrete contact waters was mitigated by sparging these waters with CO_2 to lower pH within EOP discharge limits. Sparging was implemented in the RSEM Area L5 sediment ponds, and at Cell 3 of the MWTF sludge pond.

5.4 Recommendations

In its role as Qualified Professional for ARD/ML, Lorax provided a number of recommendations throughout 2022. These have been communicated in technical memorandums, weekly conference calls, in email correspondence and this report. Key recommendations are summarized below and reflect ongoing ARD/ML monitoring and management activities.

- The geochemical monitoring program is effectively characterizing rock exposures throughout the site. The program should continue to follow recommendations that will be developed in the 2023 ARD/ML sampling plan that outlines adjustments to sampling frequency and locations as site development proceeds.
- The water quality monitoring program should continue to adjust monitoring locations and frequency in tandem with site development, construction activies, weather conditions and in response to monitoring data.
- The AG rock exposed in areas adjacent to RSEM Area R5B should be excavated (if within the Approach Channel footprint) and covered with NPAG overburden to limit the ingress of oxygen and water into the AG material. Interim measures to monitor and collect runoff in the R5B sump at the base of the slope and transfer to the WTP should be continued until final mitigation is implemented.
- Large areas of exposed PAG remained in RSEM Area R5A at the end of 2022 and the current risk mitigated through the implementation of water management measures. It is recommended that the exposed PAG material temporarily stored on top of the facility be relocated to the West and Central Expansion Areas, compacted and covered with non-PAG material to final design configuration.
- Extensive excavation in the Approach Channel occurred in Q1 2022 that exposed large areas of PAG bedrock. To ensure that water directed by AFDE from the Approach Channel to the R5B Phase 2 Sump can be managed safely, the R5B Phase 2 Sump water should contiue to be monitored frequently to facilitate directing contact water to the WTP, when necessary.
- Continued construction of the Earthfill Dam in 2022 included placement of PAG bedrock on the upstream side of the Dam Core and as a temporary thermal blanket over the Dam Core. At the end of Q4 2022 PAG and AG exposures remained within the Earthfill Dam and the following recommendations are made to ensure non-compliant discharge from this area.
    - Continue rinse pH monitoring program.

  - Engineering and construction teams need to be reminded of the risk posed by the large PAG exposure and encouraged to scheduled activities to expediate the placement of a non-PAG cover on the Zone 8 material.
  - Maintain the water management system to facilitate collection and monitoring of exposed PAG runoff in swales and sumps to allow the contact water to be directed the WTP, if monitoring indicates it is necessary.
  - Remove and relocate the temporary thermal cover to a permanent storage location before the end of March 2023.

- Monitoring indicates that PAG and AG bedrock is exposed in RSEM Area L5 and L5 Extension and these areas are near the design material balance capacity of the facility. Regrading and placement of the final non-PAG cover over the exposed PAG in the L5 Extension is recommended to prevent acidic runoff from reporting to the Phase 2 RSEM Area L5 sediment ponds and possibly discharging during snow melt or high rainfall events.
- The Area 30 sediment pond water quality monitoring results have triggered additional monitoring in the adjacent wetlands. Quarterly water quality monitoring is recommended in the Septimus beaver pond (wetlands) adjacent to the Area 30 riprap stockpiles. Although the 2022 monitoring events indicated that the BC water quality guidelines for selenium were not exceeded in the wetland, it is recommended that monitoring continue in the wetland at the same locations that were sampled in 2022. In the event that the 2023 monitoring indicates that the Se leaching potential is unacceptable, the water management ponds in Area 30 should be converted into zero-discharge holding ponds if required.
- Water quality samples collected in June through September 2022 showed elevated temperatures, beyond the optimal range for sample receipt temperatures (0 to 10 °C) at the laboratory. It is recommended that additional QA/QC measures (*i.e.*, the use of additional ice packs or refrigeration) be implemented to accelerate and maintain sample cooling during warmer periods.

6. Closure

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6. Closure

This report was prepared for the use of PRHP, which has the right to reproduce, use and rely upon this ARD/ML Management 2022 Annual report in planning, construction and reporting for the Site C Clean Energy Project. The report was prepared by the Lorax technical personnel listed below based on information provided by PRHP site personnel, observations during site visits and test results reported by ALS and BV analytical laboratories. Please contact the undersigned should you have any questions or concerns or require additional information in support of this work.

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List of Appendices

PEACE RIVER
HYDRO PARTNERS

Appendix 1-A: 2022 RSEM Sediment Control Pond Daily Discharge

PEACE RIVER
HYDRO PARTNERS

Appendix 1-A: 2022 RSEM Sediment Control Pond Daily Discharge

Date	RSEM-R5A	RSEM-R5B	RSEM-R6E	RSEM-R6W	RSEM-L5E	RSEM-L5W	RSEM-L6
	Discharge (L/s) (No value is reported on days when no flow was observed)						
2022-01-01							
2022-01-02							
2022-01-03							
2022-01-04				0.8			
2022-01-05							
2022-01-06							
2022-01-07							
2022-01-08							
2022-01-09							
2022-01-10				5.8			
2022-01-11				0.2			
2022-01-12				1.2			
2022-01-13							
2022-01-14							
2022-01-15							
2022-01-16							
2022-01-17							
2022-01-18							
2022-01-19							
2022-01-20				7.1			
2022-01-21				9.7			
2022-01-22				10.3			
2022-01-23			15.8	16.6	16.0		
2022-01-24				12.8			
2022-01-25				2.6			
2022-01-26				2.7			
2022-01-27				2.8			
2022-01-28				2.6			
2022-01-29				2.6			
2022-01-30				1.7			
2022-01-31				1.2			
2022-02-01							
2022-02-02							
2022-02-03							
2022-02-04							
2022-02-05							
2022-02-06							
2022-02-07			4.6	7.4			
2022-02-08			7.5	21.4			
2022-02-09			6.8	29.9			
2022-02-10			3.6	30.5			
2022-02-11				14.2	2.0		
2022-02-12			20.2	12.6			
2022-02-13			18.7	12.7			
2022-02-14			20.6	7.4			
2022-02-15			7.7	10.0			
2022-02-16			2.0	10.8			
2022-02-17				12.3			
2022-02-18				13.5			
2022-02-19				13.0			
2022-02-20				10.3			
2022-02-21				12.7			
2022-02-22				14.7			
2022-02-23				14.3			
2022-02-24				9.6			
2022-02-25				5.4			
2022-02-26				5.4			
2022-02-27				11.5			
2022-02-28				9.1			
2022-03-01				2.8			
2022-03-02							

Appendix 1-A: 2022 RSEM Sediment Control Pond Daily Discharge

Date	RSEM-R5A	RSEM-R5B	RSEM-R6E	RSEM-R6W	RSEM-L5E	RSEM-L5W	RSEM-L6
	Discharge (L/s) (No value is reported on days when no flow was observed)						
2022-03-03							
2022-03-04				1.9			
2022-03-05				6.7			
2022-03-06				2.5			
2022-03-07				6.1			
2022-03-08				2.8			
2022-03-09				2.9			
2022-03-10				3.0			
2022-03-11				0.9			
2022-03-12				1.7			
2022-03-13				0.8			
2022-03-14				0.1			
2022-03-15				0.2			
2022-03-16			28.6	3.2			
2022-03-17	5.0		36.8	28.2			
2022-03-18			4.6	41.5			
2022-03-19				43.5			
2022-03-20	1.5			42.5	0.002		
2022-03-21	6.5			41.0			
2022-03-22	6.5			40.5			
2022-03-23	6.5			35.3	0.5		
2022-03-24	6.5			37.1	0.1		
2022-03-25	6.5			42.1	0.1	0.2	
2022-03-26				26.1		0.1	
2022-03-27				15.8			
2022-03-28				8.5			
2022-03-29				11.3			
2022-03-30				21.7			
2022-03-31				25.7			
2022-04-01				11.8			
2022-04-02				4.8			
2022-04-03				4.1			
2022-04-04				3.1			
2022-04-05				2.8			
2022-04-06				3.3			
2022-04-07			0.04	3.1			
2022-04-08			6.12	19.9			
2022-04-09				16.4			
2022-04-10			15.0	7.8			
2022-04-11			8.0	6.9			
2022-04-12			6.8	3.1	7.0		
2022-04-13			6.7	3.0	10.0		
2022-04-14			6.4	1.9	7.0		
2022-04-15			6.7	1.9	7.0		
2022-04-16			6.6	1.8	8.5		
2022-04-17			7.1		3.1		
2022-04-18			6.3	0.6			
2022-04-19			6.2	3.7	8.3		
2022-04-20			7.7	0.3	19.5		
2022-04-21			8.3	4.7	8.3		
2022-04-22			8.5	9.9			
2022-04-23			8.2	12.1			2.9
2022-04-24			27.2	11.1			11.5
2022-04-25			12.8	13.1			3.6
2022-04-26			3.8	5.5			
2022-04-27			8.6	8.8			
2022-04-28			11.6	16.7			
2022-04-29	5.0		8.2	15.0			
2022-04-30			12.2	11.9			
2022-05-01			14.5	15.0			
2022-05-02			12.0	10.0			
2022-05-03			10.8	19.5			

Appendix 1-A: 2022 RSEM Sediment Control Pond Daily Discharge

Date	RSEM-R5A	RSEM-R5B	RSEM-R6E	RSEM-R6W	RSEM-L5E	RSEM-L5W	RSEM-L6
	Discharge (L/s) (No value is reported on days when no flow was observed)						
2022-05-04			8.6	20.0			
2022-05-05			4.9	2.0			
2022-05-06			12.9	2.2			
2022-05-07			14.5	2.0			
2022-05-08			11.0	11.5			
2022-05-09			16.6	7.0			
2022-05-10			18.2	9.7			
2022-05-11			18.2	18.4			
2022-05-12			17.0	18.1			
2022-05-13			14.8	17.8			
2022-05-14			11.7	17.6			
2022-05-15			14.3	12.1			
2022-05-16			15.0	13.8			
2022-05-17	0.5		17.0	15.2			3.5
2022-05-18	0.5		12.3	14.2			5.0
2022-05-19	2.0		12.0	13.9			0.5
2022-05-20	2.0		14.0	14.2			
2022-05-21	4.0		16.5	14.4			
2022-05-22			14.7	14.1			
2022-05-23			13.7	13.9			
2022-05-24			14.1	14.3			
2022-05-25			16.7	14.7			
2022-05-26			16.9	14.6			
2022-05-27			14.6	14.7		2.7	
2022-05-28			9.5	30.5	8.0	8.6	
2022-05-29	12.0		4.8	25.9	20.0	15.0	
2022-05-30	9.5		5.2	21.2	5.0	15.0	
2022-05-31	12.0		14.2	13.1			
2022-06-01			7.5	11.6			
2022-06-02	10.0		16.7	11.0			
2022-06-03	10.0		15.3	10.1			
2022-06-04	10.0		20.3	9.4			
2022-06-05	9.5		19.8	9.1			
2022-06-06	9.5		10.4	8.9			5.5
2022-06-07			23.2	9.0			
2022-06-08			18.4	7.0			
2022-06-09			16.1	4.4			
2022-06-10			19.4	5.7			
2022-06-11			19.5	8.9			
2022-06-12			21.7	9.5			
2022-06-13	8.0		20.6	6.1			
2022-06-14	10.0		16.6	6.2			
2022-06-15	15.0		17.5	3.4			
2022-06-16	2.0		21.4	1.6			
2022-06-17	15.0		8.3	1.0			
2022-06-18	12.0		5.4	5.4			
2022-06-19	12.0		6.3	8.6			
2022-06-20	2.5		5.4	11.2			
2022-06-21	12.0		7.9	12.4			
2022-06-22			13.9	12.0			
2022-06-23	4.0		12.1	11.4			
2022-06-24	1.5		14.8	11.4			
2022-06-25			17.2	12.5			
2022-06-26	11.5		24.7	13.6			
2022-06-27	13.6		12.0	13.4			
2022-06-28			11.2	5.3			
2022-06-29			13.1	3.8			
2022-06-30			13.3	3.9			
2022-07-01			13.0	3.9			
2022-07-02			15.3	3.8			
2022-07-03			14.2	3.8			
2022-07-04			14.4	3.6			
2022-07-05			15.2	3.3			

Appendix 1-A: 2022 RSEM Sediment Control Pond Daily Discharge

Date	RSEM-R5A	RSEM-R5B	RSEM-R6E	RSEM-R6W	RSEM-L5E	RSEM-L5W	RSEM-L6
	Discharge (L/s) (No value is reported on days when no flow was observed)						
2022-07-06			14.3	6.8			
2022-07-07			13.6	1.8			
2022-07-08			12.6	1.0			
2022-07-09			12.2	1.8			
2022-07-10	12.5		12.3	4.1			
2022-07-11			11.6	4.4			
2022-07-12	10.0		11.5	9.7			
2022-07-13			11.0	12.4			
2022-07-14	10.0		10.4	15.4			
2022-07-15	12.0		10.7	15.9			
2022-07-16	12.0		10.4	14.9			
2022-07-17	0.5		9.7	16.0			
2022-07-18			10.8	12.5			
2022-07-19			10.6	12.8			
2022-07-20			21.6	12.2			
2022-07-21			25.6	3.3			
2022-07-22			10.6	0.5			
2022-07-23			13.7	0.3			
2022-07-24			16.9	12.1			
2022-07-25			11.0	3.8			
2022-07-26			10.5	0.3			
2022-07-27			15.9	0.3			
2022-07-28	12.0		11.6	11.5			
2022-07-29	12.0		10.7	16.3			
2022-07-30			11.0	15.3			
2022-07-31			10.6	14.1			
2022-08-01			11.3	13.6			
2022-08-02			7.7	15.9			
2022-08-03	13.0		11.9	16.3			
2022-08-04	5.0		11.0	15.3			
2022-08-05			9.4	17.0			
2022-08-06	3.1		21.3	16.0			
2022-08-07			16.6	15.0			
2022-08-08			15.7	15.6			
2022-08-09			14.0	3.7			
2022-08-10			13.9	1.6			
2022-08-11			14.3	3.5			
2022-08-12			12.1	2.5			
2022-08-13			14.8				
2022-08-14			16.2	0.02			
2022-08-15			11.2				
2022-08-16			10.9				
2022-08-17			11.3				
2022-08-18			11.3	2.3			
2022-08-19			11.5	13.0			
2022-08-20			11.7	16.2			
2022-08-21			11.8	15.5			
2022-08-22			10.7	14.8			
2022-08-23			10.1	14.0			
2022-08-24			9.3	13.0			
2022-08-25			9.9	5.8			
2022-08-26			9.8	1.2			
2022-08-27			10.3	2.2			
2022-08-28			6.1	10.7			
2022-08-29			13.1	1.2			
2022-08-30			18.5	1.2			
2022-08-31			23.2	1.5			
2022-09-01			24.2	0.5			
2022-09-02			19.8	0.3			
2022-09-03			18.0	5.8			
2022-09-04			19.1	13.2			
2022-09-05			19.1	12.3			
2022-09-06			18.0	13.8			

Appendix 1-A: 2022 RSEM Sediment Control Pond Daily Discharge

Date	RSEM-R5A	RSEM-R5B	RSEM-R6E	RSEM-R6W	RSEM-L5E	RSEM-L5W	RSEM-L6
	Discharge (L/s) (No value is reported on days when no flow was observed)						
2022-09-07			35.0	14.1			
2022-09-08			40.0	13.9			
2022-09-09	12.5		40.0	13.8			
2022-09-10	12.0		40.0	14.1			
2022-09-11	12.0		40.0	14.4			
2022-09-12			40.0	14.3			
2022-09-13			40.0	9.7			
2022-09-14			35.0	1.3			
2022-09-15			35.0	2.0			
2022-09-16			38.0	2.1			
2022-09-17			35.0	6.5			
2022-09-18	10.0		38.0	12.3			
2022-09-19	10.0		35.0	13.2			
2022-09-20			35.0	14.6			
2022-09-21			26.9	14.9			
2022-09-22			25.0	15.0			
2022-09-23			27.0	14.4			
2022-09-24			14.0	13.6			
2022-09-25			23.0	9.1			
2022-09-26			25.0	1.9			
2022-09-27			27.3	5.6			
2022-09-28			35.0	4.9			
2022-09-29			35.0	10.2			
2022-09-30	15.0		40.0	9.4			
2022-10-01	10.0		40.0	13.9			
2022-10-02			40.0	14.6			
2022-10-03			41.0	3.8			
2022-10-04			60.0	5.9			
2022-10-05			75.0	16.4			
2022-10-06			75.0	15.9			
2022-10-07			48.0	17.2			
2022-10-08			75.0	17.8			
2022-10-09			56.5	17.7			
2022-10-10			48.9	15.2			
2022-10-11			44.1	11.0			
2022-10-12			47.8	11.2			
2022-10-13			55.2	7.2			
2022-10-14			26.5	7.3			
2022-10-15			33.9	3.7			
2022-10-16			31.0	4.2			
2022-10-17			38.7	1.7			
2022-10-18			17.8	2.1			
2022-10-19	7.0		34.0	4.0			
2022-10-20			11.9	14.7			
2022-10-21			13.9	17.3			
2022-10-22			12.6	20.4			2.4
2022-10-23			26.8	20.1			1.1
2022-10-24			37.7	17.8			
2022-10-25			37.6	19.6			
2022-10-26			31.2	22.6			
2022-10-27			31.8	13.9			
2022-10-28	12.0		30.3	10.6			
2022-10-29	8.0		43.4	10.2			
2022-10-30			31.4	16.9			
2022-10-31			44.6	17.5			
2022-11-01			24.7	16.0			
2022-11-02			26.6	16.7			
2022-11-03			23.0	23.1			
2022-11-04			22.2	24.4			
2022-11-05			17.5	24.5			
2022-11-06			13.6	17.5			
2022-11-07			14.5	22.8			
2022-11-08			10.7	25.5			

Appendix 1-A: 2022 RSEM Sediment Control Pond Daily Discharge

Date	RSEM-R5A	RSEM-R5B	RSEM-R6E	RSEM-R6W	RSEM-L5E	RSEM-L5W	RSEM-L6
	Discharge (L/s) (No value is reported on days when no flow was observed)						
2022-11-09			12.1	25.1			
2022-11-10			11.7	29.1			
2022-11-11			11.1	22.4			
2022-11-12			8.3	20.9			
2022-11-13			8.2	19.2			
2022-11-14			9.2	19.3			
2022-11-15			23.0	38.9			
2022-11-16			21.0	39.0			
2022-11-17			20.0	39.0			
2022-11-18			13.5	40.1			
2022-11-19			10.0	39.5			
2022-11-20			8.5	39.0			
2022-11-21			3.5	42.0			
2022-11-22			16.7	23.3			
2022-11-23			14.6	20.4			
2022-11-24			2.0	35.5			
2022-11-25			3.0	29.9			
2022-11-26			3.0	34.4			
2022-11-27			1.5	43.2			
2022-11-28			1.0	48.8			
2022-11-29				35.0			
2022-11-30				38.0			
2022-12-01				40.0			
2022-12-02				35.0			
2022-12-03				33.0			
2022-12-04				38.0			
2022-12-05				33.0			
2022-12-06				33.0			
2022-12-07				33.0			
2022-12-08				30.0			
2022-12-09				31.0			
2022-12-10				36.0			
2022-12-11				31.0			
2022-12-12				29.5			
2022-12-13				79.2			
2022-12-14				38.5			
2022-12-15				75.4			
2022-12-16				25.4			
2022-12-17				34.2			
2022-12-18				13.9			
2022-12-19				13.5			
2022-12-20				28.0			
2022-12-21				25.0			
2022-12-22				20.0			
2022-12-23				13.0			
2022-12-24				10.0			
2022-12-25				12.8			
2022-12-26				10.8			
2022-12-27				15.0			
2022-12-28				13.5			
2022-12-29				12.5			
2022-12-30				15.4			
2022-12-31				12.4			

Appendix 2-A: Bureau Veritas Analytical QA/QC Program

PEACE RIVER
HYDRO PARTNERS

Bureau Veritas Laboratories

Quality Assurance & Quality Control

COR FCD-00180 / 4

Move Forward with Confidence

BUREAU VERITAS

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1.0 Laboratory Company Profile

Founded over 45 years ago, Bureau Veritas Laboratories is the market leader in analytical services and solutions to the energy, environmental, food and DNA industries. Our 2,200 dedicated employees proudly lead the industry in depth of technical and scientific expertise and serve customers through the only national network of laboratories. In processing over 2.4 million samples and generating in excess of 43 million results annually, we skilfully combines efficiency and customer service with rigorous science and uncompromising quality management. We are committed to success with responsibility – to its stakeholders, to its communities, and to the environment.

Our Mission is clear - We are a science company that is passionately committed to delivering good science through exceptional service.

A major focus is analytical services for an exhaustive list of environmental contaminants. Solid wastes, effluents, potable water, receiving waters, ground waters, soils, sediments, stack emissions, ambient air, plant, animal and fish tissues are analysed for everything from pH to Dioxins.

We provides these services to a wide range of customers, in North America and over 20 foreign countries. Our clients include consulting engineers, industry, businesses, all levels of government as well as private individuals.

Our laboratories function as a tight network operating under a single Quality Management System, utilizing the strengths of each and working together to ensure customer requirements are met. All major laboratories provide the full range of environmental testing services using a uniform Quality System and IT infrastructure to deliver a standardized high quality service across the country. In addition, certain locations have special areas of expertise, such as seawater analysis at our Burnaby and Bedford facilities and High Resolution Dioxin analysis in our Mississauga and Ville St-Laurent facilities.

Operating within one Laboratory Information and Quality System across Canada provides uniform report formats, management performance measurements, turnaround time measurements, corrective action management, and a number of other key performance indicators making us a reliable partner.

2.0 Quality Program

Bureau Veritas Laboratories currently employs 40 full-time Quality Assurance (QA) staff. This group reports to the Senior Quality Assurance Manager, whose responsibility it is to ensure consistency of approach and program independence from operations. The QA team is strengthened through a web-based document control and management system that ensures consistent formats while minimizing routine administrative tasks. Authorized staff have immediate secure access to all corporate and individual laboratory SOPs and support documentation.

The Quality Program is designed to comply with or exceed the data quality objectives of Industry, Canadian Regulators, United States EPA and the International Standards Organization (ISO). The QA team is assisted in performing audits with the help of many trained "internal auditors" that are composed of operations and support services personnel. This brings many benefits to the customer and to our company. These benefits include improved client and accreditation audits, increased communication between groups within our company, greater variety of work for staff and increased understanding of ISO/IEC 17025 customer and our own quality requirements.

The keys to the Quality Program are Prevention and Verification.

2.1 Prevention through Quality Assurance

Extensive control charting practices ensure that analyses with biases or which are potentially out of control are recognized early so that potential problems can be rectified before exceedences occur. Comprehensive internal audits of methods, Quality Control (QC) practices, sample analyses, and quality system elements confirm adherence to Standard Operating Procedures. Regular system reviews and a structured Continuous Improvement Program combine to provide the strongest possible Quality System.

Evaluated monthly, score carding of key performance indicators such as Proficiency Testing Performance, Corrective Action Reports, Nonconformance Reports and Method Audits, drives the Program, defining successes and highlighting areas for improvement. We also have a corporate Management of Change procedure whereby substantive changes in the laboratory are adequately reviewed, communicated and documented.

2.2 Training

Upon hire, personnel are required to participate in the Corporate New Employee Orientation Program (NEOP) where they are trained on the quality management system, Ethics & Integrity, and the Environment, Health and Safety program. In addition to their initial training, they are provided technical training, delivered by designated individuals (supervisor or senior analyst level) with comprehensive working knowledge and experience in the area they are training. To ensure full traceability and auditability, training records for all employees are maintained in our online

document control system and in the employee's personal training file, which is maintained by his/her supervisor.

Analyst competence is essential to the production of accurate data. Prior to beginning work in the laboratory, technicians and analysts are required to thoroughly understand the QA objectives and the relevant SOP. This, in conjunction with hands-on training from a senior analyst, ensures successful transfer of information is effective. Demonstration of acceptable performance on laboratory control samples or reference materials by the analyst is required for final certification to perform the method. Ongoing demonstration of capability is provided through blind performance evaluation samples, audits and annual recertification.

2.3 Customer Complaints

Formal responses are required to any customer complaints, discrepancies, deficiencies or quality issues. The deficiencies are recorded in an electronic database and cascade to the supervisor and the analyst for immediate attention. An acknowledgment of the deficiency is required within a specified timeframe accompanied by an action plan, which must include any corrective measures taken along with results of these actions. A follow-up report on the same form must be completed and returned documenting the effectiveness of the improvements implemented. If closure of the issue is not done in the required timeframe the issue is escalated to the next management level promoting prompt resolution of the issue. The effective response to client issues is score-carded as a key performance indicator.

2.4 Ethics and Data Integrity

All employees are required to undergo annual ethics training and to read and sign an Ethics and Data Integrity Agreement annually, promising to not knowingly commit an unethical act or through inaction, allow a coworker to do so. Senior management reinforces the program through presentations, discussion and written tests.

2.5 Verification through Quality Control

Public safety, environmental impact and major financial decisions are routinely based on our analytical data. Legal data defensibility is essential to these activities and is verified through a comprehensive quality control program. The protocols and procedures described below are routinely employed and are described in detail in our Standard Operating Procedures (SOPs) for analysis, laboratory practice and staff training. The quality assurance objectives are translated into specific requirements that are written into all standard operating procedures.

2.6 Quality Control Protocols

Each project is conducted under a defined quality control program. Our standard quality control protocols meet or exceed the requirements of Canadian and United States regulators. In addition

to this, most large projects have a defined Quality Assurance Project Plan (QAPP) that includes all required data quality objectives. The following table outlines the quality control practices routinely employed in all laboratories. Additional elements or different limits may be used on a project specific basis.

Elements of Quality Control		
Element	**Frequency**	**Limits***
Field QC		
Sample Containers	Precleaned to EPA Spec's	Non Detect
Traveling Blanks	Project Specific	<RDL
Field Duplicates	Project Specific	Project Specific
Run QC, All Methods		
Method Blanks	1 in 20 or 1/batch	<RDL
Blank Spikes	1 in 20 or 1/batch	CCME or Provincial limits
Matrix Spikes	1 in 20 or 1/batch	CCME or Provincial limits
Duplicates Analysis	1 in 20 or 1/batch	± 20%-50%
Real Time Control Charts	Key parameters, all tests	± 3 SD, trend analysis
Inorganic QC		
Instrument Calibration	Multipoint Daily	>0.995 correlation
Calibration Verification	Daily (second source)	± 10% of initial
Continuing Cal. Verification	Every 20 samples & at end	± 10% of initial
Standard Reference Material	Daily – As Required (if available)	SRM limits
Organic QC		
Instrument Calibration	Multipoint	RSD ± 20%
Calibration Verification	Daily (second source)	± 20% of initial
Continuing Cal. Verification	Verified every 12 hr	RF or RRF ± 30% of initial
Surrogate Standards	All samples, all organic analyses	CCME or Provincial limits
Internal Standards (IS)	All Samples (method specific)	-50% to +100% of IS in Cal'n
Standard Reference Material	As required (if available)	SRM limits
External QC		
Interlaboratory Comparisons	>50/year	Top 10% overall, >95% acceptable
Double Blind Program	Annually (Inorganic and Organic where applicable)	Statistical Limits
Internal QC Checks	As required	In house limits

* Typical QC acceptance criteria. Values may vary for specific tests.

2.7 Accreditation

Bureau Veritas Laboratories hold several accreditations granted by Canadian and United States regulatory organizations. The intent of accreditation is to document through laboratory audit, check samples, and round robin studies, each laboratory's conformance to ISO/IEC 17025, an internationally accepted quality system. The accreditation process is also an integral part of our philosophy of Continuous Improvement. The following organizations have endorsed our quality

system. These endorsements are granted on a facility specific basis. In addition, many tier one industries have audited and approved our laboratories.

- Canadian Association for Laboratory Accreditation (CALA)
- Standards Council of Canada (SCC)
- Ministère de l'Environnement et de la Lutte contre les changements climatiques (MELCC)
- National Environmental Laboratory Accreditation (NELAC)
- U.S. Environmental Protection Agency Contract Laboratory
- American Industrial Hygiene Association (AIHA)
- Various US States

2.8 Proficiency Testing

Our laboratories participate in many national and international proficiency testing and double blind check sample programs. As per ISO 17025 requirements, we are required to successfully participate in proficiency testing programs for tests included on our scope of accreditation. We go above and beyond these minimum requirements. Some of the programs we are currently participating include:

- Corporate Double Blind Program
- Canadian Association for Laboratory Accreditation (CALA)
- AWAC
- CMPT
- NWRI (Env. Canada)
- NAPT
- WUCMUC
- State of New York – Environmental Laboratory Approval Program

2.9 Double Blind Program

The Double Blind Program was implemented to measure the quality of data and service provided to customers. Proficiency testing samples are required as part of standard accreditation programs (ISO 17025), however they do not adequately simulate lab performance for client samples since the lab knows it is being tested. The double blind program involves using a sample from an accredited proficiency-testing provider and having the sample “disguised” as a client sample so the lab is completely unaware their performance is being evaluated. The sample is sent to our laboratories as a regular sample, which upon completion is assessed by the Quality Assurance Department for turnaround time (TAT), data accuracy and traceability. This program best simulates lab performance for real client samples.

2.10 Customer Service / Project Management

The quality process extends beyond accreditations, methods and staff expertise. It includes the management system for all activities from project awards to follow-up customer satisfaction

surveys. The heart of the process is the Project Management (PM) team, the largest laboratory customer service team in Canada. This team consists of dedicated professionals whose responsibility it is to ensure the customer gets the tests meeting their requirements, when promised. Project managers are also aware of current and emerging regulations and thus are able to assist customers in choosing the correct testing protocol.

Supporting the PM team is our unique Laboratory Information Management System (MaxxLIMS). MaxxLIMS tracks and monitors all project information and provides a direct link between analysis and reporting. Employing barcodes, MaxxLIMS monitors each sample's progress through the lab as it is received and logged, extracted, analyzed and the resulting data is approved, validated and reported. Comprehensive sample tracking, combined with instrument capacity and staff commitment to customer service, allows clients to be confident in our ability to deliver quality data on time. Customer feedback and PM process insight has driven a number of innovations, mostly made possible through MaxxLIMS.

- Client website access to approved data
- Client website access to project status
- On line bottle orders
- Sample integrity forms
- Custom electronic and hard copy deliverables packages.
- Regulatory reports
- Consolidated invoicing
- Project summary performance reports
- Real time, automated sample log-in and data checks

2.11 The Quality Promise

The Quality Pyramid summarizes our quality promise to our customers. Each component of the pyramid strengthens the overall customer experience and ultimately converges at a single point, the promise to deliver accurate, defensible data to our clients.

Appendix 2-B: 2022 Geochemistry Results

PEACE RIVER
HYDRO PARTNERS

Table 1: 2022 Rinse pH Results

Sample Location	Sample ID	Sample Type	Material Type	Sulphides Visible	Overburden Type	Date Sampled	Date Analyzed	Operator	Easting_m	Northing_m	Elevation_m	Rinse_pH	Notes
Left Bank													
RSEM L5	L5-2022-May-12-01	RSEM Pile	Transition (30-50% shale)			12-May-22	16-May-22	Axel Chore	628589.8	6231328.8		7.54	RSEM PAG stockpile. Black coloured PAG. Overburden and sulphides present.
RSEM L5	L5-2022-May-12-02	RSEM Pile	Transition (15-30% shale)			12-May-22	16-May-22	Axel Chore	628652.7	6231302		8.31	RSEM PAG stockpile. Black coloured PAG. Overburden and sulphides present.
RSEM L5	L5-2022-May-12-03	RSEM Pile	Transition (30-50% shale)			12-May-22	16-May-22	Axel Chore	628661.7	6231191.4		7.41	RSEM PAG stockpile. Black coloured PAG. Overburden present.
RSEM L5	L5-2022-May-12-04	RSEM Pile	Fresh Bedrock	No		12-May-22	16-May-22	Axel Chore	628732.8	6231197.4		6.72	RSEM PAG stockpile. Black coloured PAG. Overburden present.
RSEM L5	L5-2022-May-12-05	RSEM Pile	Transition (15-30% shale)			12-May-22	16-May-22	Axel Chore	628756.9	6231092.8		8.57	Sample Duplicate pH: 8.60≤NL>RSEM PAG stockpile. Black coloured PAG. Overburden and sulphides present.
RSEM L5	L5-2022-May-12-06	RSEM Pile	Transition (15-30% shale)			12-May-22	16-May-22	Axel Chore	628802	6231106.1		8.62	RSEM PAG stockpile. Black coloured PAG. Overburden and sulphides present.
RSEM L5	L5-2022-May-12-07	RSEM Pile	Transition (15-30% shale)			12-May-22	12-May-22	Axel Chore	628853.8	6230992.2		8.77	RSEM PAG stockpile. Black coloured PAG. Overburden and sulphides present.
RSEM L5	L5-2022-May-12-08	RSEM Pile	Transition (0-15% shale)			12-May-22	16-May-22	Axel Chore	628891.8	6230900.3		4.45	RSEM PAG stockpile. Black coloured PAG. Overburden present.
RSEM L5	L5-2022-May-12-09	RSEM Pile	Transition (0-15% shale)			12-May-22	16-May-22	Axel Chore	629067.3	6230667.9		8.71	RSEM PAG stockpile. Black coloured PAG. Overburden and sulphides present.
RSEM L5	L5-2022-May-12-10	RSEM Pile	Transition (0-15% shale)			12-May-22	16-May-22	Axel Chore	629096.3	6230574		8.92	Sample Duplicate pH: 8.94≤NL>RSEM PAG stockpile. Black coloured PAG. Overburden present.
RSEM L5	L5-2022-Aug-11-53	RSEM Pile	Weathered Bedrock	No		11-Aug-22	20-Aug-22	Axel Chore	628648	6231293		6.40	L5 RSEM. WEATHERED SHALE. OVER BURDEN PRESENT
RSEM L5	L5-2022-Aug-11-54	RSEM Pile	Overburden		N/A	11-Aug-22	20-Aug-22	Axel Chore	628601	6231322		7.45	L5 RSEM. WEATHERED SHALE. OVER BURDEN PRESENT
RSEM L5	L5-2022-Aug-11-55	RSEM Pile	Weathered Bedrock	No		11-Aug-22	20-Aug-22	Axel Chore	628669	6231191		6.85	Sample Duplicate: 7.01≤NL>L5 RSEM. WEATHERED SHALE. OVER BURDEN PRESENT
RSEM L5	L5-2022-Aug-11-56	RSEM Pile	Weathered Bedrock	Yes		11-Aug-22	20-Aug-22	Axel Chore	628730	6231210		7.76	L5 RSEM. WEATHERED SHALE. OVER BURDEN AND SULPHIDE PRESENT
RSEM L5	L5-2022-Aug-11-57	RSEM Pile	Overburden		N/A	11-Aug-22	20-Aug-22	Axel Chore	628799	6231103		7.90	L5 RSEM. WEATHERED SHALE. OVER BURDEN AND VEGETATION PRESENT
RSEM L5	L5-2022-Aug-11-58	RSEM Pile	Overburden		N/A	11-Aug-22	20-Aug-22	Axel Chore	628746	6231097		8.03	L5 RSEM. WEATHERED SHALE. OVER BURDEN AND VEGETATION PRESENT
RSEM L5	L5-2022-Aug-11-59	RSEM Pile	Overburden		N/A	11-Aug-22	20-Aug-22	Axel Chore	628861	6230985		8.21	L5 RSEM. WEATHERED SHALE. OVER BURDEN AND VEGETATION PRESENT
RSEM L5	L5-2022-Aug-11-60	RSEM Pile	Overburden		N/A	11-Aug-22	20-Aug-22	Axel Chore	628895	6230895		7.09	Sample Duplicate: 6.97≤NL>L5 RSEM. WEATHERED SHALE. OVER BURDEN AND VEGETATION PRESENT
RSEM L5	L5-2022-Aug-11-61	RSEM Pile	Overburden		N/A	11-Aug-22	20-Aug-22	Axel Chore	629081	6230675		8.24	L5 RSEM. WEATHERED SHALE. OVER BURDEN PRESENT
RSEM L5	L5-2022-Aug-11-62	RSEM Pile	Weathered Bedrock	No		11-Aug-22	20-Aug-22	Axel Chore	629095.7	6230597		5.60	L5 RSEM. WEATHERED FINE SHALE. OVER BURDEN PRESENT
RSEM L5	L5-2022-Oct-08-51	Exposed Surface	Weathered Bedrock	No		8-Oct-22	9-Oct-22	Axel Chore	629104.7	6230603	421.7	8.31	weathered dry no sulf no stain stockpile
RSEM L5	L5-2022-Oct-08-52	Exposed Surface	Weathered Bedrock	No		8-Oct-22	9-Oct-22	Axel Chore	629084.9	6230655.6	418.3	7.25	dry stockpile no sulf no stain weathered
RSEM L5	L5-2022-Oct-08-53	Exposed Surface	Weathered Bedrock	No		8-Oct-22	9-Oct-22	Axel Chore	628901.7	6230880.5	424.3	6.90	dry weathered no sulf no stain uncapped stockpile
RSEM L5	L5-2022-Oct-08-54	Exposed Surface	Weathered Bedrock	No		8-Oct-22	9-Oct-22	Axel Chore	628883.5	6230908	427.6	3.22	dry weathered uncapped stockpile no stain no sulf
RSEM L5	L5-2022-Oct-08-55	Exposed Surface	Weathered Bedrock	No		8-Oct-22	9-Oct-22	Axel Chore	628829.8	6231029.4	448.9	7.44	pH duplicate sample: 7.5≤NL>dry weathered no sulf no stain uncapped stockpile
RSEM L5	L5-2022-Oct-08-56	Exposed Surface	Weathered Bedrock	Yes		8-Oct-22	9-Oct-22	Axel Chore	628761.3	6231148.3	457.7	8.04	dry weathered minor sulf no stain uncapped stockpile
RSEM L5	L5-2022-Oct-08-57	Exposed Surface	Weathered Bedrock	No		8-Oct-22	9-Oct-22	Axel Chore	628727.5	6231102.6	440.8	7.21	dry weathered uncapped stockpile no stain no sulf
RSEM L5	L5-2022-Oct-08-58	Exposed Surface	Weathered Bedrock	Yes		8-Oct-22	9-Oct-22	Axel Chore	628619.4	6231285	454.5	7.30	dry minor sulf cover no stain uncapped stockpile weathered
RSEM L5	L5-2022-Oct-08-59	Exposed Surface	Weathered Bedrock	Yes		8-Oct-22	9-Oct-22	Axel Chore	628605	6231344.7	457	7.55	damp weathered uncapped stockpile sulf cover no stain
Left Bank Excavation	LBEX-2022-May-12-11	Exposed Surface	Overburden		Sand/Gravel	12-May-22	16-May-22	Axel Chore	629767.3	6230251.3		7.00	Exposed face. Black coloured PAG. Overburden and sulphides present.
Left Bank Excavation	LBEX-2022-May-12-12	Exposed Surface	Weathered Bedrock	No		12-May-22	16-May-22	Axel Chore	629795.8	6230191.8		4.61	Exposed PAG face. The sample contains low moisture.
Left Bank Excavation	LBEX-2022-May-12-13	Exposed Surface	Transition (0-15% shale)			12-May-22	16-May-22	Axel Chore	629676.3	6230361.8		7.17	
Left Bank Excavation	LBEX-2022-Aug-10-48	Exposed Surface	Weathered Bedrock	No		10-Aug-22	20-Aug-22	Axel Chore	629523	6230552		3.41	LBEX RSEM. WEATHERED SHALE. OVER BURDEN PRESENT
Left Bank Excavation	LBEX-2022-Aug-10-49	Exposed Surface	Weathered Bedrock	No		10-Aug-22	20-Aug-22	Axel Chore	629539	6230602		2.42	LBEX RSEM. WEATHERED SHALE. OVER BURDEN PRESENT
Left Bank Excavation	LBEX-2022-Aug-10-50	Exposed Surface	Overburden		N/A	10-Aug-22	20-Aug-22	Axel Chore	629666	6230355		7.74	Sample Duplicate: 7.63≤NL>LBEX RSEM. WEATHERED SHALE. OVER BURDEN AND VEGETATION PRESENT
Left Bank Excavation	LBEX-2022-Aug-10-51	Exposed Surface	Weathered Bedrock	Yes		10-Aug-22	20-Aug-22	Axel Chore	629767	6230242		7.58	LBEX RSEM. WEATHERED SHALE. OVER BURDEN, VEGETATION AND SULPHIDE PRESENT
Left Bank Excavation	LBEX-2022-Aug-10-52	Exposed Surface	Weathered Bedrock	Yes		10-Aug-22	20-Aug-22	Axel Chore	629796	6230196		2.35	LBEX RSEM. WEATHERED FLAKY SHALE. OVER BURDEN AND SULPHIDE PRESENT
Left Bank Excavation	LBEX-2022-Oct-08-48	Exposed Surface	Weathered Bedrock	Yes		8-Oct-22	9-Oct-22	Axel Chore	629760.8	6230246.6	483	4.72	LBEX RSEM. Weathered PAG. Overburden and sulphide present
Left Bank Excavation	LBEX-2022-Oct-08-50	Exposed Surface	Weathered Bedrock	Yes		8-Oct-22	9-Oct-22	Axel Chore	629796.1	6230193	472.7	2.20	pH sample duplicate: 2.2≤NL>LBEX RSEM. Weathered Shayle PAG. Overburden and Sulphide present
Left Bank Excavation	LBEX-2022-Oct-08-49	Exposed Surface	Weathered Bedrock	Yes		9-Oct-22	9-Oct-22	Axel Chore	629791.3	6230204	475.6	1.89	LBEX RSEM. Weathered Shayle PAG. Overburden and Sulphide present
Earthfill Dam													
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-May-12-47	Exposed Surface	Transition (0-15% shale)			12-May-22	16-May-22	Axel Chore	629116	6229656.5		6.66	PAG stokepile. Black coloured PAG. Contents contain aggregate.
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-May-12-48	Exposed Surface	Transition (15-30% shale)			12-May-22	16-May-22	Axel Chore	629201.1	6229713.8		7.17	PAG stokepile. Black coloured PAG. Contents contain aggregate.
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-May-12-49	Exposed Surface	Transition (15-30% shale)			12-May-22	16-May-22	Axel Chore	629285.9	6229911.4		7.23	PAG stokepile. Black coloured PAG. Contents contain aggregate.
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-May-12-50	Exposed Surface	Transition (0-15% shale)			12-May-22	16-May-22	Axel Chore	629407.1	6230062.5		7.30	Sample Duplicate pH: 7.33 ≤NL>PAG stokepile. Black coloured PAG. Contents contain aggregate.
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-May-12-51	Exposed Surface	Transition (0-15% shale)			12-May-22	16-May-22	Axel Chore	629471.3	6230195.4		7.19	PAG stokepile. Black coloured PAG. Contents contain sulphides and aggregate.
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-May-12-52	Exposed Surface	Transition (15-30% shale)			12-May-22	16-May-22	Axel Chore	629475.7	6230064.3		7.81	PAG stokepile. Black coloured PAG. Contents contain aggregate.
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-May-12-53	Exposed Surface	Transition (15-30% shale)			12-May-22	16-May-22	Axel Chore	629415.6	6229915.9		7.88	PAG stokepile. Black coloured PAG. Contents contain sulphides and aggregate.
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-May-12-54	Exposed Surface	Weathered Bedrock	Yes		12-May-22	16-May-22	Axel Chore	629203.2	6229594.1		7.54	PAG stokepile. Black coloured PAG. Contents contain sulphides and aggregate.
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-06-22-01	PAG stockpile	Transition (15-30% shale)			22-Jun-22	23-Jun-22	Axel Chore	629120.8	6229658.7		7.04	PAG stokepile. Black coloured PAG. Contents contain aggregate.
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-06-22-02	PAG Stockpile	Transition (15-30% shale)			22-Jun-22	23-Jun-22	Axel Chore	629210.4	6229729.7		7.33	PAG stokepile. Black coloured PAG. Contents contain aggregate.
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-06-22-03	PAG Stockpile	Transition (15-30% shale)			22-Jun-22	23-Jun-22	Axel Chore	629291.9	6229911.9		6.80	PAG stokepile. Black coloured PAG. Contents contain aggregate.
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-06-22-04	PAG Stockpile	Transition (15-30% shale)			22-Jun-22	23-Jun-22	Axel Chore	629422.4	6230093		6.41	PAG stokepile. Black coloured PAG. Contents contain aggregate.
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-06-22-05	PAG Stockpile	Weathered Bedrock	Yes		22-Jun-22	23-Jun-22	Axel Chore	629499.3	6230205.8		5.22	Sample Duplicate: 5.20≤NL>PAG stokepile. Black coloured PAG. Contents contain sulphides.
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-06-22-06	PAG Stockpile	Transition (15-30% shale)			22-Jun-22	23-Jun-22	Axel Chore	629479.7	6230069.7		6.72	PAG stokepile. Black coloured PAG. Contents contain sulphides and aggregate.
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-06-22-07	PAG Stockpile	Weathered Bedrock	Yes		22-Jun-22	23-Jun-22	Axel Chore	629412.8	6229916.1		7.07	
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-Aug-09-42	Temporary Stockpile	Colluvium-Shale			9-Aug-22	20-Aug-22	Axel Chore	629318	6229920		7.67	ZONE8. FRESH SHALE
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-Aug-09-43	Temporary Stockpile	Weathered Bedrock	No		9-Aug-22	20-Aug-22	Axel Chore	629166	6229727		2.47	ZONE 8 WEDGE. WEATHERED SHALE. OVER BURDEN PRESENT
Earthfill Dam - Zone 8 Wedge	ZONE_8-2022-Aug-09-44	Temporary Stockpile	Weathered Bedrock	No		9-Aug-22	20-Aug-22	Axel Chore	629114	6229647		4.78	ZONE 8 WEDGE. WEATHERED SHALE. OVER BURDEN PRESENT

Table 1: 2022 Rinse pH Results

Sample Location	Sample ID	Sample Type	Material Type	Sulphides Visible	Overburden Type	Date Sampled	Date Analyzed	Operator	Easting_m	Northing_m	Elevation_m	Rinse_pH	Notes
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-Aug-09-45	Temporary Stockpile	Weathered Bedrock	No		9-Aug-22	20-Aug-22	Axel Chore	629447	6230019		6.31	Sample Duplicate: 6.55≤NL>ZONE 8. WEATHERED SHALE. OVER BURDEN PRESENT
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-Aug-09-46	Temporary Stockpile	Weathered Bedrock	No		9-Aug-22	20-Aug-22	Axel Chore	629391	6229932		4.38	ZONE 8 WEDGE. WEATHERED SHALE. IVER BURDEN PRESENT
Earthfill Dam - Zone 8 Wedge	Zone_8-2022-Aug-09-47	Temporary Stockpile	Weathered Bedrock	No		9-Aug-22	20-Aug-22	Axel Chore	629197	6229639		2.37	ZONE 8 WEDGE. WEATHERED SHALE OVER BURDEN PRESENT
Earthfill Dam - Zone 8 Wedge	Zone8-2022-Aug-09-40	Temporary Stockpile	Weathered Bedrock	No		9-Aug-22	20-Aug-22	Axel Chore	629483	6230199		4.88	Sample Duplicate: 4.69≤NL>ZONE 8 WEDGE. WEATHERED FLAKY PAG. OVER BURDEN PRESENT
Earthfill Dam - Zone 8 Wedge	Zone8-2022-Aug-09-41	Temporary Stockpile	Weathered Bedrock	No		9-Aug-22	20-Aug-22	Axel Chore	629400	6230027		6.66	ZONE8 WEDGE. FRESH SHALE. OVER BURDEN PRESENT
Earthfill Dam - Zone 8 Wedge	Zone8-2022-Oct-08-41	Exposed Surface	Overburden		N/A	8-Oct-22	9-Oct-22	Axel Chore	629406.9	6230014.8	410.9	5.80	Zone8. Weathered PAG. Overburden present
Earthfill Dam - Zone 8 Wedge	Zone8-2022-Oct-08-42	Exposed Surface	Overburden		N/A	8-Oct-22	9-Oct-22	Axel Chore	629319.6	6229920.1	410	6.45	Zone8. Weathered Shayle PAG. Overburden present
Earthfill Dam - Zone 8 Wedge	Zone8-2022-Oct-08-43	Exposed Surface	Overburden		N/A	8-Oct-22	9-Oct-22	Axel Chore	629165.2	6229715.4	417.8	6.82	Zone8. Weathered PAG. Overburden present
Earthfill Dam - Zone 8 Wedge	Zone8-2022-Oct-08-44	Exposed Surface	Overburden		N/A	8-Oct-22	9-Oct-22	Axel Chore	629119.3	6229648.8	421.9	6.78	Zone8. Weathered PAG. Overburden present
Earthfill Dam - Zone 8 Wedge	Zone8-2022-Oct-08-45	Exposed Surface	Weathered Bedrock	No		8-Oct-22	9-Oct-22	Axel Chore	629205.9	6229644.8	411	2.24	pH sample duplicate: 2.23≤NL>Weathered Shayle PAG. Overburden and sulphide present
Earthfill Dam - Zone 8 Wedge	Zone8-2022-Oct-08-46	Exposed Surface	Weathered Bedrock	Yes		8-Oct-22	9-Oct-22	Axel Chore	629394.7	6229924.3	410.7	3.58	Zone8. Weathered Shayle PAG. Overburden present with minor sulphide.
Earthfill Dam - Zone 8 Wedge	Zone8-2022-Oct-08-47	Exposed Surface	Weathered Bedrock	Yes		8-Oct-22	9-Oct-22	Axel Chore	629450.2	6230013.9	411	5.50	Zone8 Weathered Shayle PAG. Overburden present with minor sulphide
Earthfill Dam - Zone 8 Wedge	Zone8-2022-Oct-08-40	Exposed Surface	Weathered Bedrock	Yes		9-Oct-22	9-Oct-22	Axel Chore	629483.5	6230191.2	411.8	6.08	pH duplicate sample: 6.09≤NL>Zone8 weathered PAG. Overburden and sulphide present
Right Bank													
RSEM R5a	R5a-2022-May-12-14	RSEM Pile	Transition (0-15% shale)			12-May-22	16-May-22	Axel Chore	628216	6230486.4		7.67	
RSEM R5a	R5a-2022-May-12-15	RSEM Pile	Transition (15-30% shale)			12-May-22	16-May-22	Axel Chore	628167	6230558.7		9.29	Sample Duplicate pH: 9.31≤NL>RSEM PAG pile. Black coloured PAG. Contents contain aggregate.
RSEM R5a	R5a-2022-May-12-16	RSEM Pile	Transition (15-30% shale)			12-May-22	16-May-22	Axel Chore	627940.9	6230865		7.79	RSEM PAG stockpile. Black coloured PAG. Overburden and sulphides present.
RSEM R5a	R5a-2022-May-12-17	RSEM Pile	Transition (15-30% shale)			12-May-22	16-May-22	Axel Chore	627905	6230919		7.84	RSEM PAG stockpile. Black coloured PAG. Overburden present.
RSEM R5a	R5a-2022-May-12-18	RSEM Pile	Weathered Bedrock	Yes		12-May-22	16-May-22	Axel Chore	627670.2	6231151.4		2.45	RSEM PAG stockpile. Black coloured PAG. Overburden and sulphides present.
RSEM R5a	R5a-2022-May-12-19	RSEM Pile	Weathered Bedrock	Yes		12-May-22	16-May-22	Axel Chore	627703.7	6231065.8		2.84	RSEM PAG stockpile. Black coloured PAG. Overburden and sulphides present.
RSEM R5a	R5a-2022-May-12-20	RSEM Pile	Weathered Bedrock	No		12-May-22	16-May-22	Axel Chore	627612.6	6231308.2		2.41	Sample Duplicate pH: 2.41 ≤NL>RSEM PAG pile. Black coloured. Contents contain aggregate.
RSEM R5a	R5a-2022-May-12-21	RSEM Pile	Transition (0-15% shale)			12-May-22	16-May-22	Axel Chore	627571.6	6231246.2		6.96	RSEM PAG stockpile. Black coloured PAG. Overburden present.
RSEM R5a	R5a-2022-May-12-22	RSEM Pile	Fresh Bedrock	No		12-May-22	16-May-22	Axel Chore	627536.6	6231303.5		7.18	RSEM PAG pile. Black coloured PAG. Contents contain aggregate. Fresh PAG
RSEM R5a	R5a-2022-May-12-23	RSEM Pile	Transition (0-15% shale)			12-May-22	16-May-22	Axel Chore	627456.7	6231509.9		5.71	RSEM PAG stockpile. Fresh PAG. Black coloured. Low moisture content.
RSEM R5a	R5a-2022-May-12-24	RSEM Pile	Transition (0-15% shale)			12-May-22	16-May-22	Axel Chore	627365.1	6231658.3		4.75	RSEM PAG stockpile. Fresh PAG. Black coloured. Low moisture content
RSEM R5a	R5a-2022-May-12-25	RSEM Pile	Transition (0-15% shale)			12-May-22	16-May-22	Axel Chore	627282.9	6231792.6		7.57	Sample Duplicate pH: 7.61≤NL>RSEM PAG stockpile. Black coloured PAG. Overburden present.
RSEM R5a	R5a-2022-May-12-26	RSEM Pile	Weathered Bedrock	Yes		12-May-22	16-May-22	Axel Chore	627110.9	6231818.5		2.50	RSEM PAG stockpile. Black coloured PAG. Overburden and sulphides present.
RSEM R5a	R5a-2022-May-12-27	Exposed Surface	Fresh Bedrock	No		12-May-22	16-May-22	Axel Chore	627366.7	6231403.6		7.94	RSEM PAG stockpile. Fresh PAG. Black coloured. Low moisture content
RSEM R5a	R5a-2022-May-12-28	RSEM Pile	Fresh Bedrock	No		12-May-22	16-May-22	Axel Chore	627468.5	6231274.1		7.79	RSEM PAG stockpile. Fresh PAG. Black coloured. Low moisture content
RSEM R5a	R5a-2022-May-12-29	RSEM Pile	Fresh Bedrock	No		12-May-22	16-May-22	Axel Chore	627474	6231192.6		7.41	RSEM PAG stockpile. Fresh PAG. Black coloured. Low moisture content
RSEM R5a	R5a-2022-May-12-30	RSEM Pile	Fresh Bedrock	No		12-May-22	16-May-22	Axel Chore	627526.5	6231182.3		7.55	Sample Duplicate pH: 7.58 <NL>RSEM PAG stockpile. Fresh PAG. Black coloured. Low moisture content. Aggregate present.
RSEM R5a	R5a-2022-May-12-32	RSEM Pile	Fresh Bedrock	No		12-May-22	16-May-22	Axel Chore	627666.5	6230972.3		8.34	RSEM PAG stockpile. Fresh PAG. Black coloured. Low moisture content. Aggregate present.
RSEM R5a	R5a-2022-May-12-33	RSEM Pile	Fresh Bedrock	Yes		12-May-22	16-May-22	Axel Chore	627762.2	6230905.4		7.75	RSEM PAG stockpile. Black coloured PAG. Overburden and sulphides present.
RSEM R5a	R5a-2022-May-12-34	RSEM Pile	Fresh Bedrock	No		12-May-22	16-May-22	Axel Chore	627780.6	6230861.5		8.34	RSEM PAG stockpile. Fresh PAG. Black coloured. High moisture content.
RSEM R5a	R5a-2022-May-12-35	RSEM Pile	Fresh Bedrock	Yes		12-May-22	16-May-22	Axel Chore	627876.7	6230805.4		8.05	Sample Duplicate pH: 8.01≤NL>RSEM PAG stockpile. Fresh PAG. Black coloured. Low moisture content
RSEM R5a	R5A-2022-Aug-08-01	RSEM Pile	Weathered Bedrock	No		8-Aug-22	21-Aug-22	Axel Chore	627110	6231816		2.55	RSEM PAG. OVER BURDEN PRESENT. WEATHERED
RSEM R5a	R5A-2022-Aug-08-02	RSEM Pile	Weathered Bedrock	No		8-Aug-22	21-Aug-22	Axel Chore	627157	6231732		4.55	RSEM PAG. WEATHERED SHALE
RSEM R5a	R5A-2022-Aug-08-03	RSEM Pile	Weathered Bedrock	No		8-Aug-22	21-Aug-22	Axel Chore	627292	6231792		6.60	RSEM PAG. WEATHERED SHALE. OVER BURDEN PRESENT
RSEM R5a	R5A-2022-Aug-08-04	RSEM Pile	Weathered Bedrock	No		8-Aug-22	21-Aug-22	Axel Chore	627296	6231739		2.40	RSEM PAG. WEATHERED SHALE OVER BURDEN PRESENT
RSEM R5a	R5A-2022-Aug-08-05	RSEM Pile	Weathered Bedrock	No		8-Aug-22	21-Aug-22	Axel Chore	627360	6231662		3.41	Sample Duplicate: 3.29≤NL>RSEM PAG. WEATHERED SHALE. OVERBURDEN PRESENT
RSEM R5a	R5A-2022-Aug-08-06	RSEM Pile	Overburden		N/A	8-Aug-22	21-Aug-22	Axel Chore	627535	6231438		7.10	RSEM PAG. WEATHERED SHALE. OVER BURDEN PRESENT
RSEM R5a	R5A-2022-Aug-08-07	RSEM Pile	Weathered Bedrock	Yes		8-Aug-22	21-Aug-22	Axel Chore	627580	6231387		7.35	RSEM PAG. WEATHERED SHALE. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-08-08	RSEM Pile	Weathered Bedrock	Yes		8-Aug-22	21-Aug-22	Axel Chore	627614	6231304		2.65	RSEM PAG. WEATHERED SHALE. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-08-09	RSEM Pile	Weathered Bedrock	No		8-Aug-22	21-Aug-22	Axel Chore	627675	6231138		2.40	Sample Duplicate: 2.4≤NL>RSEM PAG. WEATHERED SHALE. OVER BURDEN PRESENT
RSEM R5a	R5A-2022-Aug-08-11	RSEM Pile	Weathered Bedrock	Yes		8-Aug-22	21-Aug-22	Axel Chore	627904	6230916		7.91	RSEM PAG. WEATHERED SHALE. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-08-12	RSEM Pile	Weathered Bedrock	Yes		8-Aug-22	21-Aug-22	Axel Chore	627942	6230842		6.90	RSEM PAG. WEATHERED SHALE. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-08-13	RSEM Pile	Weathered Bedrock	No		8-Aug-22	21-Aug-22	Axel Chore	628163	6230548		6.48	RSEM PAG. WEATHERED SHALE. OVER BURDEN PRESENT
RSEM R5a	R5A-2022-Aug-08-14	RSEM Pile	Weathered Bedrock	Yes		8-Aug-22	21-Aug-22	Axel Chore	628213	6230494		7.05	RSEM PAG. WEATHERED SHALE. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-08-10	RSEM Pile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	627695	6231072		6.60	RSEM PAG. WEATHERED SHALE. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-09-15	RSEM Pile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	627204	6231529		6.60	Sample Duplicate: 6.60≤NL>RSEM PAG. WEATHERED PAG. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-09-16	RSEM Pile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	627279	6231511		3.71	RSEM PAG. VERY FINE WEATHERED PAG. SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-09-17	RSEM Pile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	627359	6231414		5.55	RSEM PAG. WEATHERED PAG. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-09-18	RSEM Pile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	627289	6231433		4.61	RSEM PAG. WEATHERED PAG. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-09-19	RSEM Pile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	627334	6231316		4.20	RSEM PAG. WEATHERED PAG. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-09-20	RSEM Pile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	627377	6231308		6.91	Sample Duplicate: 6.73≤NL>RSEM PAG. WEATHERED PAG. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-09-21	RSEM Pile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	627423	6231247		2.25	RSEM PAG. WEATHERED PAG. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-09-22	RSEM Pile	Weathered Bedrock	No		9-Aug-22	21-Aug-22	Axel Chore	627354	6231272		4.55	RSEM PAG. WEATHERED PAG. OVER BURDEN PRESENT
RSEM R5a	R5A-2022-Aug-09-23	RSEM Pile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	627516	6231108		6.65	RSEM PAG. WEATHERED PAG. OVER BURDEN, SULPHIDE AND VEGETATION PRESENT
RSEM R5a	R5A-2022-Aug-09-24	RSEM Pile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	627547	6231049		6.75	RSEM PAG. WEATHERED PAG. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-09-25	RSEM Pile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	627711	6230907		8.12	Sample Duplicate: 8.15≤NL>RSEM PAG. WEATHERED PAG. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-09-26	RSEM Pile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	627736	6230889		7.65	RSEM PAG. WEATHERED PAG. OVER BURDEN AND SULPHIDE PRESENT
RSEM R5a	R5A-2022-Aug-09-27	RSEM Pile	Weathered Bedrock	No		9-Aug-22	21-Aug-22	Axel Chore	627758	6230845		2.80	RSEM PAG. WEATHERED PAG. OVER BURDEN PRESENT

Table 1: 2022 Rinse pH Results

Sample Location	Sample ID	Sample Type	Material Type	Sulphides Visible	Overburden Type	Date Sampled	Date Analyzed	Operator	Easting_m	Northing_m	Elevation_m	Rinse_pH	Notes
RSEM R5a	R5A-2022-Aug-09-28	RSEM Pile	Weathered Bedrock	No		9-Aug-22	21-Aug-22	Axel Chore	627728	6230842		5.81	RSEM PAG. WEATHERED PAG. OVER BURDEN PRESENT
RSEM R5a	R5a-2022-Oct-07-1	Exposed Surface	Fresh Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	628135.1	6230500.7	447.6	7.89	fresh pag no sulfides dry hauled load
RSEM R5a	R5a-2022-Oct-07-10	Exposed Surface	Weathered Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	627573.2	6231367.5	421.4	2.18	pH duplicate: 2.15≤NL>weathered dry no stain no sulf stockpile
RSEM R5a	R5a-2022-Oct-07-11	Exposed Surface	Weathered Bedrock	Yes		7-Oct-22	9-Oct-22	Axel Chore	627385.7	6231486.5	430	4.16	weathered dry no stain minor sulf stockpile
RSEM R5a	R5a-2022-Oct-07-12	Exposed Surface	Weathered Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	627322.2	6231561.8	430.8	2.69	weathered dry no stain no sulf stockpile
RSEM R5a	R5a-2022-Oct-07-13	Exposed Surface	Weathered Bedrock	No		7-Oct-22	10-Oct-22	Axel Chore	627285	6231742.5	423	2.20	weathered dry no sulf no stain stockpile
RSEM R5a	R5a-2022-Oct-07-14	Exposed Surface	Weathered Bedrock	Yes		7-Oct-22	9-Oct-22	Axel Chore	627267	6231752	423.9	4.12	weathered track packed no stain minor sulf stockpile
RSEM R5a	R5a-2022-Oct-07-15	Exposed Surface	Fresh Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	627231.1	6231762.9	425.8	5.69	pH sample: 5.73≤NL>freshly excavated dry fresh no stain no sulf
RSEM R5a	R5a-2022-Oct-07-16	Exposed Surface	Weathered Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	627137.5	6231766.5	433.4	3.08	dry no stain weathered no sulf no stain
RSEM R5a	R5a-2022-Oct-07-17	Exposed Surface	Fresh Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	627192.9	6231689.3	441.9	5.47	fresh pag recently exposed no sulf no stain dry
RSEM R5a	R5a-2022-Oct-07-18	Exposed Surface	Fresh Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	627235.2	6231644.1	440.2	3.34	dry fresh recently exposed no sulf no stain stockpile
RSEM R5a	R5a-2022-Oct-07-19	Exposed Surface	Weathered Bedrock	Yes		7-Oct-22	9-Oct-22	Axel Chore	627210	6231551.7	449.2	2.41	dry weathered minor sulfide no stain stockpile
RSEM R5a	R5a-2022-Oct-07-2	Exposed Surface	Fresh Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	628150	6230475.7	444.9	10.32	Excavated material fresh pag dry no sulf stain
RSEM R5a	R5a-2022-Oct-07-20	Exposed Surface	Weathered Bedrock	Yes		7-Oct-22	9-Oct-22	Axel Chore	627273.9	6231464.3	450.3	3.84	pH duplicate sample: 3.84≤NL>weathered dry sulfides stockpiled no staining
RSEM R5a	R5a-2022-Oct-07-21	Exposed Surface	Weathered Bedrock	Yes		7-Oct-22	9-Oct-22	Axel Chore	627341.3	6231448.2	440.3	4.61	dry sulfide cover weathered stockpile no staining
RSEM R5a	R5a-2022-Oct-07-22	Exposed Surface	Weathered Bedrock	Yes		7-Oct-22	9-Oct-22	Axel Chore	627402.4	6231326.3	440.6	4.93	weathered dry sulfide cover no staining stockpile material concrete mixed in
RSEM R5a	R5a-2022-Oct-07-23	Exposed Surface	Weathered Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	627427.6	6231254.3	452.1	5.60	weathered dry stockpiled no sulf no stain
RSEM R5a	R5a-2022-Oct-07-24	Exposed Surface	Weathered Bedrock	No		7-Oct-22	10-Oct-22	Axel Chore	627517.9	6231106.6	468.1	3.42	weathered dry stockpiled no sulf no stain
RSEM R5a	R5a-2022-Oct-07-25	Exposed Surface	Weathered Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	627657.1	6230960.2	467.5	8.87	pH duplicate sample: 8.9≤NL>weathered stockpile dry no sulf no stain old
RSEM R5a	R5a-2022-Oct-07-26	Exposed Surface	Weathered Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	627878.1	6230777	462.9	5.01	fresh pag no sulf stockpile dry no stain
RSEM R5a	R5a-2022-Oct-07-3	Exposed Surface	Fresh Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	628209.2	6230440		9.93	fresh pag exc no sulf dry
RSEM R5a	R5a-2022-Oct-07-4	Exposed Surface	Weathered Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	628177.5	6230526.6	434.2	7.94	dry weathered no stain no sulf stockpiled
RSEM R5a	R5a-2022-Oct-07-5	Exposed Surface	Weathered Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	627915.9	6230874.6	445.9	5.76	pH duplicate: 5.79≤NL>weathered stockpiled dry sulfides mild
RSEM R5a	R5a-2022-Oct-07-6	Exposed Surface	Weathered Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	627887.9	6230916.5	444.7	8.44	weathered dry no sulf no stain
RSEM R5a	R5a-2022-Oct-07-7	Exposed Surface	Weathered Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	627709.2	6231080.5	441.1	2.20	weathered dry no stain no sulf stockpile
RSEM R5a	R5a-2022-Oct-07-8	Exposed Surface	Weathered Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	627660.5	6231146.8	441.3	2.25	weathered stockpile no stain or sulf
RSEM R5a	R5a-2022-Oct-07-9	Exposed Surface	Weathered Bedrock	No		7-Oct-22	9-Oct-22	Axel Chore	627571.4	6231225.7	442	2.17	Dry minor sulf no stain weathered stockpiled
RSEM R5b	R5b_West-2022-May-12-36	Exposed Surface	Weathered Bedrock	No		12-May-22	16-May-22	Axel Chore	628566	6229821.2		7.91	Exposed PAG rock face. Black coloured PAG. Contents contain weathered PAG
RSEM R5b	R5b_West-2022-May-12-37	Exposed Surface	Weathered Bedrock	Yes		12-May-22	16-May-22	Axel Chore	628586.6	6229750.6		5.41	Exposed PAG rock face. Black coloured PAG. Contents contain weathered PAG
RSEM R5b	R5b_West-2022-May-12-38	Exposed Surface	Weathered Bedrock	No		12-May-22	16-May-22	Axel Chore	628643.7	6229708.6		4.53	Exposed PAG rock face. Black coloured PAG. Contents contain weathered PAG
RSEM R5b	R5b_West-2022-May-12-39	Exposed Surface	Weathered Bedrock	No		12-May-22	16-May-22	Axel Chore	628615.4	6229781		7.34	Exposed PAG rock face. Red coloured PAG. Contents contain weathered PAG
RSEM R5b	R5B-2022-Aug-09-29	Exposed Surface	Overburden		N/A	9-Aug-22	21-Aug-22	Axel Chore	628603	6229815		7.10	R5B WEST DITCH EXPOSURE. WEATHERED PAG. OVER BURDEN AND VEGETATION PRESENT
RSEM R5b	R5B-2022-Aug-09-30	Exposed Surface	Weathered Bedrock	No		9-Aug-22	21-Aug-22	Axel Chore	628573	6229754		5.24	Sample Duplicate: 5.45≤NL>R5B WEST DITCH EXPOSURE. WEATHERED PAG. VEGETATION PRESENT
RSEM R5b	R5B-2022-Aug-09-31	Exposed Surface	Weathered Bedrock	No		9-Aug-22	21-Aug-22	Axel Chore	628621	6229703		3.32	R5B WEST DITCH EXPOSURE. WEATHERED PAG. OVER BURDEN PRESENT
RSEM R5b	R5B-2022-Aug-09-32	Exposed Surface	Weathered Bedrock	No		9-Aug-22	21-Aug-22	Axel Chore	628613	6229785		2.50	R5B WEST DITCH EXPOSURE. WEATHERED PAG. OVER BURDEN PRESENT
RSEM R5b	R5B-2022-Oct-08-27	Exposed Surface	Overburden		N/A	8-Oct-22	9-Oct-22	Axel Chore	628599.1	6229822.1	441.4	5.23	R5B west ditch exposure. Weathered PAG. Overburden present
RSEM R5b	R5B-2022-Oct-08-28	Exposed Surface	Overburden		N/A	8-Oct-22	9-Oct-22	Axel Chore	628604.8	6229786.1	444.2	5.24	R5B west ditch exposure. Weathered PAG. Overburden. Present
RSEM R5b	R5B-2022-Oct-08-29	Exposed Surface	Overburden		N/A	8-Oct-22	9-Oct-22	Axel Chore	628588.2	6229756.1	453.7	6.84	R5B West ditch exposure. Weathered PAG. Overburden present
RSEM R5b	R5B-2022-Oct-08-30	Exposed Surface	Overburden		N/A	8-Oct-22	9-Oct-22	Axel Chore	628574.2	6229752.2	458.1	5.02	pH duplicate sample: 5.07 ≤NL>R5B West ditch exposure. Weathered PAG. Overburden present
RSEM R5b	R5B-2022-Oct-08-31	Exposed Surface	Overburden		N/A	8-Oct-22	9-Oct-22	Axel Chore	628618.8	6229702.2	456.7	8.09	R5B West ditch exposure. Weathered PAG. Overburden present
RSEM R5b	R5B-2022-Oct-08-32	Exposed Surface	Overburden		N/A	8-Oct-22	9-Oct-22	Axel Chore	628622.7	6229703.9	455.4	7.62	R5B West ditch exposure. Weathered PAG. Overburden present
Approach_Channel_Temporary_Stockpile	TS_AC-2022-May-12-40	Stockpile	Fresh Bedrock	No		12-May-22	16-May-22	Axel Chore	628819.2	6229414.5		8.77	Sample Duplicate pH: 8.75≤NL>PAG stockpile. Fresh PAG. Black coloured. Low moisture content
Approach_Channel_Temporary_Stockpile	TS_AC-2022-May-12-41	Stockpile	Fresh Bedrock	No		12-May-22	16-May-22	Axel Chore	628791.9	6229469.6		8.88	PAG stockpile. Fresh PAG. Black coloured. Low moisture content
Approach_Channel_Temporary_Stockpile	TS_AC-2022-May-12-42	Stockpile	Fresh Bedrock	Yes		12-May-22	16-May-22	Axel Chore	628755.5	6229558.4		9.11	PAG stockpile. Black coloured PAG. Overburden and sulphides present.
Approach_Channel_Temporary_Stockpile	TS_AC-2022-May-12-43	Stokepile	Fresh Bedrock	Yes		12-May-22	16-May-22	Axel Chore	628800.9	6229582.2		8.74	PAG stockpile. Black coloured PAG. Sulphides present.
Approach_Channel_Temporary_Stockpile	TS_AC-2022-May-12-44	Stockpile	Weathered Bedrock	No		12-May-22	16-May-22	Axel Chore	628840.6	6229507.5		8.37	RSEM PAG stockpile. Weathered PAG. Black coloured. Low moisture content
Approach_Channel_Temporary_Stockpile	TS_AC-2022-May-12-45	Stockpile	Weathered Bedrock	No		12-May-22	16-May-22	Axel Chore	628817.5	6229456.9		7.50	Sample Duplicate pH: 7.52≤NL>Exposed PAG rock face. Black coloured PAG. Contents contain weathered PAG.
Approach_Channel_Temporary_Stockpile	TS_AC-2022-May-12-46	Exposed Surface	Fresh Bedrock	Yes		12-May-22	16-May-22	Axel Chore	628877.4	6229518.4		2.35	PAG exposed slope. Black coloured PAG. Contents contain sulphides
Approach_Channel_Temporary_Stockpile	AC-2022-Aug-09-33	Exposed Surface	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	628886	6229505		2.12	TEMP AC STOCKPILE. WEATHERED PAG. OVER BURDEN AND SULPHIDE PRESENT
Approach_Channel_Temporary_Stockpile	AC-2022-Aug-09-34	Temporary Stockpile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	628859	6229487		5.85	TEMP AC STOCKPILE. WEATHERED PAG. SULPHIDE PRESENT
Approach_Channel_Temporary_Stockpile	AC-2022-Aug-09-35	Temporary Stockpile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	628844	6229419		2.38	Sample Duplicate: 2.39≤NL>TEMP AC STOCKPILE. WEATHERED PAG. OVER BURDEN AND SULPHIDE PRESENT
Approach_Channel_Temporary_Stockpile	AC-2022-Aug-09-36	Temporary Stockpile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	628814	6229408		4.20	TEMP AC STOCKPILE. WEATHERED PAG. OVER BURDEN AND SULPHIDE PRESENT
Approach_Channel_Temporary_Stockpile	AC-2022-Aug-09-37	Temporary Stockpile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	628794	6229444		3.35	TEMP AC STOCKPILE. WEATHERED PAG. SULPHIDE PRESENT
Approach_Channel_Temporary_Stockpile	AC-2022-Aug-09-38	Temporary Stockpile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	628773	6229467		4.98	TEMP AC STOCKPILE. WEATHERED PAG. OVER BURDEN AND SULPHIDE PRESENT
Approach_Channel_Temporary_Stockpile	AC-2022-Aug-09-39	Temporary Stockpile	Weathered Bedrock	Yes		9-Aug-22	21-Aug-22	Axel Chore	628772	6229556		3.72	TEMP AC STOCKPILE. WEATHERED PAG. OVER BURDEN AND SULPHIDE PRESENT
Approach Channel	AC-2022-Oct-08-33	Exposed Surface	Overburden		N/A	8-Oct-22	9-Oct-22	Axel Chore	628853.8	6229427.3	462.5	6.78	Temp AC stockpile. Weathered PAG. Overburden present
Approach Channel	AC-2022-Oct-08-34	Exposed Surface	Weathered Bedrock	Yes		8-Oct-22	9-Oct-22	Axel Chore	628817	6229405.5	463.8	2.41	Temp AC stockpile. Weathered PAG. Overburden and minor sulphide present
Approach Channel	AC-2022-Oct-08-35	Exposed Surface	Overburden		N/A	8-Oct-22	9-Oct-22	Axel Chore	628794.4	6229434.8	464.3	5.09	pH sample duplicate: 5.06≤NL>Temp AC stockpile. Weathered PAG. Overburden present
Approach Channel	AC-2022-Oct-08-37	Exposed Surface	Weathered Bedrock	No		8-Oct-22	9-Oct-22	Axel Chore	628883.5	6229509.1	456.1	2.37	Temp AC stockpile. Weathered PAG
Approach Channel	AC-2022-Oct-08-39	Exposed Surface	Weathered Bedrock	Yes		8-Oct-22	9-Oct-22	Axel Chore	628866.3	6229497	459.1	2.91	Temp AC stockpile. Weathered PAG. Overburden and sulphide present
Approach Channel	AC-2022-Oct-08-36	Exposed Surface	Colluvium-Shale			9-Oct-22	9-Oct-22	Axel Chore	628778.9	6229464.1	464.3	6.68	Temp AC stockpile. Weathered Shayle PAG. Overburden present
Approach Channel	AC-2022-Oct-08-38	Exposed Surface	Overburden		N/A	9-Oct-22	9-Oct-22	Axel Chore	628886.7	6229529.6	451.9	2.09	Temp AC stockpile. Weathered PAG. Overburden present

Table 2: 2022 ABA Results

Sample ID	Lab Report	Lab Report ID	Date	Paste pH	Rinse pH	Total S	Sulphate S	Sulphide S	Non Extractable S	TAP	SAP	Modified NP	Net NP	NPR	Fizz Rating
Units				**pH Units**	**pH Units**	**wt%**	**wt%**	**wt%**	**wt%**	**kg $CaCO_3$/t**	**kg $CaCO_3$/t**	**kg $CaCO_3$/t**	**kg $CaCO_3$/t**	**(Mod NP/TAP)**	**N/A**
Left Bank															
L5-2022-MAY-12-08	C235261	ATR012	12-May-22	4.59	3.90	0.62	0.60	<0.01	0.02	19.4	0.3	-6.20	-6.20	-0.32	NONE
L5-2022-AUG-11-60	C269345	BBP913	11-Aug-22	6.78	6.65	0.52	0.50	0.01	<0.02	16.3	0.3	2.70	2.40	0.17	NONE
L5-2022-OCT-08-59	C281778	BET869	8-Oct-22	7.73	7.27	0.65	0.11	0.34	0.20	20.3	10.6	26.3	15.7	1.3	SLIGHT
LBEX-2022-AUG-10-50	C269345	BBP912	10-Aug-22	7.74	7.61	0.12	0.09	0.01	0.02	3.8	0.3	23.5	23.2	6.3	SLIGHT
LBEX-2022-OCT-08-50	C281778	BET868	8-Oct-22	3.51	2.56	2.64	1.53	0.41	0.70	82.5	12.8	-8.40	-21.2	-0.10	NONE
Earthfill Dam															
ZONE 8-2022-MAY-12-51	C235261	ATR025	12-May-22	7.13	6.14	1.41	0.12	1.10	0.19	44.1	34.4	4.00	-30.4	0.09	NONE
ZONE8-2022-AUG-09-40	C269345	BBP911	9-Aug-22	5.73	3.55	1.46	0.37	0.80	0.29	45.6	25.0	-0.80	-25.8	-0.02	NONE
ZONE8-2022-OCT-08-40	C281778	BET867	8-Oct-22	7.28	6.39	1.08	0.29	0.35	0.44	33.8	10.9	11.3	0.400	0.3	NONE
Right Bank															
R5A-2022-MAY-12-15	C235261	ATR013	12-May-22	8.47	9.40	0.42	0.01	0.35	0.06	13.1	10.9	20.1	9.20	1.5	SLIGHT
R5A-2022-MAY-12-17	C235261	ATR014	12-May-22	7.97	8.12	0.31	0.04	0.13	0.14	9.7	4.1	19.7	15.6	2.0	SLIGHT
R5A-2022-MAY-12-19	C235261	ATR015	12-May-22	4.47	3.92	1.19	0.37	0.68	0.14	37.2	21.3	-3.00	-24.3	-0.08	NONE
R5A-2022-MAY-12-21	C235261	ATR016	12-May-22	7.93	7.37	1.12	0.12	0.85	0.15	35.0	26.6	21.5	-5.10	0.6	SLIGHT
R5A-2022-MAY-12-23	C235261	ATR017	12-May-22	6.27	4.55	1.64	0.08	1.29	0.27	51.3	40.3	1.00	-39.3	0.02	NONE
R5A-2022-MAY-12-25	C235261	ATR018	12-May-22	7.87	7.52	0.43	0.06	0.28	0.09	13.4	8.8	29.7	20.9	2.2	SLIGHT
R5A-2022-MAY-12-27	C235261	ATR019	12-May-22	7.84	9.47	0.84	0.04	0.66	0.14	26.3	20.6	4.80	-15.8	0.18	NONE
R5A-2022-MAY-12-29	C235261	ATR020	12-May-22	7.26	7.22	1.65	0.05	1.30	0.30	51.6	40.6	4.30	-36.3	0.08	NONE
R5A-2022-MAY-12-31	C235261	ATR021	12-May-22	7.36	6.88	1.24	0.06	1.02	0.16	38.8	31.9	5.00	-26.9	0.13	NONE
R5A-2022-MAY-12-33	C235261	ATR022	12-May-22	8.28	7.91	0.98	0.07	0.72	0.19	30.6	22.5	6.20	-16.3	0.20	NONE
R5A-2022-MAY-12-35	C235261	ATR023	12-May-22	7.72	8.51	1.25	0.05	1.04	0.16	39.1	32.5	5.70	-26.8	0.15	NONE
R5A-2022-AUG-08-09	C269345	BBP908	8-Aug-22	6.78	2.80	0.91	0.60	0.01	0.30	28.4	0.3	20.7	20.4	0.7	SLIGHT
R5A-2022-AUG-09-20	C269345	BBP909	9-Aug-22	6.82	6.07	1.11	0.17	0.69	0.25	34.7	21.6	2.70	-18.9	0.08	NONE
R5A-2022-OCT-07-6	C281778	BET863	7-Oct-22	8.16	8.20	0.11	0.06	0.01	0.04	3.4	0.3	80.5	80.2	23.4	SLIGHT
R5A-2022-OCT-07-10	C281778	BET864	7-Oct-22	4.40	2.34	0.98	0.72	0.01	0.25	30.6	0.3	-7.40	-7.70	-0.24	NONE
R5A-2022-OCT-07-20	C281778	BET865	7-Oct-22	4.76	3.98	0.94	0.20	0.46	0.28	29.4	14.4	-0.50	-14.9	-0.02	NONE
R5B-2022-AUG-09-30	C269345	BBP910	9-Aug-22	6.26	5.39	0.60	0.57	0.01	0.02	18.8	0.3	0.0	-0.300	0.0	NONE
R5B-2022-OCT-08-30	C281778	BET866	8-Oct-22	5.39	5.19	0.84	0.72	<0.01	0.12	26.3	0.3	11.4	11.4	0.4	NONE
TS AC-2022-MAY-12-42	C235261	ATR024	12-May-22	8.03	8.94	1.09	0.04	0.91	0.14	34.1	28.4	7.00	-21.4	0.21	NONE

Notes:

Paste pH - Field and Laboratory Methods Applicable to Overburdens and Minesoils, (EPA 600 / 2-78-054, March 1978).

Rinse pH (on < 2mm) - MEND PREDICTION MANUAL, (MEND Report 1.20.1, December 2009).

Total sulphur, total carbon & carbonate carbon (CO2; HCl direct method) by Leco.

HCl Extractable Sulphur and HNO_3 Extractable Sulphur is based on a modified version of ASTM Method D 2492-02

Sulphide Sulphur (by diff.) = (Total Sulphur)-(Sulphate Sulphur)

Non Extractable Sulphur = (Total Sulphur)-(HCl Extractable Sulphate Sulphur)-(HNO_3 Extractable Sulphide Sulphur)

TAP = Total Acid Potential = Total S x 31.25

SAP = Sulphide Acid Potential = Sulphide S x 31.25

Modified ABA NP (Neutralization Potential) - MEND Acid Rock Drainage Prediction Manual, MEND Project 1.16.1b (pages 6.2-11 to 17), March 1991.

Net Neutralization Potential = (Modified ABA Neutralization Potential)-(Acid Generation Potential (Sulphide S))

NPR = Neutralization Potential Ratio = (Neutralization Potential)/(Acid Generation Potential)

Fizz Rating - Reference method used is based on NP method.

Table 3: 2022 Solid Phase Elemental Results

Parameter	Units	ACA	Left Bank					Earthfill Dam			Right Bank				
			L5-2022-MAY-12-08	L5-2022-AUG-11-60	L5-2022-OCT-08-59	LBEX-2022-AUG-10-50	LBEX-2022-OCT-08-50	ZONE 8-2022-MAY-12-51	ZONE8-2022-AUG-09-40	ZONE8-2022-OCT-08-40	R5A-2022-MAY-12-15	R5A-2022-MAY-12-17	R5A-2022-MAY-12-19	R5A-2022-MAY-12-21	R5A-2022-MAY-12-23
BV Lab Sample ID			*ATR012*	*BBP913*	*BET869*	*BBP912*	*BET868*	*ATR025*	*BBP911*	*BET867*	*ATR013*	*ATR014*	*ATR015*	*ATR016*	*ATR017*
Ag	ppb	53	243	279	242	230	329	360	406	319	211	272	384	332	431
Al	%	8.15	1.49	2.12	1.02	1.82	0.96	1.66	1.70	1.04	1.22	1.75	1.32	1.49	1.53
As	ppm	4.8	16.6	17.9	10.8	8.0	24.4	12.3	13.8	11.4	9.1	9.7	12.6	11.9	13.6
Au	ppb	1.5	1.6	1.9	0.2	0.8	0.7	0.4	0.7	0.2	0.4	0.7	<0.2	0.3	0.4
B	ppm	17	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Ba	ppm	628	561	738	416	573	166	386	480	400	356	602	394	455	268
Bi	ppm	0.16	0.27	0.30	0.19	0.22	0.22	0.26	0.26	0.23	0.16	0.17	0.24	0.22	0.27
Ca	%	2.57	0.43	0.62	1.23	1.00	1.29	0.35	0.43	0.80	1.02	0.98	0.36	1.13	0.35
Cd	ppm	0.09	1.16	1.46	0.29	0.47	1.05	0.45	0.55	0.41	0.25	0.57	0.49	0.43	0.62
Co	ppm	17.3	15.5	14.9	9.1	21.9	10.5	8.4	10.6	8.2	8.8	9.2	6.6	7.8	8.2
Cr	ppm	92	47.2	72.0	54.3	143	54.2	69.8	87.4	83.9	106	127	48.0	75.4	36.7
Cu	ppm	28	49.5	36.2	24.1	27.2	30.6	31.6	34.0	28.2	27.5	26.7	28.4	28.2	35.4
Fe	%	3.92	3.82	3.38	2.09	2.14	3.31	2.10	2.21	2.04	2.18	2.14	2.11	2.00	2.26
Ga	ppm	17.5	4.2	6.1	2.8	5.2	2.8	4.3	4.4	2.9	3.4	4.9	3.5	4.1	4.0
Hg	ppb	50	77	94	66	64	76	87	96	80	41	59	70	71	83
K	%	2.32	0.35	0.54	0.29	0.45	0.33	0.54	0.56	0.32	0.32	0.44	0.43	0.47	0.48
La	ppm	31	6.2	8.2	4.6	8.8	5.8	4.8	4.7	4.2	4.7	7.4	4.0	5.0	4.5
Mg	%	1.5	0.29	0.40	0.35	0.54	0.27	0.33	0.33	0.33	0.35	0.37	0.29	0.30	0.32
Mn	ppm	774	496	562	162	308	175	68	72	148	185	190	71	104	62
Mo	ppm	1.1	3.80	4.58	1.21	2.72	26.8	2.18	3.42	2.27	0.97	1.28	2.78	1.93	3.16
Na	%	2.43	0.072	0.104	0.152	0.048	0.033	0.174	0.148	0.184	0.041	0.036	0.016	0.096	0.016
Ni	ppm	47	49.0	54.0	25.5	46.4	38.0	30.9	32.9	28.2	25.0	32.5	25.5	28.7	30.6
P	%	0.0655	0.100	0.107	0.088	0.061	0.134	0.069	0.078	0.069	0.080	0.080	0.063	0.072	0.061
Pb	ppm	17	14.4	16.2	11.1	12.2	13.3	14.1	15.2	12.9	9.24	10.7	13.3	12.9	14.9
S	%	0.0621	0.58	0.56	0.65	0.16	2.69	1.34	1.47	1.11	0.42	0.30	1.16	1.09	1.56
Sb	ppm	0.4	0.19	0.67	0.21	0.31	0.47	0.06	0.17	0.19	0.12	0.12	0.05	0.07	0.06
Sc	ppm	14	7.4	6.2	4.0	4.9	3.8	4.9	5.1	4.0	3.9	5.1	4.3	4.6	4.9
Se	ppm	0.09	1.5	1.8	1.0	1.1	3.4	1.4	1.6	1.4	0.9	0.7	1.5	1.3	1.7
Sr	ppm	320	75.1	107	68.6	68.7	56.7	65.5	73.6	81.5	51.9	56.8	57.6	62.2	37.2
Te	ppm	-	0.07	0.08	0.06	0.07	0.08	0.08	0.08	0.07	0.06	0.06	0.08	0.06	0.07
Th	ppm	10.5	5.7	6.3	4.9	4.7	4.5	5.7	5.9	5.2	4.5	5.1	5.0	5.3	5.5
Ti	%	0.384	0.002	0.002	0.002	0.006	0.001	0.001	0.001	0.002	0.005	0.003	0.001	0.002	0.001
Tl	ppm	0.9	0.26	0.38	0.10	0.17	0.39	0.11	0.23	0.14	0.07	0.15	0.10	0.12	0.13
U	ppm	2.7	2.7	1.7	1.2	1.6	5.9	1.0	1.1	1.0	1.0	1.2	0.9	1.0	1.1
V	ppm	97	45	61	30	53	42	48	49	33	36	54	40	44	46
W	ppm	1.9	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zn	ppm	67	166	153	99.3	128	134	117	123	103	89.3	119	103	109	142

Notes:

ACA: Average Upper Continental Crustal Abundance (Rudnick & Gao, 2014)

Values shaded in light grey exceed 3x the ACA

Values shaded in dark grey exceed 10x the ACA

Table 3: 2022 Solid Phase Elemental Results

Parameter	Units	ACA	Right Bank												
			R5A-2022-MAY-12-25	R5A-2022-MAY-12-27	R5A-2022-MAY-12-29	R5A-2022-MAY-12-31	R5A-2022-MAY-12-33	R5A-2022-MAY-12-35	R5A-2022-AUG-08-09	R5A-2022-AUG-09-20	R5A-2022-OCT-07-6	R5A-2022-OCT-07-10	R5A-2022-OCT-07-20	R5B-2022-AUG-09-30	R5B-2022-OCT-08-30	TS AC-2022-MAY-12-42
BV Lab Sample ID			*ATR018*	*ATR019*	*ATR020*	*ATR021*	*ATR022*	*ATR023*	*BBP908*	*BBP909*	*BET863*	*BET864*	*BET865*	*BBP910*	*BET866*	*ATR024*
Ag	ppb	53	206	355	416	366	322	348	380	343	158	382	390	400	419	364
Al	%	8.15	1.47	1.54	1.58	1.42	1.59	1.61	1.39	1.68	1.14	1.73	1.04	1.55	0.71	1.68
As	ppm	4.8	9.0	8.0	12.4	11.8	10.4	11.7	10.8	10.9	8.3	12.0	10.5	16.4	15.6	10.1
Au	ppb	1.5	0.3	<0.2	0.3	0.3	0.3	0.2	1.0	0.8	1.3	0.5	0.4	1.7	1.5	0.2
B	ppm	17	<20	<20	<20	<20	<20	<20	<20	<20	<20	21	<20	<20	<20	<20
Ba	ppm	628	425	601	307	389	547	412	544	488	391	608	411	529	431	459
Bi	ppm	0.16	0.16	0.22	0.26	0.25	0.26	0.25	0.25	0.26	0.30	0.30	0.30	0.24	0.26	0.25
Ca	%	2.57	1.38	0.27	0.40	0.28	0.35	0.33	1.68	0.39	2.75	0.48	0.26	0.24	0.20	0.33
Cd	ppm	0.09	0.53	0.24	0.64	0.38	0.39	0.44	0.13	0.41	1.04	0.28	0.37	0.01	<0.01	0.33
Co	ppm	17.3	8.8	6.8	8.5	8.7	9.7	9.0	3.0	8.5	9.7	4.5	8.2	1.7	1.4	8.7
Cr	ppm	92	139	84.8	51.2	40.8	60.3	134	64.3	81.5	189	133	24.9	72.0	22.4	71.0
Cu	ppm	28	26.9	29.0	34.7	32.7	32.0	33.0	21.6	32.0	23.9	24.9	31.8	24.1	23.4	31.6
Fe	%	3.92	2.58	1.42	2.20	1.86	1.99	2.06	1.85	2.08	2.86	2.16	1.81	2.48	2.97	1.87
Ga	ppm	17.5	4.0	4.0	4.2	3.7	4.3	4.3	3.8	4.5	3.2	4.6	2.8	4.6	2.4	4.3
Hg	ppb	50	47	71	71	80	63	77	83	78	43	86	73	68	74	82
K	%	2.32	0.37	0.51	0.50	0.46	0.49	0.52	0.46	0.53	0.27	0.59	0.32	0.59	0.36	0.54
La	ppm	31	6.0	4.3	4.6	4.5	4.6	4.5	3.4	4.9	7.4	3.7	3.7	5.1	5.5	4.7
Mg	%	1.5	0.47	0.29	0.33	0.30	0.33	0.31	0.25	0.34	0.74	0.27	0.28	0.20	0.12	0.33
Mn	ppm	774	305	41	68	69	192	80	45	94	390	68	65	10	4	75
Mo	ppm	1.1	1.98	0.90	3.07	1.29	1.19	2.26	3.61	2.06	2.49	4.05	1.49	6.67	5.64	1.11
Na	%	2.43	0.024	0.180	0.048	0.208	0.243	0.162	0.066	0.192	0.088	0.033	0.167	0.130	0.175	0.196
Ni	ppm	47	30.6	28.8	32.3	29.6	30.4	33.4	13.2	30.5	33.9	21.6	27.2	6.0	3.4	29.9
P	%	0.0655	0.079	0.062	0.066	0.063	0.059	0.062	0.056	0.069	0.085	0.062	0.063	0.069	0.084	0.064
Pb	ppm	17	10.0	12.7	13.9	14.2	14.1	13.8	14.2	14.8	9.59	15.0	14.5	13.9	15.3	14.0
S	%	0.0621	0.41	0.79	1.59	1.17	0.92	1.23	0.83	1.08	0.12	1.02	0.99	0.63	0.90	1.06
Sb	ppm	0.4	0.16	0.07	0.05	0.06	0.05	0.06	0.15	0.19	0.65	0.15	0.18	0.18	0.19	0.06
Sc	ppm	14	4.3	4.6	5.0	4.7	4.9	4.8	3.7	5.0	4.0	4.6	4.3	3.1	2.1	5.1
Se	ppm	0.09	0.9	1.1	1.9	1.1	1.2	1.4	1.5	1.3	0.9	1.5	1.1	2.0	2.4	1.1
Sr	ppm	320	58.6	52.2	48.4	57.6	60.7	60.3	87.7	75.6	70.9	62.9	61.9	61.2	75.1	57.4
Te	ppm	-	0.05	0.07	0.07	0.07	0.07	0.07	0.08	0.07	0.04	0.07	0.07	0.07	0.07	0.07
Th	ppm	10.5	4.2	5.0	5.5	5.5	5.6	5.4	3.3	6.2	3.5	4.0	6.0	6.3	7.0	5.5
Ti	%	0.384	0.006	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.010	0.001	<0.001	<0.001	<0.001	0.001
Tl	ppm	0.9	0.10	0.08	0.11	0.08	0.08	0.09	0.21	0.19	0.16	0.19	0.14	0.39	0.34	0.07
U	ppm	2.7	1.0	1.0	1.1	0.8	0.9	0.9	0.5	1.1	1.0	0.8	0.9	1.1	0.7	0.9
V	ppm	97	48	47	46	42	42	48	42	45	47	53	29	49	30	49
W	ppm	1.9	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zn	ppm	67	101	111	142	120	124	114	43.4	115	99.9	60.3	118	55.3	48.7	121

Notes:

ACA: Average Upper Continental Crustal Abundance (Rudnick & Gao, 2014)

Values shaded in light grey exceed 3x the ACA

Values shaded in dark grey exceed 10x the ACA

Appendix 2-C: Dredgeate Laboratory Results

PEACE RIVER
HYDRO PARTNERS

Your P.O. #: 48179
Site Location: SITE C
Your C.O.C. #: 45180

Attention: Kael Hanak

Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC
CANADA V1J 4H6

Report Date: 2022/03/03
Report #: R3142419
Version: 3 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C209357
Received: 2022/02/14, 07:45

Sample Matrix: Soil
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbon, Nitrogen, Sulphur - Combustion (1)	1	N/A	2022/02/23	CAL SOP-00263	AN-A-030609-E-01 m
BC Hydrocarbons in Soil by GC/FID (1)	1	2022/02/18	2022/02/18	CAL SOP-00239	BCMOE EPH S 12/16
EPH less PAH in Soil By GC/FID (1)	1	N/A	2022/02/20		Auto Calc
Glycols in Soil by GC/FID (1)	1	2022/02/18	2022/02/18	CAL SOP-00093	BCMOE Glycols 09/17
Elements by ICPMS (total)	1	2022/02/17	2022/02/22	BBY7SOP-00004 / BBY7SOP-00001	EPA 6020b R2 m
Metals - TCLP	1	2022/02/18	2022/02/18	BBY7SOP-00001	EPA 1311, 6020bR2 m
Moisture (1)	1	N/A	2022/02/19	AB SOP-00002	CCME PHC-CWS m
PAH in Soil by GC/MS (1)	1	2022/02/18	2022/02/18	AB SOP-00003 AB SOP-00036	EPA 3540C/8270E m
Total LMW, HMW, Total PAH Calc (1)	1	N/A	2022/02/20		Auto Calc
pH (2:1 DI Water Extract)	1	2022/02/19	2022/02/22	BBY6SOP-00028	BCMOE BCLM Mar2005 m
TCLP pH Measurements	1	N/A	2022/02/18	BBY7SOP-00005	EPA 1311
Total Oil and Grease	1	2022/03/03	2022/03/03	BBY8SOP-00006	BCMOE BCLM Mar 1997
Volatile HC-BTEX (1)	1	2022/02/15	2022/02/23		Auto Calc
BTEX/MTBE/Styrene/VPH in Soil GC/MS/FID (1)	1	N/A	2022/02/18	CAL SOP-00240	BC MELP VH 2014

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope

Your P.O. #: 48179
Site Location: SITE C
Your C.O.C. #: 45180

Attention: Kael Hanak

Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC
CANADA V1J 4H6

Report Date: 2022/03/03
Report #: R3142419
Version: 3 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C209357
Received: 2022/02/14, 07:45

dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Debbie Nordbruget, Key Account Specialist
Email: Debra.NORDBRUGET@bureauveritas.com
Phone# (250)385-6112
==========
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Job #: C209357
Report Date: 2022/03/03

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: IN

RESULTS OF CHEMICAL ANALYSES OF SOIL

Bureau Veritas ID		AOP250		
Sampling Date		2022/02/13 16:45		
COC Number		45180		
	UNITS	MWTF-SLP Cell 1	RDL	QC Batch
Misc. Inorganics				
Total Carbon	%	7.8	0.050	A505273
Total Sulphur (S)	%	ND	0.060	A505273
OIL & GREASE				
Total Oil and grease	ug/g	ND (1)	230	A514876
Physical Properties				
Soluble (2:1) pH	pH	8.67	N/A	A504218

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.
N/A = Not Applicable
(1) Detection limits raised due to high moisture content.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C209357
Report Date: 2022/03/03

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: IN

GLYCOLS BY GC-FID (SOIL)

Bureau Veritas ID		AOP250		
Sampling Date		2022/02/13 16:45		
COC Number		45180		
	UNITS	MWTF-SLP Cell 1	RDL	QC Batch
Glycols				
Extractable (Water) Ethylene Glycol	mg/kg	ND (1)	23	A503500
Extractable (Water) Diethylene Glycol	mg/kg	ND (1)	21	A503500
Extractable (Water) Triethylene Glycol	mg/kg	ND (1)	23	A503500
Extractable (Water) Propylene Glycol	mg/kg	ND (1)	23	A503500
Surrogate Recovery (%)				
Extractable (Water) Methyl Sulfone (sur.)	%	96		A503500

RDL = Reportable Detection Limit
(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C209357
Report Date: 2022/03/03

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: IN

PHYSICAL TESTING (SOIL)

Bureau Veritas ID		AOP250		
Sampling Date		2022/02/13 16:45		
COC Number		45180		
	UNITS	MWTF-SLP Cell 1	RDL	QC Batch
Physical Properties				
Moisture	%	57	0.30	A503606
RDL = Reportable Detection Limit				

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: IN

SEMIVOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		AOP250		
Sampling Date		2022/02/13 16:45		
COC Number		45180		
	UNITS	MWTF-SLP Cell 1	RDL	QC Batch
Polycyclic Aromatics				
Acenaphthene	mg/kg	ND (1)	0.011	A503327
Acenaphthylene	mg/kg	ND (1)	0.011	A503327
Anthracene	mg/kg	ND (1)	0.0088	A503327
Benzo(a)anthracene	mg/kg	ND (1)	0.022	A503327
Benzo(b&j)fluoranthene	mg/kg	0.023 (1)	0.022	A503327
Benzo(k)fluoranthene	mg/kg	ND (1)	0.022	A503327
Benzo(g,h,i)perylene	mg/kg	0.059 (1)	0.044	A503327
Benzo(a)pyrene	mg/kg	ND (1)	0.022	A503327
Chrysene	mg/kg	ND (1)	0.022	A503327
Dibenz(a,h)anthracene	mg/kg	ND (1)	0.044	A503327
Fluoranthene	mg/kg	ND (1)	0.022	A503327
Fluorene	mg/kg	ND (1)	0.022	A503327
Indeno(1,2,3-cd)pyrene	mg/kg	ND (1)	0.044	A503327
2-Methylnaphthalene	mg/kg	0.20 (1)	0.022	A503327
Naphthalene	mg/kg	0.13 (1)	0.022	A503327
Phenanthrene	mg/kg	0.086 (1)	0.022	A503327
Pyrene	mg/kg	0.037 (1)	0.022	A503327
Low Molecular Weight PAH`s	mg/kg	0.41	0.11	A499755
High Molecular Weight PAH`s	mg/kg	0.12	0.044	A499755
Total PAH	mg/kg	0.53	0.11	A499755
Surrogate Recovery (%)				
D10-ANTHRACENE (sur.)	%	102		A503327
D8-ACENAPHTHYLENE (sur.)	%	103		A503327
D8-NAPHTHALENE (sur.)	%	95		A503327
D9-Acridine (sur.)	%	82		A503327
TERPHENYL-D14 (sur.)	%	96		A503327

RDL = Reportable Detection Limit
(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C209357
Report Date: 2022/03/03

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: IN

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AOP250		
Sampling Date		2022/02/13 16:45		
COC Number		45180		
	UNITS	MWTF-SLP Cell 1	RDL	QC Batch
TCLP Extraction Procedure				
Leachate Antimony (Sb)	mg/L	ND	0.10	A503266
Leachate Arsenic (As)	mg/L	ND	0.10	A503266
Leachate Barium (Ba)	mg/L	1.64	0.10	A503266
Leachate Beryllium (Be)	mg/L	ND	0.10	A503266
Leachate Boron (B)	mg/L	ND	0.10	A503266
Leachate Cadmium (Cd)	mg/L	ND	0.10	A503266
Leachate Chromium (Cr)	mg/L	ND	0.10	A503266
Leachate Cobalt (Co)	mg/L	ND	0.10	A503266
Leachate Copper (Cu)	mg/L	ND	0.10	A503266
Leachate Iron (Fe)	mg/L	ND	0.50	A503266
Leachate Lead (Pb)	mg/L	ND	0.10	A503266
Leachate Mercury (Hg)	mg/L	ND	0.0020	A503266
Leachate Molybdenum (Mo)	mg/L	ND	0.10	A503266
Leachate Nickel (Ni)	mg/L	ND	0.10	A503266
Leachate Selenium (Se)	mg/L	ND	0.10	A503266
Leachate Silver (Ag)	mg/L	ND	0.010	A503266
Leachate Thallium (Tl)	mg/L	ND	0.10	A503266
Leachate Uranium (U)	mg/L	ND	0.10	A503266
Leachate Vanadium (V)	mg/L	ND	0.10	A503266
Leachate Zinc (Zn)	mg/L	ND	0.10	A503266
Leachate Zirconium (Zr)	mg/L	ND	0.10	A503266
Initial pH of Sample	pH	9.87	N/A	A502798
pH after HCl	pH	5.66	N/A	A502798
Final pH of Leachate	pH	6.18	N/A	A502798
pH of Leaching Fluid	pH	2.93	N/A	A502798
Total Metals by ICPMS				
Total Aluminum (Al)	mg/kg	7560	100	A504214
Total Antimony (Sb)	mg/kg	0.70	0.10	A504214

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.
N/A = Not Applicable

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C209357
Report Date: 2022/03/03

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: IN

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AOP250		
Sampling Date		2022/02/13 16:45		
COC Number		45180		
	UNITS	MWTF-SLP Cell 1	RDL	QC Batch
Total Arsenic (As)	mg/kg	7.03	0.20	A504214
Total Barium (Ba)	mg/kg	628	0.10	A504214
Total Beryllium (Be)	mg/kg	0.44	0.20	A504214
Total Bismuth (Bi)	mg/kg	0.12	0.10	A504214
Total Boron (B)	mg/kg	11.5	1.0	A504214
Total Cadmium (Cd)	mg/kg	0.393	0.050	A504214
Total Calcium (Ca)	mg/kg	208000	100	A504214
Total Chromium (Cr)	mg/kg	11.6	0.50	A504214
Total Cobalt (Co)	mg/kg	7.53	0.10	A504214
Total Copper (Cu)	mg/kg	21.3	0.50	A504214
Total Iron (Fe)	mg/kg	15000	100	A504214
Total Lead (Pb)	mg/kg	7.87	0.10	A504214
Total Lithium (Li)	mg/kg	15.2	0.50	A504214
Total Magnesium (Mg)	mg/kg	7560	100	A504214
Total Manganese (Mn)	mg/kg	250	0.20	A504214
Total Mercury (Hg)	mg/kg	0.064	0.050	A504214
Total Molybdenum (Mo)	mg/kg	1.64	0.10	A504214
Total Nickel (Ni)	mg/kg	22.3	0.50	A504214
Total Phosphorus (P)	mg/kg	511	10	A504214
Total Potassium (K)	mg/kg	1440	100	A504214
Total Selenium (Se)	mg/kg	0.77	0.50	A504214
Total Silver (Ag)	mg/kg	0.156	0.050	A504214
Total Sodium (Na)	mg/kg	856	100	A504214
Total Strontium (Sr)	mg/kg	625	0.10	A504214
Total Thallium (Tl)	mg/kg	0.130	0.050	A504214
Total Tin (Sn)	mg/kg	1.89	0.10	A504214
Total Titanium (Ti)	mg/kg	37.7	1.0	A504214
Total Tungsten (W)	mg/kg	0.58	0.50	A504214
Total Uranium (U)	mg/kg	2.15	0.050	A504214
Total Vanadium (V)	mg/kg	21.1	1.0	A504214
Total Zinc (Zn)	mg/kg	90.2	1.0	A504214
RDL = Reportable Detection Limit				

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C209357
Report Date: 2022/03/03

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: IN

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AOP250		
Sampling Date		2022/02/13 16:45		
COC Number		45180		
	UNITS	**MWTF-SLP Cell 1**	**RDL**	**QC Batch**
Total Zirconium (Zr)	mg/kg	3.85	0.50	A504214
RDL = Reportable Detection Limit				

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C209357
Report Date: 2022/03/03

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: IN

BTEX BY GC-MS (SOIL)

Bureau Veritas ID		AOP250		
Sampling Date		2022/02/13 16:45		
COC Number		45180		
	UNITS	MWTF-SLP Cell 1	RDL	QC Batch
Volatiles				
Xylenes (Total)	mg/kg	ND	0.16	A499756
VH C6-C10	mg/kg	ND	24	A499756
VPH (VH6 to 10 - BTEX)	mg/kg	ND	24	A499756
Field Preserved Volatiles				
Methyl-tert-butylether (MTBE)	mg/kg	ND (1)	0.040	A503283
Benzene	mg/kg	0.041 (2)	0.014	A503283
Toluene	mg/kg	ND (1)	0.050	A503283
Ethylbenzene	mg/kg	0.095 (2)	0.028	A503283
m & p-Xylene	mg/kg	0.12 (2)	0.11	A503283
o-Xylene	mg/kg	ND (2)	0.11	A503283
Styrene	mg/kg	ND (2)	0.085	A503283
Surrogate Recovery (%)				
1,4-Difluorobenzene (sur.)	%	91		A503283
4-Bromofluorobenzene (sur.)	%	117		A503283
D10-o-Xylene (sur.)	%	116		A503283
D4-1,2-Dichloroethane (sur.)	%	103		A503283

RDL = Reportable Detection Limit

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

(1) Detection limit reported based on MDL and sample weight used for analysis.

(2) Detection limits raised based on sample weight used for analysis.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C209357
Report Date: 2022/03/03

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: IN

TOTAL PETROLEUM HYDROCARBONS (SOIL)

Bureau Veritas ID		AOP250		
Sampling Date		2022/02/13 16:45		
COC Number		45180		
	UNITS	MWTF-SLP Cell 1	RDL	QC Batch
Ext. Pet. Hydrocarbon				
EPH (C10-C19)	mg/kg	ND (1)	230	A503292
EPH (C19-C32)	mg/kg	ND (1)	230	A503292
LEPH (C10-C19 less PAH)	mg/kg	ND	230	A499754
HEPH (C19-C32 less PAH)	mg/kg	ND	230	A499754
Surrogate Recovery (%)				
O-TERPHENYL (sur.)	%	91		A503292

RDL = Reportable Detection Limit

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C209357
Report Date: 2022/03/03

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: IN

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	2.0°C

Results relate only to the items tested.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A502798	ERE	Method Blank	Initial pH of Sample	2022/02/18	4.95		pH	
			Final pH of Leachate	2022/02/18	4.93		pH	
			pH of Leaching Fluid	2022/02/18	4.95		pH	
A502798	ERE	RPD [AOP250-01]	Initial pH of Sample	2022/02/18	0.20		%	N/A
			pH after HCl	2022/02/18	0.18		%	N/A
			Final pH of Leachate	2022/02/18	0.16		%	N/A
			pH of Leaching Fluid	2022/02/18	0		%	N/A
A503266	JBN	Matrix Spike [AOP250-01]	Leachate Antimony (Sb)	2022/02/18		105	%	75 - 125
			Leachate Arsenic (As)	2022/02/18		104	%	75 - 125
			Leachate Barium (Ba)	2022/02/18		96	%	75 - 125
			Leachate Beryllium (Be)	2022/02/18		103	%	75 - 125
			Leachate Boron (B)	2022/02/18		104	%	75 - 125
			Leachate Cadmium (Cd)	2022/02/18		105	%	75 - 125
			Leachate Chromium (Cr)	2022/02/18		100	%	75 - 125
			Leachate Cobalt (Co)	2022/02/18		96	%	75 - 125
			Leachate Copper (Cu)	2022/02/18		98	%	75 - 125
			Leachate Iron (Fe)	2022/02/18		103	%	75 - 125
			Leachate Lead (Pb)	2022/02/18		102	%	75 - 125
			Leachate Mercury (Hg)	2022/02/18		103	%	75 - 125
			Leachate Molybdenum (Mo)	2022/02/18		104	%	75 - 125
			Leachate Nickel (Ni)	2022/02/18		99	%	75 - 125
			Leachate Selenium (Se)	2022/02/18		105	%	75 - 125
			Leachate Silver (Ag)	2022/02/18		102	%	75 - 125
			Leachate Thallium (Tl)	2022/02/18		103	%	75 - 125
			Leachate Uranium (U)	2022/02/18		106	%	75 - 125
			Leachate Vanadium (V)	2022/02/18		102	%	75 - 125
			Leachate Zinc (Zn)	2022/02/18		97	%	75 - 125
			Leachate Zirconium (Zr)	2022/02/18		107	%	75 - 125
A503266	JBN	Spiked Blank	Leachate Antimony (Sb)	2022/02/18		106	%	75 - 125
			Leachate Arsenic (As)	2022/02/18		102	%	75 - 125
			Leachate Barium (Ba)	2022/02/18		100	%	75 - 125
			Leachate Beryllium (Be)	2022/02/18		96	%	75 - 125
			Leachate Boron (B)	2022/02/18		104	%	75 - 125
			Leachate Cadmium (Cd)	2022/02/18		102	%	75 - 125
			Leachate Chromium (Cr)	2022/02/18		98	%	75 - 125
			Leachate Cobalt (Co)	2022/02/18		96	%	75 - 125
			Leachate Copper (Cu)	2022/02/18		99	%	75 - 125
			Leachate Iron (Fe)	2022/02/18		102	%	75 - 125
			Leachate Lead (Pb)	2022/02/18		98	%	75 - 125
			Leachate Mercury (Hg)	2022/02/18		102	%	75 - 125
			Leachate Molybdenum (Mo)	2022/02/18		100	%	75 - 125
			Leachate Nickel (Ni)	2022/02/18		96	%	75 - 125
			Leachate Selenium (Se)	2022/02/18		101	%	75 - 125
			Leachate Silver (Ag)	2022/02/18		98	%	75 - 125
			Leachate Thallium (Tl)	2022/02/18		99	%	75 - 125
			Leachate Uranium (U)	2022/02/18		104	%	75 - 125
			Leachate Vanadium (V)	2022/02/18		101	%	75 - 125
			Leachate Zinc (Zn)	2022/02/18		98	%	75 - 125
			Leachate Zirconium (Zr)	2022/02/18		105	%	75 - 125
A503266	JBN	Method Blank	Leachate Antimony (Sb)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Arsenic (As)	2022/02/18	ND, RDL=0.10		mg/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachate Barium (Ba)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Beryllium (Be)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Boron (B)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Cadmium (Cd)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Chromium (Cr)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Cobalt (Co)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Copper (Cu)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Iron (Fe)	2022/02/18	ND, RDL=0.50		mg/L	
			Leachate Lead (Pb)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Mercury (Hg)	2022/02/18	ND, RDL=0.0020		mg/L	
			Leachate Molybdenum (Mo)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Nickel (Ni)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Selenium (Se)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Silver (Ag)	2022/02/18	ND, RDL=0.010		mg/L	
			Leachate Thallium (Tl)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Uranium (U)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Vanadium (V)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Zinc (Zn)	2022/02/18	ND, RDL=0.10		mg/L	
			Leachate Zirconium (Zr)	2022/02/18	ND, RDL=0.10		mg/L	
A503266	JBN	RPD [AOP250-01]	Leachate Antimony (Sb)	2022/02/18	NC		%	35
			Leachate Arsenic (As)	2022/02/18	NC		%	35
			Leachate Barium (Ba)	2022/02/18	1.3		%	35
			Leachate Beryllium (Be)	2022/02/18	NC		%	35
			Leachate Boron (B)	2022/02/18	NC		%	35
			Leachate Cadmium (Cd)	2022/02/18	NC		%	35
			Leachate Chromium (Cr)	2022/02/18	NC		%	35
			Leachate Cobalt (Co)	2022/02/18	NC		%	35
			Leachate Copper (Cu)	2022/02/18	NC		%	35
			Leachate Iron (Fe)	2022/02/18	NC		%	35
			Leachate Lead (Pb)	2022/02/18	NC		%	35
			Leachate Mercury (Hg)	2022/02/18	NC		%	35
			Leachate Molybdenum (Mo)	2022/02/18	NC		%	35
			Leachate Nickel (Ni)	2022/02/18	NC		%	35
			Leachate Selenium (Se)	2022/02/18	NC		%	35
			Leachate Silver (Ag)	2022/02/18	NC		%	35

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachate Thallium (Tl)	2022/02/18	NC		%	35
			Leachate Uranium (U)	2022/02/18	NC		%	35
			Leachate Vanadium (V)	2022/02/18	NC		%	35
			Leachate Zinc (Zn)	2022/02/18	NC		%	35
			Leachate Zirconium (Zr)	2022/02/18	NC		%	35
A503283	SSV	Matrix Spike	1,4-Difluorobenzene (sur.)	2022/02/18		100	%	60 - 140
			4-Bromofluorobenzene (sur.)	2022/02/18		114	%	60 - 140
			D10-o-Xylene (sur.)	2022/02/18		95	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2022/02/18		91	%	60 - 140
			Methyl-tert-butylether (MTBE)	2022/02/18		81	%	50 - 140
			Benzene	2022/02/18		82	%	50 - 140
			Toluene	2022/02/18		84	%	50 - 140
			Ethylbenzene	2022/02/18		86	%	50 - 140
			m & p-Xylene	2022/02/18		83	%	50 - 140
			o-Xylene	2022/02/18		81	%	50 - 140
			Styrene	2022/02/18		90	%	50 - 140
A503283	SSV	Spiked Blank	1,4-Difluorobenzene (sur.)	2022/02/18		91	%	60 - 140
			4-Bromofluorobenzene (sur.)	2022/02/18		122	%	60 - 140
			D10-o-Xylene (sur.)	2022/02/18		106	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2022/02/18		103	%	60 - 140
			Methyl-tert-butylether (MTBE)	2022/02/18		91	%	60 - 130
			Benzene	2022/02/18		88	%	60 - 130
			Toluene	2022/02/18		90	%	60 - 130
			Ethylbenzene	2022/02/18		92	%	60 - 130
			m & p-Xylene	2022/02/18		89	%	60 - 130
			o-Xylene	2022/02/18		89	%	60 - 130
			Styrene	2022/02/18		94	%	60 - 130
A503283	SSV	Method Blank	1,4-Difluorobenzene (sur.)	2022/02/18		92	%	60 - 140
			4-Bromofluorobenzene (sur.)	2022/02/18		121	%	60 - 140
			D10-o-Xylene (sur.)	2022/02/18		100	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2022/02/18		104	%	60 - 140
			Methyl-tert-butylether (MTBE)	2022/02/18	ND, RDL=0.040		mg/kg	
			Benzene	2022/02/18	ND, RDL=0.0050		mg/kg	
			Toluene	2022/02/18	ND, RDL=0.050		mg/kg	
			Ethylbenzene	2022/02/18	ND, RDL=0.010		mg/kg	
			m & p-Xylene	2022/02/18	ND, RDL=0.040		mg/kg	
			o-Xylene	2022/02/18	ND, RDL=0.040		mg/kg	
			Styrene	2022/02/18	ND, RDL=0.030		mg/kg	
A503283	SSV	RPD	Methyl-tert-butylether (MTBE)	2022/02/18	NC		%	50
			Benzene	2022/02/18	NC		%	50
			Toluene	2022/02/18	NC		%	50
			Ethylbenzene	2022/02/18	NC		%	50
			m & p-Xylene	2022/02/18	NC		%	50
			o-Xylene	2022/02/18	NC		%	50
			Styrene	2022/02/18	NC		%	50
A503292	CAU	Matrix Spike	O-TERPHENYL (sur.)	2022/02/18		88	%	60 - 140

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			EPH (C10-C19)	2022/02/18		88	%	60 - 130
			EPH (C19-C32)	2022/02/18		93	%	60 - 130
A503292	CAU	Spiked Blank	O-TERPHENYL (sur.)	2022/02/18		91	%	60 - 140
			EPH (C10-C19)	2022/02/18		92	%	70 - 130
			EPH (C19-C32)	2022/02/18		96	%	70 - 130
A503292	CAU	Method Blank	O-TERPHENYL (sur.)	2022/02/18		90	%	60 - 140
			EPH (C10-C19)	2022/02/18	ND, RDL=100		mg/kg	
			EPH (C19-C32)	2022/02/18	ND, RDL=100		mg/kg	
A503292	CAU	RPD	EPH (C10-C19)	2022/02/18	NC		%	40
			EPH (C19-C32)	2022/02/18	NC		%	40
A503327	NK3	Matrix Spike	D10-ANTHRACENE (sur.)	2022/02/18		86	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2022/02/18		86	%	50 - 140
			D8-NAPHTHALENE (sur.)	2022/02/18		80	%	50 - 140
			D9-Acridine (sur.)	2022/02/18		70	%	50 - 140
			TERPHENYL-D14 (sur.)	2022/02/18		97	%	50 - 140
			Acenaphthene	2022/02/18		77	%	50 - 140
			Acenaphthylene	2022/02/18		87	%	50 - 140
			Anthracene	2022/02/18		80	%	50 - 140
			Benzo(a)anthracene	2022/02/18		92	%	50 - 140
			Benzo(b&j)fluoranthene	2022/02/18		92	%	50 - 140
			Benzo(k)fluoranthene	2022/02/18		91	%	50 - 140
			Benzo(g,h,i)perylene	2022/02/18		82	%	50 - 140
			Benzo(a)pyrene	2022/02/18		87	%	50 - 140
			Chrysene	2022/02/18		86	%	50 - 140
			Dibenz(a,h)anthracene	2022/02/18		96	%	50 - 140
			Fluoranthene	2022/02/18		91	%	50 - 140
			Fluorene	2022/02/18		79	%	50 - 140
			Indeno(1,2,3-cd)pyrene	2022/02/18		89	%	50 - 140
			2-Methylnaphthalene	2022/02/18		82	%	50 - 140
			Naphthalene	2022/02/18		77	%	50 - 140
			Phenanthrene	2022/02/18		81	%	50 - 140
			Pyrene	2022/02/18		88	%	50 - 140
A503327	NK3	Spiked Blank	D10-ANTHRACENE (sur.)	2022/02/18		93	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2022/02/18		94	%	50 - 140
			D8-NAPHTHALENE (sur.)	2022/02/18		92	%	50 - 140
			D9-Acridine (sur.)	2022/02/18		77	%	50 - 140
			TERPHENYL-D14 (sur.)	2022/02/18		101	%	50 - 140
			Acenaphthene	2022/02/18		87	%	50 - 140
			Acenaphthylene	2022/02/18		100	%	50 - 140
			Anthracene	2022/02/18		89	%	50 - 140
			Benzo(a)anthracene	2022/02/18		103	%	50 - 140
			Benzo(b&j)fluoranthene	2022/02/18		100	%	50 - 140
			Benzo(k)fluoranthene	2022/02/18		90	%	50 - 140
			Benzo(g,h,i)perylene	2022/02/18		93	%	50 - 140
			Benzo(a)pyrene	2022/02/18		99	%	50 - 140
			Chrysene	2022/02/18		98	%	50 - 140
			Dibenz(a,h)anthracene	2022/02/18		101	%	50 - 140
			Fluoranthene	2022/02/18		99	%	50 - 140
			Fluorene	2022/02/18		95	%	50 - 140
			Indeno(1,2,3-cd)pyrene	2022/02/18		95	%	50 - 140
			2-Methylnaphthalene	2022/02/18		97	%	50 - 140

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Naphthalene	2022/02/18		91	%	50 - 140
			Phenanthrene	2022/02/18		91	%	50 - 140
			Pyrene	2022/02/18		102	%	50 - 140
A503327	NK3	Method Blank	D10-ANTHRACENE (sur.)	2022/02/18		104	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2022/02/18		102	%	50 - 140
			D8-NAPHTHALENE (sur.)	2022/02/18		89	%	50 - 140
			D9-Acridine (sur.)	2022/02/18		79	%	50 - 140
			TERPHENYL-D14 (sur.)	2022/02/18		110	%	50 - 140
			Acenaphthene	2022/02/18	ND, RDL=0.0050		mg/kg	
			Acenaphthylene	2022/02/18	ND, RDL=0.0050		mg/kg	
			Anthracene	2022/02/18	ND, RDL=0.0040		mg/kg	
			Benzo(a)anthracene	2022/02/18	ND, RDL=0.010		mg/kg	
			Benzo(b&j)fluoranthene	2022/02/18	ND, RDL=0.010		mg/kg	
			Benzo(k)fluoranthene	2022/02/18	ND, RDL=0.010		mg/kg	
			Benzo(g,h,i)perylene	2022/02/18	ND, RDL=0.020		mg/kg	
			Benzo(a)pyrene	2022/02/18	ND, RDL=0.010		mg/kg	
			Chrysene	2022/02/18	ND, RDL=0.010		mg/kg	
			Dibenz(a,h)anthracene	2022/02/18	ND, RDL=0.020		mg/kg	
			Fluoranthene	2022/02/18	ND, RDL=0.010		mg/kg	
			Fluorene	2022/02/18	ND, RDL=0.010		mg/kg	
			Indeno(1,2,3-cd)pyrene	2022/02/18	ND, RDL=0.020		mg/kg	
			2-Methylnaphthalene	2022/02/18	ND, RDL=0.010		mg/kg	
			Naphthalene	2022/02/18	ND, RDL=0.010		mg/kg	
			Phenanthrene	2022/02/18	ND, RDL=0.010		mg/kg	
			Pyrene	2022/02/18	ND, RDL=0.010		mg/kg	
A503327	NK3	RPD	Acenaphthene	2022/02/18	NC		%	50
			Acenaphthylene	2022/02/18	NC		%	50
			Anthracene	2022/02/18	NC		%	50
			Benzo(a)anthracene	2022/02/18	NC		%	50
			Benzo(b&j)fluoranthene	2022/02/18	NC		%	50
			Benzo(k)fluoranthene	2022/02/18	NC		%	50
			Benzo(g,h,i)perylene	2022/02/18	NC		%	50
			Benzo(a)pyrene	2022/02/18	NC		%	50
			Chrysene	2022/02/18	NC		%	50
			Dibenz(a,h)anthracene	2022/02/18	NC		%	50
			Fluoranthene	2022/02/18	NC		%	50
			Fluorene	2022/02/18	NC		%	50

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Indeno(1,2,3-cd)pyrene	2022/02/18	NC		%	50
			2-Methylnaphthalene	2022/02/18	NC		%	50
			Naphthalene	2022/02/18	NC		%	50
			Phenanthrene	2022/02/18	NC		%	50
			Pyrene	2022/02/18	NC		%	50
A503500	JW0	Matrix Spike [AOP250-01]	Extractable (Water) Methyl Sulfone (sur.)	2022/02/18		103	%	50 - 140
			Extractable (Water) Ethylene Glycol	2022/02/18		77	%	60 - 140
			Extractable (Water) Diethylene Glycol	2022/02/18		99	%	60 - 140
			Extractable (Water) Triethylene Glycol	2022/02/18		93	%	60 - 140
			Extractable (Water) Propylene Glycol	2022/02/18		88	%	60 - 140
A503500	JW0	Spiked Blank	Extractable (Water) Methyl Sulfone (sur.)	2022/02/18		91	%	50 - 140
			Extractable (Water) Ethylene Glycol	2022/02/18		66	%	60 - 140
			Extractable (Water) Diethylene Glycol	2022/02/18		86	%	60 - 140
			Extractable (Water) Triethylene Glycol	2022/02/18		79	%	60 - 140
			Extractable (Water) Propylene Glycol	2022/02/18		73	%	60 - 140
A503500	JW0	Method Blank	Extractable (Water) Methyl Sulfone (sur.)	2022/02/18		96	%	50 - 140
			Extractable (Water) Ethylene Glycol	2022/02/18	ND, RDL=10		mg/kg	
			Extractable (Water) Diethylene Glycol	2022/02/18	ND, RDL=9.0		mg/kg	
			Extractable (Water) Triethylene Glycol	2022/02/18	ND, RDL=10		mg/kg	
			Extractable (Water) Propylene Glycol	2022/02/18	ND, RDL=10		mg/kg	
A503500	JW0	RPD [AOP250-01]	Extractable (Water) Ethylene Glycol	2022/02/18	NC		%	50
			Extractable (Water) Diethylene Glycol	2022/02/18	NC		%	50
			Extractable (Water) Triethylene Glycol	2022/02/18	NC		%	50
			Extractable (Water) Propylene Glycol	2022/02/18	NC		%	50
A503606	RIL	Method Blank	Moisture	2022/02/19	ND, RDL=0.30		%	
A503606	RIL	RPD	Moisture	2022/02/19	9.4		%	20
A504214	JLP	Matrix Spike	Total Aluminum (Al)	2022/02/22		NC	%	75 - 125
			Total Antimony (Sb)	2022/02/22		108	%	75 - 125
			Total Arsenic (As)	2022/02/22		105	%	75 - 125
			Total Barium (Ba)	2022/02/22		115	%	75 - 125
			Total Beryllium (Be)	2022/02/22		99	%	75 - 125
			Total Bismuth (Bi)	2022/02/22		106	%	75 - 125
			Total Boron (B)	2022/02/22		106	%	75 - 125
			Total Cadmium (Cd)	2022/02/22		106	%	75 - 125
			Total Calcium (Ca)	2022/02/22		NC	%	75 - 125
			Total Chromium (Cr)	2022/02/22		105	%	75 - 125
			Total Cobalt (Co)	2022/02/22		100	%	75 - 125
			Total Copper (Cu)	2022/02/22		98	%	75 - 125
			Total Iron (Fe)	2022/02/22		NC	%	75 - 125
			Total Lead (Pb)	2022/02/22		107	%	75 - 125
			Total Lithium (Li)	2022/02/22		96	%	75 - 125
			Total Magnesium (Mg)	2022/02/22		NC	%	75 - 125
			Total Manganese (Mn)	2022/02/22		NC	%	75 - 125
			Total Mercury (Hg)	2022/02/22		107	%	75 - 125
			Total Molybdenum (Mo)	2022/02/22		112	%	75 - 125
			Total Nickel (Ni)	2022/02/22		99	%	75 - 125
			Total Phosphorus (P)	2022/02/22		105	%	75 - 125
			Total Potassium (K)	2022/02/22		149 (1)	%	75 - 125

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Selenium (Se)	2022/02/22		103	%	75 - 125
			Total Silver (Ag)	2022/02/22		106	%	75 - 125
			Total Sodium (Na)	2022/02/22		207 (1)	%	75 - 125
			Total Strontium (Sr)	2022/02/22		123	%	75 - 125
			Total Thallium (Tl)	2022/02/22		106	%	75 - 125
			Total Tin (Sn)	2022/02/22		113	%	75 - 125
			Total Titanium (Ti)	2022/02/22		NC	%	75 - 125
			Total Tungsten (W)	2022/02/22		105	%	75 - 125
			Total Uranium (U)	2022/02/22		107	%	75 - 125
			Total Vanadium (V)	2022/02/22		106	%	75 - 125
			Total Zinc (Zn)	2022/02/22		104	%	75 - 125
			Total Zirconium (Zr)	2022/02/22		144 (1)	%	75 - 125
A504214	JLP	QC Standard	Total Aluminum (Al)	2022/02/22		107	%	70 - 130
			Total Antimony (Sb)	2022/02/22		116	%	70 - 130
			Total Arsenic (As)	2022/02/22		91	%	70 - 130
			Total Barium (Ba)	2022/02/22		107	%	70 - 130
			Total Beryllium (Be)	2022/02/22		104	%	70 - 130
			Total Cadmium (Cd)	2022/02/22		122	%	70 - 130
			Total Calcium (Ca)	2022/02/22		101	%	70 - 130
			Total Chromium (Cr)	2022/02/22		112	%	70 - 130
			Total Cobalt (Co)	2022/02/22		101	%	70 - 130
			Total Copper (Cu)	2022/02/22		105	%	70 - 130
			Total Iron (Fe)	2022/02/22		104	%	70 - 130
			Total Lead (Pb)	2022/02/22		115	%	70 - 130
			Total Lithium (Li)	2022/02/22		109	%	70 - 130
			Total Magnesium (Mg)	2022/02/22		111	%	70 - 130
			Total Manganese (Mn)	2022/02/22		110	%	70 - 130
			Total Mercury (Hg)	2022/02/22		107	%	70 - 130
			Total Molybdenum (Mo)	2022/02/22		114	%	70 - 130
			Total Nickel (Ni)	2022/02/22		108	%	70 - 130
			Total Phosphorus (P)	2022/02/22		97	%	70 - 130
			Total Potassium (K)	2022/02/22		102	%	70 - 130
			Total Silver (Ag)	2022/02/22		105	%	70 - 130
			Total Sodium (Na)	2022/02/22		105	%	70 - 130
			Total Strontium (Sr)	2022/02/22		111	%	70 - 130
			Total Thallium (Tl)	2022/02/22		96	%	70 - 130
			Total Tin (Sn)	2022/02/22		102	%	70 - 130
			Total Uranium (U)	2022/02/22		114	%	70 - 130
			Total Vanadium (V)	2022/02/22		111	%	70 - 130
			Total Zinc (Zn)	2022/02/22		104	%	70 - 130
A504214	JLP	Spiked Blank	Total Aluminum (Al)	2022/02/22		99	%	75 - 125
			Total Antimony (Sb)	2022/02/22		105	%	75 - 125
			Total Arsenic (As)	2022/02/22		102	%	75 - 125
			Total Barium (Ba)	2022/02/22		100	%	75 - 125
			Total Beryllium (Be)	2022/02/22		96	%	75 - 125
			Total Bismuth (Bi)	2022/02/22		103	%	75 - 125
			Total Boron (B)	2022/02/22		101	%	75 - 125
			Total Cadmium (Cd)	2022/02/22		103	%	75 - 125
			Total Calcium (Ca)	2022/02/22		106	%	75 - 125
			Total Chromium (Cr)	2022/02/22		102	%	75 - 125
			Total Cobalt (Co)	2022/02/22		97	%	75 - 125
			Total Copper (Cu)	2022/02/22		100	%	75 - 125
			Total Iron (Fe)	2022/02/22		103	%	75 - 125

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Lead (Pb)	2022/02/22		102	%	75 - 125
			Total Lithium (Li)	2022/02/22		95	%	75 - 125
			Total Magnesium (Mg)	2022/02/22		105	%	75 - 125
			Total Manganese (Mn)	2022/02/22		100	%	75 - 125
			Total Mercury (Hg)	2022/02/22		101	%	75 - 125
			Total Molybdenum (Mo)	2022/02/22		102	%	75 - 125
			Total Nickel (Ni)	2022/02/22		100	%	75 - 125
			Total Phosphorus (P)	2022/02/22		98	%	75 - 125
			Total Potassium (K)	2022/02/22		109	%	75 - 125
			Total Selenium (Se)	2022/02/22		103	%	75 - 125
			Total Silver (Ag)	2022/02/22		101	%	75 - 125
			Total Sodium (Na)	2022/02/22		109	%	75 - 125
			Total Strontium (Sr)	2022/02/22		107	%	75 - 125
			Total Thallium (Tl)	2022/02/22		101	%	75 - 125
			Total Tin (Sn)	2022/02/22		105	%	75 - 125
			Total Titanium (Ti)	2022/02/22		95	%	75 - 125
			Total Tungsten (W)	2022/02/22		107	%	75 - 125
			Total Uranium (U)	2022/02/22		100	%	75 - 125
			Total Vanadium (V)	2022/02/22		101	%	75 - 125
			Total Zinc (Zn)	2022/02/22		100	%	75 - 125
			Total Zirconium (Zr)	2022/02/22		106	%	75 - 125
A504214	JLP	Method Blank	Total Aluminum (Al)	2022/02/22	ND, RDL=100		mg/kg	
			Total Antimony (Sb)	2022/02/22	ND, RDL=0.10		mg/kg	
			Total Arsenic (As)	2022/02/22	ND, RDL=0.20		mg/kg	
			Total Barium (Ba)	2022/02/22	ND, RDL=0.10		mg/kg	
			Total Beryllium (Be)	2022/02/22	ND, RDL=0.20		mg/kg	
			Total Bismuth (Bi)	2022/02/22	ND, RDL=0.10		mg/kg	
			Total Boron (B)	2022/02/22	ND, RDL=1.0		mg/kg	
			Total Cadmium (Cd)	2022/02/22	ND, RDL=0.050		mg/kg	
			Total Calcium (Ca)	2022/02/22	ND, RDL=100		mg/kg	
			Total Chromium (Cr)	2022/02/22	ND, RDL=0.50		mg/kg	
			Total Cobalt (Co)	2022/02/22	ND, RDL=0.10		mg/kg	
			Total Copper (Cu)	2022/02/22	ND, RDL=0.50		mg/kg	
			Total Iron (Fe)	2022/02/22	ND, RDL=100		mg/kg	
			Total Lead (Pb)	2022/02/22	ND, RDL=0.10		mg/kg	
			Total Lithium (Li)	2022/02/22	ND, RDL=0.50		mg/kg	
			Total Magnesium (Mg)	2022/02/22	ND, RDL=100		mg/kg	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Manganese (Mn)	2022/02/22	ND, RDL=0.20		mg/kg	
			Total Mercury (Hg)	2022/02/22	ND, RDL=0.050		mg/kg	
			Total Molybdenum (Mo)	2022/02/22	ND, RDL=0.10		mg/kg	
			Total Nickel (Ni)	2022/02/22	ND, RDL=0.50		mg/kg	
			Total Phosphorus (P)	2022/02/22	ND, RDL=10		mg/kg	
			Total Potassium (K)	2022/02/22	ND, RDL=100		mg/kg	
			Total Selenium (Se)	2022/02/22	ND, RDL=0.50		mg/kg	
			Total Silver (Ag)	2022/02/22	ND, RDL=0.050		mg/kg	
			Total Sodium (Na)	2022/02/22	ND, RDL=100		mg/kg	
			Total Strontium (Sr)	2022/02/22	ND, RDL=0.10		mg/kg	
			Total Thallium (Tl)	2022/02/22	ND, RDL=0.050		mg/kg	
			Total Tin (Sn)	2022/02/22	ND, RDL=0.10		mg/kg	
			Total Titanium (Ti)	2022/02/22	ND, RDL=1.0		mg/kg	
			Total Tungsten (W)	2022/02/22	ND, RDL=0.50		mg/kg	
			Total Uranium (U)	2022/02/22	ND, RDL=0.050		mg/kg	
			Total Vanadium (V)	2022/02/22	ND, RDL=1.0		mg/kg	
			Total Zinc (Zn)	2022/02/22	ND, RDL=1.0		mg/kg	
			Total Zirconium (Zr)	2022/02/22	ND, RDL=0.50		mg/kg	
A504214	JLP	RPD	Total Aluminum (Al)	2022/02/22	0.66		%	40
			Total Antimony (Sb)	2022/02/22	4.0		%	30
			Total Arsenic (As)	2022/02/22	1.5		%	30
			Total Barium (Ba)	2022/02/22	5.7		%	40
			Total Beryllium (Be)	2022/02/22	0.76		%	30
			Total Bismuth (Bi)	2022/02/22	NC		%	30
			Total Boron (B)	2022/02/22	3.5		%	30
			Total Cadmium (Cd)	2022/02/22	2.9		%	30
			Total Calcium (Ca)	2022/02/22	3.2		%	30
			Total Chromium (Cr)	2022/02/22	5.6		%	30
			Total Cobalt (Co)	2022/02/22	2.3		%	30
			Total Copper (Cu)	2022/02/22	1.6		%	30
			Total Iron (Fe)	2022/02/22	3.9		%	30
			Total Lead (Pb)	2022/02/22	0.19		%	40
			Total Lithium (Li)	2022/02/22	2.8		%	30
			Total Magnesium (Mg)	2022/02/22	0.96		%	30
			Total Manganese (Mn)	2022/02/22	2.2		%	30
			Total Mercury (Hg)	2022/02/22	15		%	40

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Molybdenum (Mo)	2022/02/22	2.4		%	40
			Total Nickel (Ni)	2022/02/22	5.2		%	30
			Total Phosphorus (P)	2022/02/22	4.3		%	30
			Total Potassium (K)	2022/02/22	0.89		%	40
			Total Selenium (Se)	2022/02/22	NC		%	30
			Total Silver (Ag)	2022/02/22	6.7		%	40
			Total Sodium (Na)	2022/02/22	7.0		%	40
			Total Strontium (Sr)	2022/02/22	11		%	40
			Total Thallium (Tl)	2022/02/22	3.5		%	30
			Total Tin (Sn)	2022/02/22	3.7		%	40
			Total Titanium (Ti)	2022/02/22	2.9		%	40
			Total Tungsten (W)	2022/02/22	NC		%	40
			Total Uranium (U)	2022/02/22	14		%	30
			Total Vanadium (V)	2022/02/22	2.1		%	30
			Total Zinc (Zn)	2022/02/22	1.4		%	30
			Total Zirconium (Zr)	2022/02/22	7.4		%	40
A504218	MUP	Spiked Blank	Soluble (2:1) pH	2022/02/22		99	%	97 - 103
A504218	MUP	RPD	Soluble (2:1) pH	2022/02/22	0		%	N/A
A505273	PL	QC Standard	Total Carbon	2022/02/23		104	%	75 - 125
			Total Sulphur (S)	2022/02/23		99	%	75 - 125
A505273	PL	Spiked Blank	Total Carbon	2022/02/23		90	%	75 - 125
			Total Sulphur (S)	2022/02/23		101	%	75 - 125
A505273	PL	Method Blank	Total Carbon	2022/02/23	ND, RDL=0.050		%	
			Total Sulphur (S)	2022/02/23	ND, RDL=0.060		%	
A505273	PL	RPD [AOP250-01]	Total Carbon	2022/02/23	5.6		%	30
			Total Sulphur (S)	2022/02/23	4.9		%	30
A514876	MPE	Matrix Spike [AOP250-01]	Total Oil and grease	2022/03/03		93	%	65 - 135
A514876	MPE	Spiked Blank	Total Oil and grease	2022/03/03		95	%	65 - 135
A514876	MPE	Method Blank	Total Oil and grease	2022/03/03	ND, RDL=100		ug/g	
A514876	MPE	RPD [AOP250-01]	Total Oil and grease	2022/03/03	NC (2)		%	30

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Detection limits raised due to high moisture content.

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

David Huang, M.Sc., P.Chem., QP, Scientific Services Manager

<original signed by>

Gita Pokhrel, Laboratory Supervisor

<original signed by>

Janet Gao, B.Sc., QP, Supervisor, Organics

<original signed by>

Jared Wiseman, B.Sc., P.Chem., QP, Senior Analyst, Organics

<original signed by>

Sandy Yuan, M.Sc., QP, Scientific Specialist

<original signed by>

Sze Yeung Fock, B.Sc., Scientific Specialist

<original signed by>

Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the

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VALIDATION SIGNATURE PAGE(CONT'D)

The analytical data and all QC contained in this report were reviewed and validated by:

reports. For Service Group specific validation please refer to the Validation Signature Page.

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Custody Tracking Form

W45180

Please use this form for custody tracking when submitting the work instructions via eCOC (electronic Chain of Custody). Please ensure your form has a barcode or a Bureau Veritas eCOC confirmation number in the top right hand side. This number links your electronic submission to your samples. This form should be placed in the cooler with your samples.

First Sample: MWTF-SLP Cell 1
Last Sample: MWTF-SLP Cell 1
Sample Count: 1

Relinquished By				Received By			
I Feany, Ndukwe <original signed by>		Date	2022/02/13	Dmalmloff	<original signed by>	Date	2022/02/14
		Time (24 HR)	18:10			Time (24 HR)	07:45
		Date		Reem Phillipos	<original signed by>	Date	2022/02/15
		Time (24 HR)				Time (24 HR)	06:30
		Date				Date	
		Time (24 HR)				Time (24 HR)	

Unless otherwise agreed to, submissions and use of services are governed by Bureau Veritas' standard terms and conditions which can be found at www.bvna.com.

Triage Information

Sampled By (Print): I Feany, Ndukwe

# of Coolers/Pkgs: 1

Rush ☐ Immediate Test ☐ Food Residue ☐

Micro ☐ Food Chemistry ☐

*** LABORATORY USE ONLY ***

Received At: FSJ

Lab Comments:

Labeled By: 15-Feb-22 06:30 Debbie Nordbruget

Verified By: C209357 NMU INS-0100

Custody Seal		Cooling Media	Temperature °C		
Present (Y/N)	Intact (Y/N)	Present (Y/N)	1	2	3
NO		yes	6	5	10
Y	Y	Y	2	1	3

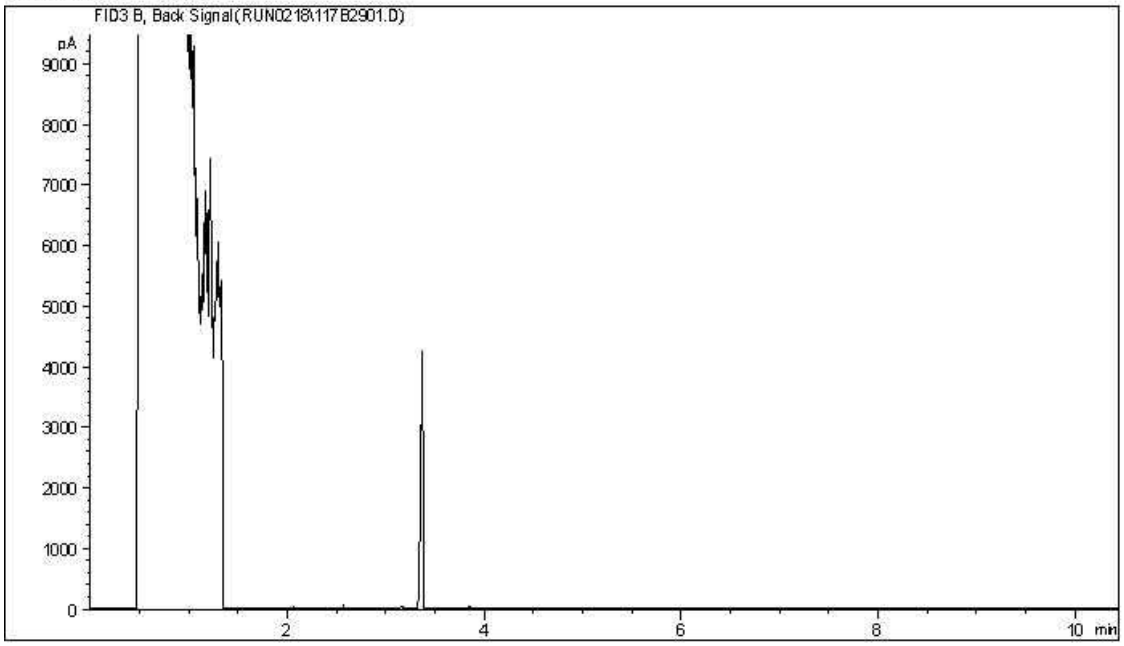
Drinking Water Metals Preservation Check Done (Circle) **YES** **NO**

COR FCD-00383/3

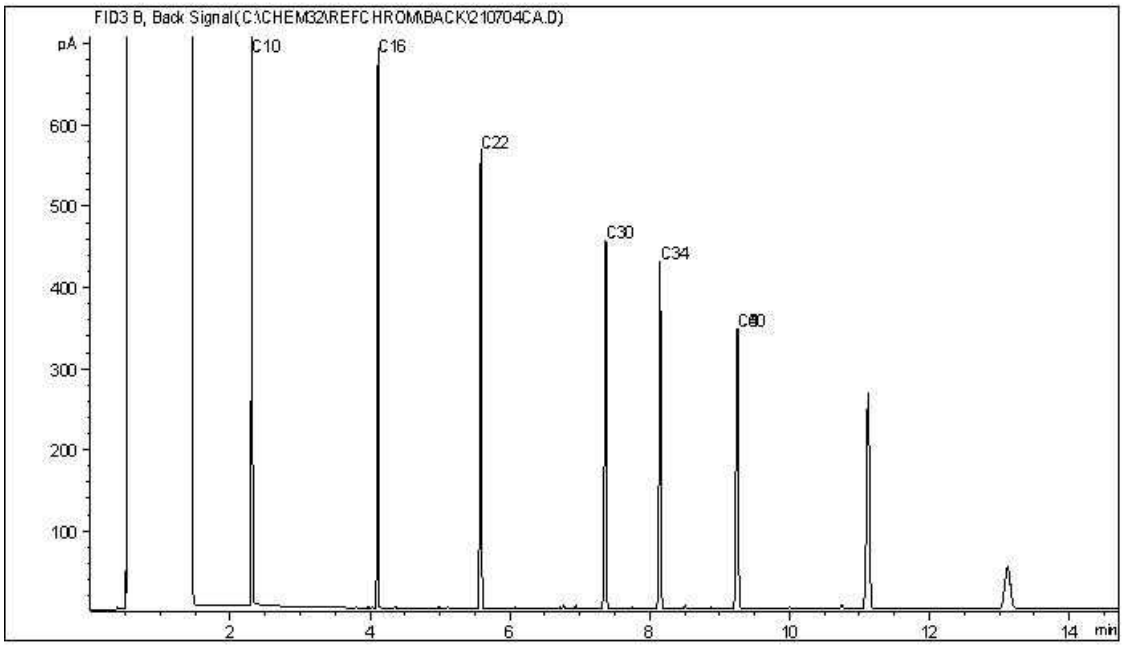
Page 1 of 1

BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC19



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

eCOC: W45180

Project Information:	C209357
Job Received:	2022/02/15 06:30
Results Required By:	2022/02/18 18:00
Expected Arrival:	2022/02/13 18:00
Submitted By:	Ifeanyi Ndukwe
Submitted To:	Burnaby ENV: 4606 Canada Way

Invoice Information

Attn: ACCOUNTS PAYABLE
Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC , V1J 4H6
Email to:
accounts.payable@prhp.ca

Report Information

Attn: Kael Hanak
Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC , V1J 4H6
Email to:
kael.hanak@prhp.ca

Project Information

Quote #:	B61674, C10269
PO/AFE#:	48179
Project #:	
Site Location:	SITE C

Analytical Summary

A: 2022/02/18 18:00

Client Sample ID	Clnt Ref	Sampling Date/Time	Matrix	#Cont	BC BTEX/VPH in Soil	BC LEPH/HEPH Petroleum Hydrocarbons	CSR/CCME Metals in Soil with Hg	TCLP Metals	Carbon, Nitrogen, Sulphur - Combustion	Glycols in Soil by GC/FID	Total Oil and Grease
MWTF-SLP Cell 1	1	2022/02/13 16:45	SOIL	6	A	A	A	A	A	A	A

Deadlines are estimates only and are subject to change. Please refer to your Job Confirmation report for final due dates.

Submission Information

# of Samples:	1
Details:	Please use Scenario 14891

Your P.O. #: 48179
Site Location: SITE C
Your C.O.C. #: 45386

Attention: Kael Hanak

Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC
CANADA V1J 4H6

Report Date: 2022/02/25
Report #: R3139501
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C210823
Received: 2022/02/19, 14:50

Sample Matrix: Soil
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE LH VH F1 in Soil - Field Pres. (2)	1	N/A	2022/02/22	BBY8SOP-00010 / BBY8SOP-00011 / BBY8SOP-00012	BCMOE BCLM Jul 2017
Carbon, Nitrogen, Sulphur - Combustion (1)	1	N/A	2022/02/23	CAL SOP-00263	AN-A-030609-E-01 m
Glycols in Soil by GC/FID (1)	1	2022/02/23	2022/02/23	CAL SOP-00093	BCMOE Glycols 09/17
Elements by ICPMS (total)	1	2022/02/23	2022/02/23	BBY7SOP-00004 / BBY7SOP-00001	EPA 6020b R2 m
Metals - TCLP	1	2022/02/22	2022/02/23	BBY7SOP-00001	EPA 1311, 6020bR2 m
Moisture	1	2022/02/22	2022/02/23	BBY8SOP-00017	BCMOE BCLM Dec2000 m
PAH in Soil by GC/MS (SIM)	1	2022/02/22	2022/02/22	BBY8SOP-00022	BCMOE BCLM Jul2017m
Total PAH and B(a)P Calculation (3)	1	N/A	2022/02/23	BBY WI-00033	Auto Calc
pH (2:1 DI Water Extract)	1	2022/02/23	2022/02/23	BBY6SOP-00028	BCMOE BCLM Mar2005 m
TCLP pH Measurements	1	N/A	2022/02/23	BBY7SOP-00005	EPA 1311
EPH less PAH in Soil By GC/FID (4)	1	N/A	2022/02/23	BBY WI-00033	Auto Calc
EPH in Soil by GC/FID	1	2022/02/22	2022/02/22	BBY8SOP-00029	BCMOE BCLM Dec2016 m
Total Oil and Grease	1	2022/02/23	2022/02/23	BBY8SOP-00006	BCMOE BCLM Mar 1997
Volatile HC-BTEX for Soil (5)	1	N/A	2022/02/23	BBY WI-00033	Auto Calc

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Your P.O. #: 48179
Site Location: SITE C
Your C.O.C. #: 45386

Attention: Kael Hanak

Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC
CANADA V1J 4H6

Report Date: 2022/02/25
Report #: R3139501
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C210823

Received: 2022/02/19, 14:50

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8

(2) The extraction date for VOC, BTEX, VH, or F1 samples that are field preserved with methanol equals the date sampled, unless otherwise stated.

(3) Total PAHs in Soil include: Quinoline, Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Acridine, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b&j)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, and Benzo(g,h,i)perylene.

Total PAHs in Sediment include (B.C. Reg. 116/2018, Schedule 3.4): Naphthalene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(a)pyrene, and Dibenz(a,h)anthracene.

(4) LEPH = EPH (C10 to C19) - (Naphthalene + Phenanthrene)
HEPH = EPH (C19 to C32) - (Benzo(a)anthracene + Benzo(a)pyrene + Benzo(b)fluoranthene + Benzo(k)fluoranthene + Dibenz(a,h)anthracene + Indeno(1,2,3-cd)pyrene + Pyrene)

(5) VPH = VH - (Benzene + Toluene + Ethylbenzene + m & p-Xylene + o-Xylene + Styrene)

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Debbie Nordbruget, Key Account Specialist
Email: Debra.NORDBRUGET@bureauveritas.com
Phone# (250)385-6112

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Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Job #: C210823
Report Date: 2022/02/25

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: F

RESULTS OF CHEMICAL ANALYSES OF SOIL

Bureau Veritas ID		AOX287		
Sampling Date		2022/02/19 09:45		
COC Number		45386		
	UNITS	AC-E-Sump (720 sump) Sludge	RDL	QC Batch
Misc. Inorganics				
Total Carbon	%	1.5	0.050	A505273
Total Sulphur (S)	%	0.12	0.060	A505273
OIL & GREASE				
Total Oil and grease	ug/g	ND	100	A505770

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C210823
Report Date: 2022/02/25

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: F

GLYCOLS BY GC-FID (SOIL)

Bureau Veritas ID		AOX287		
Sampling Date		2022/02/19 09:45		
COC Number		45386		
	UNITS	AC-E-Sump (720 sump) Sludge	RDL	QC Batch
Glycols				
Extractable (Water) Ethylene Glycol	mg/kg	ND	10	A506030
Extractable (Water) Diethylene Glycol	mg/kg	ND	9.0	A506030
Extractable (Water) Triethylene Glycol	mg/kg	ND	10	A506030
Extractable (Water) Propylene Glycol	mg/kg	ND	10	A506030
Surrogate Recovery (%)				
Extractable (Water) Methyl Sulfone (sur.)	%	89		A506030

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C210823
Report Date: 2022/02/25

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: F

PHYSICAL TESTING (SOIL)

Bureau Veritas ID		AOX287		
Sampling Date		2022/02/19 09:45		
COC Number		45386		
	UNITS	AC-E-Sump (720 sump) Sludge	RDL	QC Batch
Physical Properties				
Moisture	%	36	0.30	A505293
RDL = Reportable Detection Limit				

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: F

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AOX287	
Sampling Date		2022/02/19 09:45	
COC Number		45386	
	UNITS	**AC-E-Sump (720 sump) Sludge**	**QC Batch**
TCLP Extraction Procedure			
Initial pH of Sample	pH	8.62	A505498
pH after HCl	pH	1.80	A505498
Final pH of Leachate	pH	5.81	A505498
pH of Leaching Fluid	pH	4.92	A505498

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C210823
Report Date: 2022/02/25

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: F

CSR BTEX/VPH IN SOIL - FIELD PRESERVED (SOIL)

Bureau Veritas ID		AOX287		
Sampling Date		2022/02/19 09:45		
COC Number		45386		
	UNITS	AC-E-Sump (720 sump) Sludge	RDL	QC Batch
Calculated Parameters				
VPH (VH6 to 10 - BTEX)	mg/kg	ND	10	A505290
Volatiles				
Methyl-tert-butylether (MTBE)	mg/kg	ND	0.10	A505143
Benzene	mg/kg	ND	0.0050	A505143
Toluene	mg/kg	ND	0.050	A505143
Ethylbenzene	mg/kg	ND	0.010	A505143
m & p-Xylene	mg/kg	ND	0.040	A505143
o-Xylene	mg/kg	ND	0.040	A505143
Styrene	mg/kg	ND	0.030	A505143
Xylenes (Total)	mg/kg	ND	0.040	A505143
VH C6-C10	mg/kg	ND	10	A505143
Surrogate Recovery (%)				
1,4-Difluorobenzene (sur.)	%	106		A505143
4-Bromofluorobenzene (sur.)	%	103		A505143
D10-o-Xylene (sur.)	%	95		A505143
D4-1,2-Dichloroethane (sur.)	%	100		A505143

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

LEPH & HEPH WITH PAH FOR CSR IN SOIL (SOIL)

Bureau Veritas ID		AOX287		
Sampling Date		2022/02/19 09:45		
COC Number		45386		
	UNITS	AC-E-Sump (720 sump) Sludge	RDL	QC Batch
Calculated Parameters				
Low Molecular Weight PAH`s	mg/kg	0.30	0.050	A505288
High Molecular Weight PAH`s	mg/kg	0.18	0.050	A505288
Total PAH	mg/kg	0.47	0.050	A505288
Polycyclic Aromatics				
Naphthalene	mg/kg	0.039	0.010	A505245
1-Methylnaphthalene	mg/kg	0.070	0.050	A505245
2-Methylnaphthalene	mg/kg	0.099	0.020	A505245
Acenaphthylene	mg/kg	ND	0.0050	A505245
Acenaphthene	mg/kg	0.0054 (1)	0.0050	A505245
Fluorene	mg/kg	ND	0.020	A505245
Phenanthrene	mg/kg	0.083	0.010	A505245
Anthracene	mg/kg	ND	0.0040	A505245
Acridine	mg/kg	ND	0.050	A505245
Fluoranthene	mg/kg	0.023	0.020	A505245
Pyrene	mg/kg	0.040	0.020	A505245
Benzo(a)anthracene	mg/kg	ND	0.020	A505245
Chrysene	mg/kg	0.036	0.020	A505245
Benzo(b&j)fluoranthene	mg/kg	0.021	0.020	A505245
Benzo(b)fluoranthene	mg/kg	0.021	0.020	A505245
Benzo(k)fluoranthene	mg/kg	ND	0.020	A505245
Benzo(a)pyrene	mg/kg	ND	0.020	A505245
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.020	A505245
Dibenz(a,h)anthracene	mg/kg	ND	0.020	A505245
Benzo(g,h,i)perylene	mg/kg	0.058	0.050	A505245
Calculated Parameters				
LEPH (C10-C19 less PAH)	mg/kg	ND	100	A505289
HEPH (C19-C32 less PAH)	mg/kg	140	100	A505289

RDL = Reportable Detection Limit

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

(1) Tentatively identified result and may be potentially biased high due to matrix interference.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C210823
Report Date: 2022/02/25

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: F

LEPH & HEPH WITH PAH FOR CSR IN SOIL (SOIL)

Bureau Veritas ID		AOX287		
Sampling Date		2022/02/19 09:45		
COC Number		45386		
	UNITS	AC-E-Sump (720 sump) Sludge	RDL	QC Batch
Hydrocarbons				
EPH (C10-C19)	mg/kg	ND	100	A505246
EPH (C19-C32)	mg/kg	140	100	A505246
Surrogate Recovery (%)				
D10-ANTHRACENE (sur.)	%	76		A505245
D8-ACENAPHTHYLENE (sur.)	%	77		A505245
D8-NAPHTHALENE (sur.)	%	79		A505245
TERPHENYL-D14 (sur.)	%	81		A505245
O-TERPHENYL (sur.)	%	90		A505246

RDL = Reportable Detection Limit

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

CSR/CCME METALS IN SOIL WITH HG (SOIL)

Bureau Veritas ID		AOX287		
Sampling Date		2022/02/19 09:45		
COC Number		45386		
	UNITS	AC-E-Sump (720 sump) Sludge	RDL	QC Batch
Physical Properties				
Soluble (2:1) pH	pH	8.02	N/A	A505817
Total Metals by ICPMS				
Total Aluminum (Al)	mg/kg	10100	100	A505807
Total Antimony (Sb)	mg/kg	0.87	0.10	A505807
Total Arsenic (As)	mg/kg	10.9	0.20	A505807
Total Barium (Ba)	mg/kg	304	0.10	A505807
Total Beryllium (Be)	mg/kg	1.29	0.20	A505807
Total Bismuth (Bi)	mg/kg	0.16	0.10	A505807
Total Boron (B)	mg/kg	13.4	1.0	A505807
Total Cadmium (Cd)	mg/kg	1.55	0.050	A505807
Total Calcium (Ca)	mg/kg	22700	100	A505807
Total Chromium (Cr)	mg/kg	19.6	0.50	A505807
Total Cobalt (Co)	mg/kg	44.8	0.10	A505807
Total Copper (Cu)	mg/kg	40.7	0.50	A505807
Total Iron (Fe)	mg/kg	31200	100	A505807
Total Lead (Pb)	mg/kg	10.4	0.10	A505807
Total Lithium (Li)	mg/kg	21.9	0.50	A505807
Total Magnesium (Mg)	mg/kg	5430	100	A505807
Total Manganese (Mn)	mg/kg	782	0.20	A505807
Total Mercury (Hg)	mg/kg	0.076	0.050	A505807
Total Molybdenum (Mo)	mg/kg	3.26	0.10	A505807
Total Nickel (Ni)	mg/kg	137	0.50	A505807
Total Phosphorus (P)	mg/kg	971	10	A505807
Total Potassium (K)	mg/kg	1360	100	A505807
Total Selenium (Se)	mg/kg	0.84	0.50	A505807
Total Silver (Ag)	mg/kg	0.190	0.050	A505807
Total Sodium (Na)	mg/kg	233	100	A505807
Total Strontium (Sr)	mg/kg	81.4	0.10	A505807
Total Thallium (Tl)	mg/kg	0.195	0.050	A505807
Total Tin (Sn)	mg/kg	1.19	0.10	A505807

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: F

CSR/CCME METALS IN SOIL WITH HG (SOIL)

Bureau Veritas ID		AOX287		
Sampling Date		2022/02/19 09:45		
COC Number		45386		
	UNITS	AC-E-Sump (720 sump) Sludge	RDL	QC Batch
Total Titanium (Ti)	mg/kg	52.4	1.0	A505807
Total Tungsten (W)	mg/kg	ND	0.50	A505807
Total Uranium (U)	mg/kg	2.66	0.050	A505807
Total Vanadium (V)	mg/kg	29.3	1.0	A505807
Total Zinc (Zn)	mg/kg	620	1.0	A505807
Total Zirconium (Zr)	mg/kg	2.98	0.50	A505807

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179
Sampler Initials: F

TCLP METALS (SOIL)

Bureau Veritas ID		AOX287		
Sampling Date		2022/02/19 09:45		
COC Number		45386		
	UNITS	AC-E-Sump (720 sump) Sludge	RDL	QC Batch
TCLP Extraction Procedure				
Leachate Antimony (Sb)	mg/L	ND	0.10	A506595
Leachate Arsenic (As)	mg/L	ND	0.10	A506595
Leachate Barium (Ba)	mg/L	1.10	0.10	A506595
Leachate Beryllium (Be)	mg/L	ND	0.10	A506595
Leachate Boron (B)	mg/L	0.13	0.10	A506595
Leachate Cadmium (Cd)	mg/L	ND	0.10	A506595
Leachate Chromium (Cr)	mg/L	ND	0.10	A506595
Leachate Cobalt (Co)	mg/L	0.11	0.10	A506595
Leachate Copper (Cu)	mg/L	ND	0.10	A506595
Leachate Iron (Fe)	mg/L	ND	0.50	A506595
Leachate Lead (Pb)	mg/L	ND	0.10	A506595
Leachate Mercury (Hg)	mg/L	ND	0.0020	A506595
Leachate Molybdenum (Mo)	mg/L	ND	0.10	A506595
Leachate Nickel (Ni)	mg/L	0.46	0.10	A506595
Leachate Selenium (Se)	mg/L	ND	0.10	A506595
Leachate Silver (Ag)	mg/L	ND	0.010	A506595
Leachate Thallium (Tl)	mg/L	ND	0.10	A506595
Leachate Uranium (U)	mg/L	ND	0.10	A506595
Leachate Vanadium (V)	mg/L	ND	0.10	A506595
Leachate Zinc (Zn)	mg/L	2.42	0.10	A506595
Leachate Zirconium (Zr)	mg/L	ND	0.10	A506595

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

GENERAL COMMENTS

Version #2: Report reissued, due to technical issues.

Results relate only to the items tested.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A505143	MKL	Matrix Spike	1,4-Difluorobenzene (sur.)	2022/02/22		102	%	70 - 130
			4-Bromofluorobenzene (sur.)	2022/02/22		100	%	70 - 130
			D10-o-Xylene (sur.)	2022/02/22		105	%	60 - 130
			D4-1,2-Dichloroethane (sur.)	2022/02/22		106	%	70 - 130
			Methyl-tert-butylether (MTBE)	2022/02/22		97	%	60 - 140
			Benzene	2022/02/22		96	%	60 - 140
			Toluene	2022/02/22		94	%	60 - 140
			Ethylbenzene	2022/02/22		97	%	60 - 140
			m & p-Xylene	2022/02/22		95	%	60 - 140
			o-Xylene	2022/02/22		95	%	60 - 140
			Styrene	2022/02/22		99	%	60 - 140
A505143	MKL	Spiked Blank	1,4-Difluorobenzene (sur.)	2022/02/22		102	%	70 - 130
			4-Bromofluorobenzene (sur.)	2022/02/22		101	%	70 - 130
			D10-o-Xylene (sur.)	2022/02/22		89	%	60 - 130
			D4-1,2-Dichloroethane (sur.)	2022/02/22		95	%	70 - 130
			Methyl-tert-butylether (MTBE)	2022/02/22		87	%	70 - 130
			Benzene	2022/02/22		89	%	70 - 130
			Toluene	2022/02/22		89	%	70 - 130
			Ethylbenzene	2022/02/22		95	%	70 - 130
			m & p-Xylene	2022/02/22		94	%	70 - 130
			o-Xylene	2022/02/22		94	%	70 - 130
			Styrene	2022/02/22		97	%	70 - 130
			VH C6-C10	2022/02/22		73	%	70 - 130
A505143	MKL	Method Blank	1,4-Difluorobenzene (sur.)	2022/02/22		105	%	70 - 130
			4-Bromofluorobenzene (sur.)	2022/02/22		100	%	70 - 130
			D10-o-Xylene (sur.)	2022/02/22		95	%	60 - 130
			D4-1,2-Dichloroethane (sur.)	2022/02/22		98	%	70 - 130
			Methyl-tert-butylether (MTBE)	2022/02/22	ND, RDL=0.10		mg/kg	
			Benzene	2022/02/22	ND, RDL=0.0050		mg/kg	
			Toluene	2022/02/22	ND, RDL=0.050		mg/kg	
			Ethylbenzene	2022/02/22	ND, RDL=0.010		mg/kg	
			m & p-Xylene	2022/02/22	ND, RDL=0.040		mg/kg	
			o-Xylene	2022/02/22	ND, RDL=0.040		mg/kg	
			Styrene	2022/02/22	ND, RDL=0.030		mg/kg	
			Xylenes (Total)	2022/02/22	ND, RDL=0.040		mg/kg	
			VH C6-C10	2022/02/22	ND, RDL=10		mg/kg	
A505143	MKL	RPD	Methyl-tert-butylether (MTBE)	2022/02/22	NC		%	40
			Benzene	2022/02/22	NC		%	40
			Toluene	2022/02/22	NC		%	40
			Ethylbenzene	2022/02/22	NC		%	40
			m & p-Xylene	2022/02/22	NC		%	40
			o-Xylene	2022/02/22	NC		%	40
			Styrene	2022/02/22	NC		%	40
			Xylenes (Total)	2022/02/22	NC		%	40

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			VH C6-C10	2022/02/22	NC		%	40
A505245	JP1	Matrix Spike	D10-ANTHRACENE (sur.)	2022/02/22		82	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2022/02/22		84	%	50 - 140
			D8-NAPHTHALENE (sur.)	2022/02/22		86	%	50 - 140
			TERPHENYL-D14 (sur.)	2022/02/22		77	%	50 - 140
			Naphthalene	2022/02/22		81	%	50 - 140
			1-Methylnaphthalene	2022/02/22		83	%	50 - 140
			2-Methylnaphthalene	2022/02/22		84	%	50 - 140
			Acenaphthylene	2022/02/22		78	%	50 - 140
			Acenaphthene	2022/02/22		83	%	50 - 140
			Fluorene	2022/02/22		80	%	50 - 140
			Phenanthrene	2022/02/22		73	%	50 - 140
			Anthracene	2022/02/22		81	%	50 - 140
			Acridine	2022/02/22		99	%	50 - 140
			Fluoranthene	2022/02/22		77	%	50 - 140
			Pyrene	2022/02/22		74	%	50 - 140
			Benzo(a)anthracene	2022/02/22		81	%	50 - 140
			Chrysene	2022/02/22		81	%	50 - 140
			Benzo(b&j)fluoranthene	2022/02/22		82	%	50 - 140
			Benzo(b)fluoranthene	2022/02/22		88	%	50 - 140
			Benzo(k)fluoranthene	2022/02/22		78	%	50 - 140
			Benzo(a)pyrene	2022/02/22		81	%	50 - 140
			Indeno(1,2,3-cd)pyrene	2022/02/22		79	%	50 - 140
			Dibenz(a,h)anthracene	2022/02/22		80	%	50 - 140
			Benzo(g,h,i)perylene	2022/02/22		78	%	50 - 140
A505245	JP1	Spiked Blank	D10-ANTHRACENE (sur.)	2022/02/22		84	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2022/02/22		81	%	50 - 140
			D8-NAPHTHALENE (sur.)	2022/02/22		81	%	50 - 140
			TERPHENYL-D14 (sur.)	2022/02/22		81	%	50 - 140
			Naphthalene	2022/02/22		78	%	50 - 140
			1-Methylnaphthalene	2022/02/22		80	%	50 - 140
			2-Methylnaphthalene	2022/02/22		81	%	50 - 140
			Acenaphthylene	2022/02/22		74	%	50 - 140
			Acenaphthene	2022/02/22		79	%	50 - 140
			Fluorene	2022/02/22		77	%	50 - 140
			Phenanthrene	2022/02/22		75	%	50 - 140
			Anthracene	2022/02/22		79	%	50 - 140
			Acridine	2022/02/22		97	%	50 - 140
			Fluoranthene	2022/02/22		77	%	50 - 140
			Pyrene	2022/02/22		75	%	50 - 140
			Benzo(a)anthracene	2022/02/22		76	%	50 - 140
			Chrysene	2022/02/22		78	%	50 - 140
			Benzo(b&j)fluoranthene	2022/02/22		78	%	50 - 140
			Benzo(b)fluoranthene	2022/02/22		80	%	50 - 140
			Benzo(k)fluoranthene	2022/02/22		79	%	50 - 140
			Benzo(a)pyrene	2022/02/22		78	%	50 - 140
			Indeno(1,2,3-cd)pyrene	2022/02/22		79	%	50 - 140
			Dibenz(a,h)anthracene	2022/02/22		79	%	50 - 140
			Benzo(g,h,i)perylene	2022/02/22		77	%	50 - 140
A505245	JP1	Method Blank	D10-ANTHRACENE (sur.)	2022/02/22		87	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2022/02/22		82	%	50 - 140
			D8-NAPHTHALENE (sur.)	2022/02/22		87	%	50 - 140
			TERPHENYL-D14 (sur.)	2022/02/22		83	%	50 - 140

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Naphthalene	2022/02/22	ND, RDL=0.010		mg/kg	
			1-Methylnaphthalene	2022/02/22	ND, RDL=0.050		mg/kg	
			2-Methylnaphthalene	2022/02/22	ND, RDL=0.020		mg/kg	
			Acenaphthylene	2022/02/22	ND, RDL=0.0050		mg/kg	
			Acenaphthene	2022/02/22	ND, RDL=0.0050		mg/kg	
			Fluorene	2022/02/22	ND, RDL=0.020		mg/kg	
			Phenanthrene	2022/02/22	ND, RDL=0.010		mg/kg	
			Anthracene	2022/02/22	ND, RDL=0.0040		mg/kg	
			Acridine	2022/02/22	ND, RDL=0.050		mg/kg	
			Fluoranthene	2022/02/22	ND, RDL=0.020		mg/kg	
			Pyrene	2022/02/22	ND, RDL=0.020		mg/kg	
			Benzo(a)anthracene	2022/02/22	ND, RDL=0.020		mg/kg	
			Chrysene	2022/02/22	ND, RDL=0.020		mg/kg	
			Benzo(b&j)fluoranthene	2022/02/22	ND, RDL=0.020		mg/kg	
			Benzo(b)fluoranthene	2022/02/22	ND, RDL=0.020		mg/kg	
			Benzo(k)fluoranthene	2022/02/22	ND, RDL=0.020		mg/kg	
			Benzo(a)pyrene	2022/02/22	ND, RDL=0.020		mg/kg	
			Indeno(1,2,3-cd)pyrene	2022/02/22	ND, RDL=0.020		mg/kg	
			Dibenz(a,h)anthracene	2022/02/22	ND, RDL=0.020		mg/kg	
			Benzo(g,h,i)perylene	2022/02/22	ND, RDL=0.050		mg/kg	
A505245	JP1	RPD	Naphthalene	2022/02/22	NC		%	50
			1-Methylnaphthalene	2022/02/22	NC		%	50
			2-Methylnaphthalene	2022/02/22	NC		%	50
			Acenaphthylene	2022/02/22	11		%	50
			Acenaphthene	2022/02/22	NC		%	50
			Fluorene	2022/02/22	NC		%	50
			Phenanthrene	2022/02/22	17		%	50
			Anthracene	2022/02/22	10		%	50
			Fluoranthene	2022/02/22	14		%	50
			Pyrene	2022/02/22	14		%	50
			Benzo(a)anthracene	2022/02/22	NC		%	50
			Chrysene	2022/02/22	23		%	50
			Benzo(b&j)fluoranthene	2022/02/22	1.1		%	50
			Benzo(b)fluoranthene	2022/02/22	1.1		%	50

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzo(k)fluoranthene	2022/02/22	NC		%	50
			Benzo(a)pyrene	2022/02/22	9.8		%	50
			Indeno(1,2,3-cd)pyrene	2022/02/22	5.0		%	50
			Dibenz(a,h)anthracene	2022/02/22	NC		%	50
			Benzo(g,h,i)perylene	2022/02/22	NC		%	50
A505246	IT1	Matrix Spike	O-TERPHENYL (sur.)	2022/02/22		88	%	60 - 140
			EPH (C10-C19)	2022/02/22		100	%	60 - 140
			EPH (C19-C32)	2022/02/22		102	%	60 - 140
A505246	IT1	Spiked Blank	O-TERPHENYL (sur.)	2022/02/22		88	%	60 - 140
			EPH (C10-C19)	2022/02/22		84	%	70 - 130
			EPH (C19-C32)	2022/02/22		84	%	70 - 130
A505246	IT1	Method Blank	O-TERPHENYL (sur.)	2022/02/22		88	%	60 - 140
			EPH (C10-C19)	2022/02/22	ND, RDL=100		mg/kg	
			EPH (C19-C32)	2022/02/22	ND, RDL=100		mg/kg	
A505246	IT1	RPD	EPH (C10-C19)	2022/02/22	NC		%	40
			EPH (C19-C32)	2022/02/22	25		%	40
A505273	PL	QC Standard	Total Carbon	2022/02/23		104	%	75 - 125
			Total Sulphur (S)	2022/02/23		99	%	75 - 125
A505273	PL	Spiked Blank	Total Carbon	2022/02/23		90	%	75 - 125
			Total Sulphur (S)	2022/02/23		101	%	75 - 125
A505273	PL	Method Blank	Total Carbon	2022/02/23	ND, RDL=0.050		%	
			Total Sulphur (S)	2022/02/23	ND, RDL=0.060		%	
A505273	PL	RPD	Total Carbon	2022/02/23	5.6		%	30
			Total Sulphur (S)	2022/02/23	4.9		%	30
A505293	SEW	Method Blank	Moisture	2022/02/23	ND, RDL=0.30		%	
A505293	SEW	RPD	Moisture	2022/02/23	17		%	20
A505498	AP8	Method Blank	Initial pH of Sample	2022/02/23	4.92		pH	
			pH of Leaching Fluid	2022/02/23	4.92		pH	
A505498	AP8	RPD	Initial pH of Sample	2022/02/23	0.82		%	N/A
			pH after HCl	2022/02/23	1.2		%	N/A
			Final pH of Leachate	2022/02/23	1.0		%	N/A
			pH of Leaching Fluid	2022/02/23	0		%	N/A
A505770	MPE	Matrix Spike [AOX287-03]	Total Oil and grease	2022/02/23		98	%	65 - 135
A505770	MPE	Spiked Blank	Total Oil and grease	2022/02/23		97	%	65 - 135
A505770	MPE	Method Blank	Total Oil and grease	2022/02/23	ND, RDL=100		ug/g	
A505770	MPE	RPD [AOX287-03]	Total Oil and grease	2022/02/23	NC		%	30
A505807	JLP	Matrix Spike	Total Aluminum (Al)	2022/02/23		NC	%	75 - 125
			Total Antimony (Sb)	2022/02/23		98	%	75 - 125
			Total Arsenic (As)	2022/02/23		102	%	75 - 125
			Total Barium (Ba)	2022/02/23		109	%	75 - 125
			Total Beryllium (Be)	2022/02/23		96	%	75 - 125
			Total Bismuth (Bi)	2022/02/23		104	%	75 - 125
			Total Boron (B)	2022/02/23		99	%	75 - 125
			Total Cadmium (Cd)	2022/02/23		104	%	75 - 125
			Total Calcium (Ca)	2022/02/23		NC	%	75 - 125
			Total Chromium (Cr)	2022/02/23		106	%	75 - 125
			Total Cobalt (Co)	2022/02/23		99	%	75 - 125

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Copper (Cu)	2022/02/23		101	%	75 - 125
			Total Iron (Fe)	2022/02/23		NC	%	75 - 125
			Total Lead (Pb)	2022/02/23		102	%	75 - 125
			Total Lithium (Li)	2022/02/23		98	%	75 - 125
			Total Magnesium (Mg)	2022/02/23		NC	%	75 - 125
			Total Manganese (Mn)	2022/02/23		NC	%	75 - 125
			Total Mercury (Hg)	2022/02/23		104	%	75 - 125
			Total Molybdenum (Mo)	2022/02/23		105	%	75 - 125
			Total Nickel (Ni)	2022/02/23		99	%	75 - 125
			Total Phosphorus (P)	2022/02/23		95	%	75 - 125
			Total Potassium (K)	2022/02/23		113	%	75 - 125
			Total Selenium (Se)	2022/02/23		105	%	75 - 125
			Total Silver (Ag)	2022/02/23		102	%	75 - 125
			Total Sodium (Na)	2022/02/23		110	%	75 - 125
			Total Strontium (Sr)	2022/02/23		105	%	75 - 125
			Total Thallium (Tl)	2022/02/23		103	%	75 - 125
			Total Tin (Sn)	2022/02/23		109	%	75 - 125
			Total Titanium (Ti)	2022/02/23		NC	%	75 - 125
			Total Tungsten (W)	2022/02/23		91	%	75 - 125
			Total Uranium (U)	2022/02/23		101	%	75 - 125
			Total Vanadium (V)	2022/02/23		107	%	75 - 125
			Total Zinc (Zn)	2022/02/23		101	%	75 - 125
			Total Zirconium (Zr)	2022/02/23		116	%	75 - 125
A505807	JLP	QC Standard	Total Aluminum (Al)	2022/02/23		92	%	70 - 130
			Total Antimony (Sb)	2022/02/23		110	%	70 - 130
			Total Arsenic (As)	2022/02/23		89	%	70 - 130
			Total Barium (Ba)	2022/02/23		98	%	70 - 130
			Total Beryllium (Be)	2022/02/23		118	%	70 - 130
			Total Cadmium (Cd)	2022/02/23		103	%	70 - 130
			Total Calcium (Ca)	2022/02/23		95	%	70 - 130
			Total Chromium (Cr)	2022/02/23		96	%	70 - 130
			Total Cobalt (Co)	2022/02/23		99	%	70 - 130
			Total Copper (Cu)	2022/02/23		101	%	70 - 130
			Total Iron (Fe)	2022/02/23		100	%	70 - 130
			Total Lead (Pb)	2022/02/23		106	%	70 - 130
			Total Lithium (Li)	2022/02/23		98	%	70 - 130
			Total Magnesium (Mg)	2022/02/23		103	%	70 - 130
			Total Manganese (Mn)	2022/02/23		100	%	70 - 130
			Total Mercury (Hg)	2022/02/23		101	%	70 - 130
			Total Molybdenum (Mo)	2022/02/23		104	%	70 - 130
			Total Nickel (Ni)	2022/02/23		101	%	70 - 130
			Total Phosphorus (P)	2022/02/23		95	%	70 - 130
			Total Potassium (K)	2022/02/23		85	%	70 - 130
			Total Silver (Ag)	2022/02/23		115	%	70 - 130
			Total Sodium (Na)	2022/02/23		92	%	70 - 130
			Total Strontium (Sr)	2022/02/23		101	%	70 - 130
			Total Thallium (Tl)	2022/02/23		95	%	70 - 130
			Total Tin (Sn)	2022/02/23		98	%	70 - 130
			Total Uranium (U)	2022/02/23		102	%	70 - 130
			Total Vanadium (V)	2022/02/23		101	%	70 - 130
			Total Zinc (Zn)	2022/02/23		103	%	70 - 130
A505807	JLP	Spiked Blank	Total Aluminum (Al)	2022/02/23		100	%	75 - 125
			Total Antimony (Sb)	2022/02/23		108	%	75 - 125

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Arsenic (As)	2022/02/23		101	%	75 - 125
			Total Barium (Ba)	2022/02/23		103	%	75 - 125
			Total Beryllium (Be)	2022/02/23		101	%	75 - 125
			Total Bismuth (Bi)	2022/02/23		105	%	75 - 125
			Total Boron (B)	2022/02/23		106	%	75 - 125
			Total Cadmium (Cd)	2022/02/23		105	%	75 - 125
			Total Calcium (Ca)	2022/02/23		107	%	75 - 125
			Total Chromium (Cr)	2022/02/23		107	%	75 - 125
			Total Cobalt (Co)	2022/02/23		103	%	75 - 125
			Total Copper (Cu)	2022/02/23		105	%	75 - 125
			Total Iron (Fe)	2022/02/23		106	%	75 - 125
			Total Lead (Pb)	2022/02/23		103	%	75 - 125
			Total Lithium (Li)	2022/02/23		100	%	75 - 125
			Total Magnesium (Mg)	2022/02/23		105	%	75 - 125
			Total Manganese (Mn)	2022/02/23		104	%	75 - 125
			Total Mercury (Hg)	2022/02/23		104	%	75 - 125
			Total Molybdenum (Mo)	2022/02/23		102	%	75 - 125
			Total Nickel (Ni)	2022/02/23		102	%	75 - 125
			Total Phosphorus (P)	2022/02/23		97	%	75 - 125
			Total Potassium (K)	2022/02/23		104	%	75 - 125
			Total Selenium (Se)	2022/02/23		105	%	75 - 125
			Total Silver (Ag)	2022/02/23		103	%	75 - 125
			Total Sodium (Na)	2022/02/23		107	%	75 - 125
			Total Strontium (Sr)	2022/02/23		102	%	75 - 125
			Total Thallium (Tl)	2022/02/23		103	%	75 - 125
			Total Tin (Sn)	2022/02/23		108	%	75 - 125
			Total Titanium (Ti)	2022/02/23		102	%	75 - 125
			Total Tungsten (W)	2022/02/23		109	%	75 - 125
			Total Uranium (U)	2022/02/23		99	%	75 - 125
			Total Vanadium (V)	2022/02/23		103	%	75 - 125
			Total Zinc (Zn)	2022/02/23		104	%	75 - 125
			Total Zirconium (Zr)	2022/02/23		106	%	75 - 125
A505807	JLP	Method Blank	Total Aluminum (Al)	2022/02/23	ND, RDL=100		mg/kg	
			Total Antimony (Sb)	2022/02/23	ND, RDL=0.10		mg/kg	
			Total Arsenic (As)	2022/02/23	ND, RDL=0.20		mg/kg	
			Total Barium (Ba)	2022/02/23	ND, RDL=0.10		mg/kg	
			Total Beryllium (Be)	2022/02/23	ND, RDL=0.20		mg/kg	
			Total Bismuth (Bi)	2022/02/23	ND, RDL=0.10		mg/kg	
			Total Boron (B)	2022/02/23	ND, RDL=1.0		mg/kg	
			Total Cadmium (Cd)	2022/02/23	ND, RDL=0.050		mg/kg	
			Total Calcium (Ca)	2022/02/23	ND, RDL=100		mg/kg	
			Total Chromium (Cr)	2022/02/23	ND, RDL=0.50		mg/kg	

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Cobalt (Co)	2022/02/23	ND, RDL=0.10		mg/kg	
			Total Copper (Cu)	2022/02/23	ND, RDL=0.50		mg/kg	
			Total Iron (Fe)	2022/02/23	ND, RDL=100		mg/kg	
			Total Lead (Pb)	2022/02/23	ND, RDL=0.10		mg/kg	
			Total Lithium (Li)	2022/02/23	ND, RDL=0.50		mg/kg	
			Total Magnesium (Mg)	2022/02/23	ND, RDL=100		mg/kg	
			Total Manganese (Mn)	2022/02/23	ND, RDL=0.20		mg/kg	
			Total Mercury (Hg)	2022/02/23	ND, RDL=0.050		mg/kg	
			Total Molybdenum (Mo)	2022/02/23	ND, RDL=0.10		mg/kg	
			Total Nickel (Ni)	2022/02/23	ND, RDL=0.50		mg/kg	
			Total Phosphorus (P)	2022/02/23	ND, RDL=10		mg/kg	
			Total Potassium (K)	2022/02/23	ND, RDL=100		mg/kg	
			Total Selenium (Se)	2022/02/23	ND, RDL=0.50		mg/kg	
			Total Silver (Ag)	2022/02/23	ND, RDL=0.050		mg/kg	
			Total Sodium (Na)	2022/02/23	ND, RDL=100		mg/kg	
			Total Strontium (Sr)	2022/02/23	ND, RDL=0.10		mg/kg	
			Total Thallium (Tl)	2022/02/23	ND, RDL=0.050		mg/kg	
			Total Tin (Sn)	2022/02/23	ND, RDL=0.10		mg/kg	
			Total Titanium (Ti)	2022/02/23	ND, RDL=1.0		mg/kg	
			Total Tungsten (W)	2022/02/23	ND, RDL=0.50		mg/kg	
			Total Uranium (U)	2022/02/23	ND, RDL=0.050		mg/kg	
			Total Vanadium (V)	2022/02/23	ND, RDL=1.0		mg/kg	
			Total Zinc (Zn)	2022/02/23	ND, RDL=1.0		mg/kg	
			Total Zirconium (Zr)	2022/02/23	ND, RDL=0.50		mg/kg	
A505807	JLP	RPD	Total Aluminum (Al)	2022/02/23	8.0		%	40
			Total Antimony (Sb)	2022/02/23	15		%	30
			Total Arsenic (As)	2022/02/23	0.27		%	30
			Total Barium (Ba)	2022/02/23	4.9		%	40
			Total Beryllium (Be)	2022/02/23	7.4		%	30
			Total Bismuth (Bi)	2022/02/23	26		%	30

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Boron (B)	2022/02/23	6.3		%	30
			Total Cadmium (Cd)	2022/02/23	NC		%	30
			Total Calcium (Ca)	2022/02/23	6.4		%	30
			Total Chromium (Cr)	2022/02/23	10		%	30
			Total Cobalt (Co)	2022/02/23	7.9		%	30
			Total Copper (Cu)	2022/02/23	1.8		%	30
			Total Iron (Fe)	2022/02/23	6.7		%	30
			Total Lead (Pb)	2022/02/23	4.9		%	40
			Total Lithium (Li)	2022/02/23	2.2		%	30
			Total Magnesium (Mg)	2022/02/23	8.4		%	30
			Total Manganese (Mn)	2022/02/23	9.8		%	30
			Total Mercury (Hg)	2022/02/23	15		%	40
			Total Molybdenum (Mo)	2022/02/23	8.7		%	40
			Total Nickel (Ni)	2022/02/23	7.1		%	30
			Total Phosphorus (P)	2022/02/23	11		%	30
			Total Potassium (K)	2022/02/23	19		%	40
			Total Selenium (Se)	2022/02/23	NC		%	30
			Total Silver (Ag)	2022/02/23	NC		%	40
			Total Sodium (Na)	2022/02/23	13		%	40
			Total Strontium (Sr)	2022/02/23	2.2		%	40
			Total Thallium (Tl)	2022/02/23	NC		%	30
			Total Tin (Sn)	2022/02/23	9.5		%	40
			Total Titanium (Ti)	2022/02/23	2.0		%	40
			Total Tungsten (W)	2022/02/23	NC		%	40
			Total Uranium (U)	2022/02/23	1.7		%	30
			Total Vanadium (V)	2022/02/23	5.4		%	30
			Total Zinc (Zn)	2022/02/23	4.1		%	30
			Total Zirconium (Zr)	2022/02/23	31		%	40
A505817	MUP	Spiked Blank	Soluble (2:1) pH	2022/02/23		100	%	97 - 103
A505817	MUP	RPD	Soluble (2:1) pH	2022/02/23	0.33		%	N/A
A506030	EC0	Matrix Spike [AOX287-02]	Extractable (Water) Methyl Sulfone (sur.)	2022/02/23		98	%	50 - 140
			Extractable (Water) Ethylene Glycol	2022/02/23		87	%	60 - 140
			Extractable (Water) Diethylene Glycol	2022/02/23		98	%	60 - 140
			Extractable (Water) Triethylene Glycol	2022/02/23		95	%	60 - 140
			Extractable (Water) Propylene Glycol	2022/02/23		89	%	60 - 140
A506030	EC0	Spiked Blank	Extractable (Water) Methyl Sulfone (sur.)	2022/02/23		95	%	50 - 140
			Extractable (Water) Ethylene Glycol	2022/02/23		85	%	60 - 140
			Extractable (Water) Diethylene Glycol	2022/02/23		97	%	60 - 140
			Extractable (Water) Triethylene Glycol	2022/02/23		95	%	60 - 140
			Extractable (Water) Propylene Glycol	2022/02/23		87	%	60 - 140
A506030	EC0	Method Blank	Extractable (Water) Methyl Sulfone (sur.)	2022/02/23		96	%	50 - 140
			Extractable (Water) Ethylene Glycol	2022/02/23	ND, RDL=10		mg/kg	
			Extractable (Water) Diethylene Glycol	2022/02/23	ND, RDL=9.0		mg/kg	
			Extractable (Water) Triethylene Glycol	2022/02/23	ND, RDL=10		mg/kg	
			Extractable (Water) Propylene Glycol	2022/02/23	ND, RDL=10		mg/kg	
A506030	EC0	RPD [AOX287-02]	Extractable (Water) Ethylene Glycol	2022/02/23	NC		%	50
			Extractable (Water) Diethylene Glycol	2022/02/23	NC		%	50
			Extractable (Water) Triethylene Glycol	2022/02/23	NC		%	50
			Extractable (Water) Propylene Glycol	2022/02/23	NC		%	50

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A506595	JLP	Matrix Spike	Leachate Antimony (Sb)	2022/02/23		111	%	75 - 125
			Leachate Arsenic (As)	2022/02/23		103	%	75 - 125
			Leachate Barium (Ba)	2022/02/23		102	%	75 - 125
			Leachate Beryllium (Be)	2022/02/23		94	%	75 - 125
			Leachate Boron (B)	2022/02/23		97	%	75 - 125
			Leachate Cadmium (Cd)	2022/02/23		107	%	75 - 125
			Leachate Chromium (Cr)	2022/02/23		107	%	75 - 125
			Leachate Cobalt (Co)	2022/02/23		106	%	75 - 125
			Leachate Copper (Cu)	2022/02/23		105	%	75 - 125
			Leachate Iron (Fe)	2022/02/23		109	%	75 - 125
			Leachate Lead (Pb)	2022/02/23		102	%	75 - 125
			Leachate Mercury (Hg)	2022/02/23		107	%	75 - 125
			Leachate Molybdenum (Mo)	2022/02/23		109	%	75 - 125
			Leachate Nickel (Ni)	2022/02/23		103	%	75 - 125
			Leachate Selenium (Se)	2022/02/23		102	%	75 - 125
			Leachate Silver (Ag)	2022/02/23		105	%	75 - 125
			Leachate Thallium (Tl)	2022/02/23		103	%	75 - 125
			Leachate Uranium (U)	2022/02/23		103	%	75 - 125
			Leachate Vanadium (V)	2022/02/23		107	%	75 - 125
			Leachate Zinc (Zn)	2022/02/23		106	%	75 - 125
			Leachate Zirconium (Zr)	2022/02/23		111	%	75 - 125
A506595	JLP	Spiked Blank	Leachate Antimony (Sb)	2022/02/23		106	%	75 - 125
			Leachate Arsenic (As)	2022/02/23		104	%	75 - 125
			Leachate Barium (Ba)	2022/02/23		103	%	75 - 125
			Leachate Beryllium (Be)	2022/02/23		96	%	75 - 125
			Leachate Boron (B)	2022/02/23		100	%	75 - 125
			Leachate Cadmium (Cd)	2022/02/23		106	%	75 - 125
			Leachate Chromium (Cr)	2022/02/23		110	%	75 - 125
			Leachate Cobalt (Co)	2022/02/23		106	%	75 - 125
			Leachate Copper (Cu)	2022/02/23		104	%	75 - 125
			Leachate Iron (Fe)	2022/02/23		107	%	75 - 125
			Leachate Lead (Pb)	2022/02/23		104	%	75 - 125
			Leachate Mercury (Hg)	2022/02/23		104	%	75 - 125
			Leachate Molybdenum (Mo)	2022/02/23		106	%	75 - 125
			Leachate Nickel (Ni)	2022/02/23		101	%	75 - 125
			Leachate Selenium (Se)	2022/02/23		106	%	75 - 125
			Leachate Silver (Ag)	2022/02/23		104	%	75 - 125
			Leachate Thallium (Tl)	2022/02/23		103	%	75 - 125
			Leachate Uranium (U)	2022/02/23		101	%	75 - 125
			Leachate Vanadium (V)	2022/02/23		106	%	75 - 125
			Leachate Zinc (Zn)	2022/02/23		104	%	75 - 125
			Leachate Zirconium (Zr)	2022/02/23		108	%	75 - 125
A506595	JLP	Method Blank	Leachate Antimony (Sb)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Arsenic (As)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Barium (Ba)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Beryllium (Be)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Boron (B)	2022/02/23	ND, RDL=0.10		mg/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachate Cadmium (Cd)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Chromium (Cr)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Cobalt (Co)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Copper (Cu)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Iron (Fe)	2022/02/23	ND, RDL=0.50		mg/L	
			Leachate Lead (Pb)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Mercury (Hg)	2022/02/23	ND, RDL=0.0020		mg/L	
			Leachate Molybdenum (Mo)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Nickel (Ni)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Selenium (Se)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Silver (Ag)	2022/02/23	ND, RDL=0.010		mg/L	
			Leachate Thallium (Tl)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Uranium (U)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Vanadium (V)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Zinc (Zn)	2022/02/23	ND, RDL=0.10		mg/L	
			Leachate Zirconium (Zr)	2022/02/23	ND, RDL=0.10		mg/L	
A506595	JLP	RPD	Leachate Antimony (Sb)	2022/02/23	NC		%	35
			Leachate Arsenic (As)	2022/02/23	NC		%	35
			Leachate Barium (Ba)	2022/02/23	1.8		%	35
			Leachate Beryllium (Be)	2022/02/23	NC		%	35
			Leachate Boron (B)	2022/02/23	NC		%	35
			Leachate Cadmium (Cd)	2022/02/23	NC		%	35
			Leachate Chromium (Cr)	2022/02/23	NC		%	35
			Leachate Cobalt (Co)	2022/02/23	NC		%	35
			Leachate Copper (Cu)	2022/02/23	NC		%	35
			Leachate Iron (Fe)	2022/02/23	NC		%	35
			Leachate Lead (Pb)	2022/02/23	NC		%	35
			Leachate Mercury (Hg)	2022/02/23	NC		%	35
			Leachate Molybdenum (Mo)	2022/02/23	NC		%	35
			Leachate Nickel (Ni)	2022/02/23	NC		%	35
			Leachate Selenium (Se)	2022/02/23	NC		%	35
			Leachate Silver (Ag)	2022/02/23	NC		%	35
			Leachate Thallium (Tl)	2022/02/23	NC		%	35
			Leachate Uranium (U)	2022/02/23	NC		%	35
			Leachate Vanadium (V)	2022/02/23	NC		%	35
			Leachate Zinc (Zn)	2022/02/23	NC		%	35

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachate Zirconium (Zr)	2022/02/23	NC		%	35

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

David Huang, M.Sc., P.Chem., QP, Scientific Services Manager

<original signed by>

Gita Pokhrel, Laboratory Supervisor

<original signed by>

Sandy Yuan, M.Sc., QP, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Custody Tracking Form

W45386-R

Please use this form for custody tracking when submitting the work instructions via eCOC (electronic Chain of Custody). Please ensure your form has a barcode or a Bureau Veritas eCOC confirmation number in the top right hand side. This number links your electronic submission to your samples. This form should be placed in the cooler with your samples.

First Sample:	AC-E-Sump (720 sump) Sludge
Last Sample:	AC-E-Sump (720 sump) Sludge
Sample Count:	1

Relinquished By				Received By			
Frany Ndukwe		Date	2022/02/19	bmalmloff	<original signed by>	Date	2022/02/19
		Time (24 HR)	14:50			Time (24 HR)	14:50
		Date		SALLY SEY	<original signed by>	Date	2022/02/22
		Time (24 HR)				Time (24 HR)	08:34
		Date				Date	
		Time (24 HR)				Time (24 HR)	

Unless otherwise agreed to, submissions and use of services are governed by Bureau Veritas' standard terms and conditions which can be found at www.bvna.com.

Triage Information

Sampled By (Print): Frany Ndukwe

# of Coolers/Pkgs: 1

Rush ☑ Immediate Test ☐ Food Residue ☐

Micro ☐ Food Chemistry ☐

*** LABORATORY USE ONLY ***

Received At: FSJ

Labeled By:

Verified By:

Lab Comments: Rush - 1 day

Custody Seal		Cooling Media	Temperature °C		
Present (Y/N)	Intact (Y/N)	Present (Y/N)	1	2	3
NO		Yes	4	3	5
Y	Y	Y	4	4	5
Drinking Water Metals Preservation Check Done (Circle)				YES	NO

C210823_COC

FCD-00383/3

Page 1 of 1

eCOC: W45386

Results Required By: 2022/02/22 14:45
Expected Arrival: 2022/02/19 14:45
Submitted By: Ifeanyi Ndukwe
Submitted To: Burnaby ENV: 4606 Canada Way

Invoice Information

Attn: ACCOUNTS PAYABLE
Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC , V1J 4H6
Email to:
accounts.payable@prhp.ca

Report Information

Attn: Kael Hanak
Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC , V1J 4H6
Email to:
kael.hanak@prhp.ca

Project Information

Quote #: C20144, C10269
PO/AFE#: 48179
Project #:
Site Location: SITE C

Analytical Summary

A: 2022/02/22 14:45

Client Sample ID	Clnt Ref	Sampling Date/Time	Matrix	#Cont	BC BTEX/VPH in Soil	BC LEPH/HEPH Petroleum Hydrocarbons	CSR/CCME Metals in Soil with Hg	TCLP Metals	Carbon, Nitrogen, Sulphur - Combustion	Glycols in Soil by GC/FID	Total Oil and Grease
AC-E-Sump (720 sump) Sludge	1	2022/02/19 09:45	SOIL	6	A	A	A	A	A	A	A

Deadlines are estimates only and are subject to change. Please refer to your Job Confirmation report for final due dates.

Submission Information

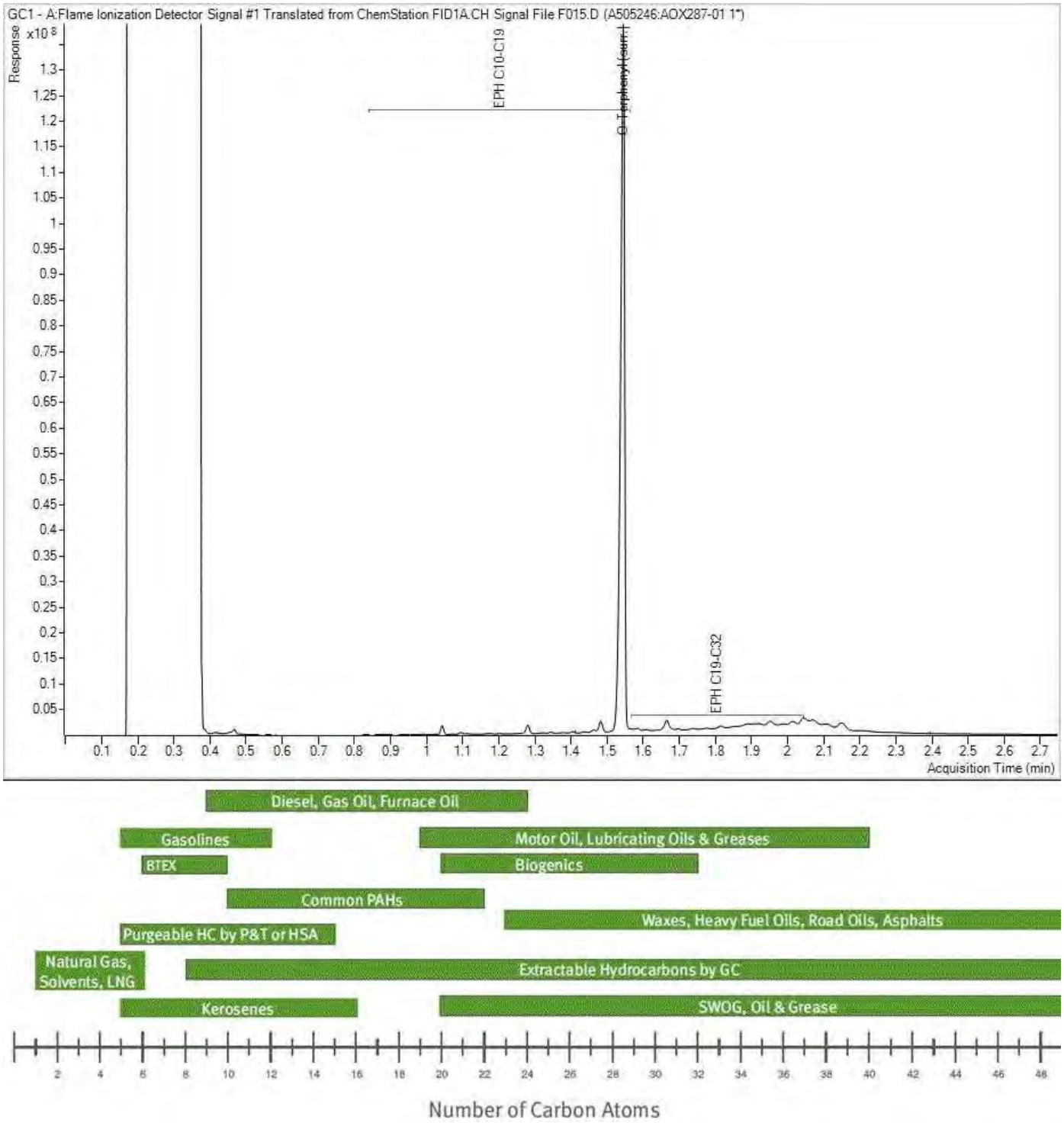
# of Samples: 1
Details: Please use Scenario 14891

C210823_COC

Bureau Veritas Job #: C210823
Report Date: 2022/02/25
Bureau Veritas Sample: AOX287

Peace River Hydro Partners
Site Reference: SITE C
Client ID: AC-E-Sump (720 sump) Sludge

EPH in Soil by GC/FID Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

eCOC: W45386

Project Information:	C210823
Job Received:	2022/02/22 08:34
Results Required By:	2022/02/22 14:45
Expected Arrival:	2022/02/19 14:45
Submitted By:	Ifeanyi Ndukwe
Submitted To:	Burnaby ENV: 4606 Canada Way

Invoice Information

Attn: ACCOUNTS PAYABLE
Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC , V1J 4H6
Email to:
accounts.payable@prhp.ca

Report Information

Attn: Kael Hanak
Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC , V1J 4H6
Email to:
kael.hanak@prhp.ca

Project Information

Quote #:	C20144, C10269
PO/AFE#:	48179
Project #:	
Site Location:	SITE C

Analytical Summary

A: 2022/02/22 14:45

Client Sample ID	Clnt Ref	Sampling Date/Time	Matrix	#Cont	BC BTEX/VPH in Soil	BC LEPH/HEPH Petroleum Hydrocarbons	CSR/CCME Metals in Soil with Hg	TCLP Metals	Carbon, Nitrogen, Sulphur - Combustion	Glycols in Soil by GC/FID	Total Oil and Grease
AC-E-Sump (720 sump) Sludge	1	2022/02/19 09:45	SOIL	6	A	A	A	A	A	A	A

Deadlines are estimates only and are subject to change. Please refer to your Job Confirmation report for final due dates.

Submission Information

# of Samples:	1
Details:	Please use Scenario 14891

Your P.O. #: 48179
Site Location: SITE C
Your C.O.C. #: 45712

Attention: Kael Hanak

Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC
CANADA V1J 4H6

Report Date: 2022/03/18
Report #: R3149321
Version: 2 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C213894
Received: 2022/03/03, 07:50

Sample Matrix: Sediment
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbon, Nitrogen, Sulphur - Combustion (1)	3	N/A	2022/03/10	CAL SOP-00263	AN-A-030609-E-01 m
BC Hydrocarbons in Soil by GC/FID (1)	3	2022/03/05	2022/03/05	CAL SOP-00239	BCMOE EPH S 12/16
EPH less PAH in Soil By GC/FID (1)	3	N/A	2022/03/05		Auto Calc
Glycols in Soil by GC/FID (1)	3	2022/03/09	2022/03/09	CAL SOP-00093	BCMOE Glycols 09/17
Elements by ICPMS (total)	3	2022/03/09	2022/03/09	BBY7SOP-00004 / BBY7SOP-00001	EPA 6020b R2 m
Metals - TCLP	3	2022/03/09	2022/03/09	BBY7SOP-00001	EPA 1311, 6020bR2 m
Moisture (1)	3	N/A	2022/03/05	AB SOP-00002	CCME PHC-CWS m
PAH in Soil by GC/MS (1)	3	2022/03/05	2022/03/05	AB SOP-00003 AB SOP-00036	EPA 3540C/8270E m
Total LMW, HMW, Total PAH Calc (1)	3	N/A	2022/03/05		Auto Calc
pH (2:1 DI Water Extract)	3	2022/03/09	2022/03/09	BBY6SOP-00028	BCMOE BCLM Mar2005 m
TCLP pH Measurements	3	N/A	2022/03/09	BBY7SOP-00005	EPA 1311
Total Oil and Grease	3	2022/03/17	2022/03/17	BBY8SOP-00006	BCMOE BCLM Mar 1997
Volatile HC-BTEX (1)	3	2022/03/04	2022/03/09		Auto Calc
BTEX/MTBE/Styrene/VPH in Soil GC/MS/FID (1)	3	N/A	2022/03/08	CAL SOP-00240	BC MELP VH 2014

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope

Your P.O. #: 48179
Site Location: SITE C
Your C.O.C. #: 45712

Attention: Kael Hanak

Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC
CANADA V1J 4H6

Report Date: 2022/03/18
Report #: R3149321
Version: 2 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C213894
Received: 2022/03/03, 07:50

dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Debbie Nordbruget, Key Account Specialist
Email: Debra.NORDBRUGET@bureauveritas.com
Phone# (250)385-6112
==========
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For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Job #: C213894
Report Date: 2022/03/18

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179

RESULTS OF CHEMICAL ANALYSES OF SEDIMENT

Bureau Veritas ID		APO822	APO823	APO824		
Sampling Date		2022/03/01 15:00	2022/03/02 07:30	2022/03/02 08:00		
COC Number		45712	45712	45712		
	UNITS	Crusher SLP - E	Crusher SLP - C	Crusher SLP - W	RDL	QC Batch
Misc. Inorganics						
Total Carbon	%	3.9	3.5	3.2	0.050	A521223
Total Sulphur (S)	%	ND	ND	ND	0.060	A521223
OIL & GREASE						
Total Oil and grease	ug/g	ND	130	ND	100	A528006
Physical Properties						
Soluble (2:1) pH	pH	8.35	8.16	8.25	N/A	A520586

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

N/A = Not Applicable

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C213894
Report Date: 2022/03/18

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179

GLYCOLS BY GC-FID (SEDIMENT)

Bureau Veritas ID		APO822	APO823	APO824		
Sampling Date		2022/03/01 15:00	2022/03/02 07:30	2022/03/02 08:00		
COC Number		45712	45712	45712		
	UNITS	Crusher SLP - E	Crusher SLP - C	Crusher SLP - W	RDL	QC Batch
Glycols						
Extractable (Water) Ethylene Glycol	mg/kg	ND	ND	ND	10	A520527
Extractable (Water) Diethylene Glycol	mg/kg	ND	ND	ND	9.0	A520527
Extractable (Water) Triethylene Glycol	mg/kg	ND	ND	ND	10	A520527
Extractable (Water) Propylene Glycol	mg/kg	ND	ND	ND	10	A520527
Surrogate Recovery (%)						
Extractable (Water) Methyl Sulfone (sur.)	%	104	93	94		A520527

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C213894
Report Date: 2022/03/18

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179

PHYSICAL TESTING (SEDIMENT)

Bureau Veritas ID		APO822	APO823	APO824		
Sampling Date		2022/03/01 15:00	2022/03/02 07:30	2022/03/02 08:00		
COC Number		45712	45712	45712		
	UNITS	Crusher SLP - E	Crusher SLP - C	Crusher SLP - W	RDL	QC Batch
Physical Properties						
Moisture	%	21	45	34	0.30	A517606
RDL = Reportable Detection Limit						

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SEMIVOLATILE ORGANICS BY GC-MS (SEDIMENT)

Bureau Veritas ID		APO822	APO823	APO824		
Sampling Date		2022/03/01 15:00	2022/03/02 07:30	2022/03/02 08:00		
COC Number		45712	45712	45712		
	UNITS	Crusher SLP - E	Crusher SLP - C	Crusher SLP - W	RDL	QC Batch
Polycyclic Aromatics						
Acenaphthene	mg/kg	ND	ND	ND	0.0050	A517804
Acenaphthylene	mg/kg	ND	ND	ND	0.0050	A517804
Anthracene	mg/kg	ND	ND	ND	0.0040	A517804
Benzo(a)anthracene	mg/kg	ND	ND	ND	0.010	A517804
Benzo(b&j)fluoranthene	mg/kg	ND	0.033	0.031	0.010	A517804
Benzo(k)fluoranthene	mg/kg	ND	ND	ND	0.010	A517804
Benzo(g,h,i)perylene	mg/kg	ND	0.056	0.051	0.020	A517804
Benzo(a)pyrene	mg/kg	ND	ND	ND	0.010	A517804
Chrysene	mg/kg	ND	ND	ND	0.010	A517804
Dibenz(a,h)anthracene	mg/kg	ND	ND	ND	0.020	A517804
Fluoranthene	mg/kg	ND	ND	ND	0.010	A517804
Fluorene	mg/kg	ND	ND	ND	0.010	A517804
Indeno(1,2,3-cd)pyrene	mg/kg	ND	ND	ND	0.020	A517804
2-Methylnaphthalene	mg/kg	ND	ND	ND	0.010	A517804
Naphthalene	mg/kg	ND	ND	ND	0.010	A517804
Phenanthrene	mg/kg	0.012	0.045	0.038	0.010	A517804
Pyrene	mg/kg	ND	0.019	ND	0.010	A517804
Low Molecular Weight PAH`s	mg/kg	0.012	0.045	0.038	0.010	A517200
High Molecular Weight PAH`s	mg/kg	ND	ND	ND	0.020	A517200
Total PAH	mg/kg	ND	0.063	0.038	0.020	A517200
Surrogate Recovery (%)						
D10-ANTHRACENE (sur.)	%	107	109	127		A517804
D8-ACENAPHTHYLENE (sur.)	%	86	82	100		A517804
D8-NAPHTHALENE (sur.)	%	87	93	106		A517804
D9-Acridine (sur.)	%	64	54	71		A517804
TERPHENYL-D14 (sur.)	%	105	119	114		A517804

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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ELEMENTS BY ATOMIC SPECTROSCOPY (SEDIMENT)

Bureau Veritas ID		APO822	APO823	APO824		
Sampling Date		2022/03/01 15:00	2022/03/02 07:30	2022/03/02 08:00		
COC Number		45712	45712	45712		
	UNITS	Crusher SLP - E	Crusher SLP - C	Crusher SLP - W	RDL	QC Batch
TCLP Extraction Procedure						
Leachate Antimony (Sb)	mg/L	ND	ND	ND	0.10	A520968
Leachate Arsenic (As)	mg/L	ND	ND	ND	0.10	A520968
Leachate Barium (Ba)	mg/L	1.90	2.19	2.23	0.10	A520968
Leachate Beryllium (Be)	mg/L	ND	ND	ND	0.10	A520968
Leachate Boron (B)	mg/L	ND	ND	ND	0.10	A520968
Leachate Cadmium (Cd)	mg/L	ND	ND	ND	0.10	A520968
Leachate Chromium (Cr)	mg/L	ND	ND	ND	0.10	A520968
Leachate Cobalt (Co)	mg/L	ND	ND	ND	0.10	A520968
Leachate Copper (Cu)	mg/L	ND	ND	ND	0.10	A520968
Leachate Iron (Fe)	mg/L	ND	ND	ND	0.50	A520968
Leachate Lead (Pb)	mg/L	ND	ND	ND	0.10	A520968
Leachate Mercury (Hg)	mg/L	0.0022	0.0038	0.0023	0.0020	A520968
Leachate Molybdenum (Mo)	mg/L	ND	ND	ND	0.10	A520968
Leachate Nickel (Ni)	mg/L	ND	ND	ND	0.10	A520968
Leachate Selenium (Se)	mg/L	ND	ND	ND	0.10	A520968
Leachate Silver (Ag)	mg/L	ND	ND	ND	0.010	A520968
Leachate Thallium (Tl)	mg/L	ND	ND	ND	0.10	A520968
Leachate Uranium (U)	mg/L	ND	ND	ND	0.10	A520968
Leachate Vanadium (V)	mg/L	ND	ND	ND	0.10	A520968
Leachate Zinc (Zn)	mg/L	ND	ND	ND	0.10	A520968
Leachate Zirconium (Zr)	mg/L	ND	ND	ND	0.10	A520968
Initial pH of Sample	pH	9.24	8.97	8.94	N/A	A520241
pH after HCl	pH	1.88	3.88	4.15	N/A	A520241
Final pH of Leachate	pH	6.34	6.13	6.13	N/A	A520241
pH of Leaching Fluid	pH	4.92	4.92	4.92	N/A	A520241
Total Metals by ICPMS						
Total Aluminum (Al)	mg/kg	6960	13100	14400	100	A520553
Total Antimony (Sb)	mg/kg	1.08	1.74	1.79	0.10	A520553
Total Arsenic (As)	mg/kg	10.5	19.8	19.9	0.20	A520553

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

N/A = Not Applicable

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ELEMENTS BY ATOMIC SPECTROSCOPY (SEDIMENT)

Bureau Veritas ID		APO822	APO823	APO824		
Sampling Date		2022/03/01 15:00	2022/03/02 07:30	2022/03/02 08:00		
COC Number		45712	45712	45712		
	UNITS	Crusher SLP - E	Crusher SLP - C	Crusher SLP - W	RDL	QC Batch
Total Barium (Ba)	mg/kg	209	432	444	0.10	A520553
Total Beryllium (Be)	mg/kg	0.40	0.75	0.80	0.20	A520553
Total Bismuth (Bi)	mg/kg	0.11	0.26	0.27	0.10	A520553
Total Boron (B)	mg/kg	4.1	6.5	8.2	1.0	A520553
Total Cadmium (Cd)	mg/kg	0.586	0.970	1.05	0.050	A520553
Total Calcium (Ca)	mg/kg	38600	33800	33300	100	A520553
Total Chromium (Cr)	mg/kg	14.6	29.0	32.3	0.50	A520553
Total Cobalt (Co)	mg/kg	8.06	17.2	17.9	0.10	A520553
Total Copper (Cu)	mg/kg	19.1	40.7	43.5	0.50	A520553
Total Iron (Fe)	mg/kg	25200	40300	39800	100	A520553
Total Lead (Pb)	mg/kg	8.98	19.4	19.6	0.10	A520553
Total Lithium (Li)	mg/kg	8.72	15.1	16.2	0.50	A520553
Total Magnesium (Mg)	mg/kg	11600	11300	11500	100	A520553
Total Manganese (Mn)	mg/kg	476	799	807	0.20	A520553
Total Mercury (Hg)	mg/kg	0.051	0.128	0.129	0.050	A520553
Total Molybdenum (Mo)	mg/kg	2.74	6.10	6.17	0.10	A520553
Total Nickel (Ni)	mg/kg	22.8	44.3	45.3	0.50	A520553
Total Phosphorus (P)	mg/kg	920	1050	1080	10	A520553
Total Potassium (K)	mg/kg	774	1680	1950	100	A520553
Total Selenium (Se)	mg/kg	ND	0.67	0.68	0.50	A520553
Total Silver (Ag)	mg/kg	0.134	0.293	0.313	0.050	A520553
Total Sodium (Na)	mg/kg	ND	160	165	100	A520553
Total Strontium (Sr)	mg/kg	70.3	74.2	80.0	0.10	A520553
Total Thallium (Tl)	mg/kg	0.180	0.362	0.377	0.050	A520553
Total Tin (Sn)	mg/kg	0.24	0.59	0.69	0.10	A520553
Total Titanium (Ti)	mg/kg	128	93.1	99.9	1.0	A520553
Total Tungsten (W)	mg/kg	ND	ND	ND	0.50	A520553
Total Uranium (U)	mg/kg	1.01	1.50	1.59	0.050	A520553
Total Vanadium (V)	mg/kg	29.4	47.1	51.3	1.0	A520553
Total Zinc (Zn)	mg/kg	65.4	128	137	1.0	A520553

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C213894
Report Date: 2022/03/18

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179

ELEMENTS BY ATOMIC SPECTROSCOPY (SEDIMENT)

Bureau Veritas ID		APO822	APO823	APO824		
Sampling Date		2022/03/01 15:00	2022/03/02 07:30	2022/03/02 08:00		
COC Number		45712	45712	45712		
	UNITS	**Crusher SLP - E**	**Crusher SLP - C**	**Crusher SLP - W**	**RDL**	**QC Batch**
Total Zirconium (Zr)	mg/kg	2.96	3.70	3.89	0.50	A520553
RDL = Reportable Detection Limit						

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

BTEX BY GC-MS (SEDIMENT)

Bureau Veritas ID		APO822	APO823	APO824		
Sampling Date		2022/03/01 15:00	2022/03/02 07:30	2022/03/02 08:00		
COC Number		45712	45712	45712		
	UNITS	Crusher SLP - E	Crusher SLP - C	Crusher SLP - W	RDL	QC Batch
Volatiles						
Xylenes (Total)	mg/kg	ND	ND	ND	0.057	A517254
VH C6-C10	mg/kg	ND	ND	ND	8.6	A517254
VPH (VH6 to 10 - BTEX)	mg/kg	ND	ND	ND	8.6	A517254
Field Preserved Volatiles						
Methyl-tert-butylether (MTBE)	mg/kg	ND	ND	ND	0.040	A519309
Benzene	mg/kg	ND	ND	ND	0.0050	A519309
Toluene	mg/kg	ND	ND	ND	0.050	A519309
Ethylbenzene	mg/kg	ND	ND	ND	0.010	A519309
m & p-Xylene	mg/kg	ND	ND	ND	0.040	A519309
o-Xylene	mg/kg	ND	ND	ND	0.040	A519309
Styrene	mg/kg	ND	ND	ND	0.030	A519309
Surrogate Recovery (%)						
1,4-Difluorobenzene (sur.)	%	102	104	103		A519309
4-Bromofluorobenzene (sur.)	%	103	103	100		A519309
D10-o-Xylene (sur.)	%	119	118	118		A519309
D4-1,2-Dichloroethane (sur.)	%	103	104	103		A519309

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C213894
Report Date: 2022/03/18

Peace River Hydro Partners
Site Location: SITE C
Your P.O. #: 48179

TOTAL PETROLEUM HYDROCARBONS (SEDIMENT)

Bureau Veritas ID		APO822	APO823	APO824		
Sampling Date		2022/03/01 15:00	2022/03/02 07:30	2022/03/02 08:00		
COC Number		45712	45712	45712		
	UNITS	Crusher SLP - E	Crusher SLP - C	Crusher SLP - W	RDL	QC Batch
Ext. Pet. Hydrocarbon						
EPH (C10-C19)	mg/kg	ND	ND	ND	100	A517803
EPH (C19-C32)	mg/kg	ND	ND	ND	100	A517803
LEPH (C10-C19 less PAH)	mg/kg	ND	ND	ND	100	A517182
HEPH (C19-C32 less PAH)	mg/kg	ND	ND	ND	100	A517182
Surrogate Recovery (%)						
O-TERPHENYL (sur.)	%	92	104	96		A517803

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	6.0°C

Results relate only to the items tested.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A517606	SVI	Method Blank	Moisture	2022/03/05	ND, RDL=0.30		%	
A517606	SVI	RPD	Moisture	2022/03/05	0.69		%	20
A517803	MHF	Matrix Spike [APO823-01]	O-TERPHENYL (sur.)	2022/03/05		103	%	60 - 140
			EPH (C10-C19)	2022/03/05		103	%	60 - 130
			EPH (C19-C32)	2022/03/05		99	%	60 - 130
A517803	MHF	Spiked Blank	O-TERPHENYL (sur.)	2022/03/05		110	%	60 - 140
			EPH (C10-C19)	2022/03/05		111	%	70 - 130
			EPH (C19-C32)	2022/03/05		109	%	70 - 130
A517803	MHF	Method Blank	O-TERPHENYL (sur.)	2022/03/05		94	%	60 - 140
			EPH (C10-C19)	2022/03/05	ND, RDL=100		mg/kg	
			EPH (C19-C32)	2022/03/05	ND, RDL=100		mg/kg	
A517803	MHF	RPD [APO823-01]	EPH (C10-C19)	2022/03/05	NC		%	40
			EPH (C19-C32)	2022/03/05	NC		%	40
A517804	JC7	Matrix Spike [APO823-01]	D10-ANTHRACENE (sur.)	2022/03/05		105	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2022/03/05		86	%	50 - 140
			D8-NAPHTHALENE (sur.)	2022/03/05		95	%	50 - 140
			D9-Acridine (sur.)	2022/03/05		60	%	50 - 140
			TERPHENYL-D14 (sur.)	2022/03/05		101	%	50 - 140
			Acenaphthene	2022/03/05		93	%	50 - 140
			Acenaphthylene	2022/03/05		84	%	50 - 140
			Anthracene	2022/03/05		82	%	50 - 140
			Benzo(a)anthracene	2022/03/05		96	%	50 - 140
			Benzo(b&j)fluoranthene	2022/03/05		90	%	50 - 140
			Benzo(k)fluoranthene	2022/03/05		90	%	50 - 140
			Benzo(g,h,i)perylene	2022/03/05		91	%	50 - 140
			Benzo(a)pyrene	2022/03/05		81	%	50 - 140
			Chrysene	2022/03/05		98	%	50 - 140
			Dibenz(a,h)anthracene	2022/03/05		102	%	50 - 140
			Fluoranthene	2022/03/05		85	%	50 - 140
			Fluorene	2022/03/05		94	%	50 - 140
			Indeno(1,2,3-cd)pyrene	2022/03/05		83	%	50 - 140
			2-Methylnaphthalene	2022/03/05		99	%	50 - 140
			Naphthalene	2022/03/05		92	%	50 - 140
			Phenanthrene	2022/03/05		88	%	50 - 140
			Pyrene	2022/03/05		81	%	50 - 140
A517804	JC7	Spiked Blank	D10-ANTHRACENE (sur.)	2022/03/05		126	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2022/03/05		105	%	50 - 140
			D8-NAPHTHALENE (sur.)	2022/03/05		104	%	50 - 140
			D9-Acridine (sur.)	2022/03/05		84	%	50 - 140
			TERPHENYL-D14 (sur.)	2022/03/05		113	%	50 - 140
			Acenaphthene	2022/03/05		98	%	50 - 140
			Acenaphthylene	2022/03/05		104	%	50 - 140
			Anthracene	2022/03/05		102	%	50 - 140
			Benzo(a)anthracene	2022/03/05		105	%	50 - 140
			Benzo(b&j)fluoranthene	2022/03/05		103	%	50 - 140
			Benzo(k)fluoranthene	2022/03/05		108	%	50 - 140
			Benzo(g,h,i)perylene	2022/03/05		101	%	50 - 140
			Benzo(a)pyrene	2022/03/05		99	%	50 - 140
			Chrysene	2022/03/05		107	%	50 - 140
			Dibenz(a,h)anthracene	2022/03/05		100	%	50 - 140
			Fluoranthene	2022/03/05		108	%	50 - 140

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Fluorene	2022/03/05		107	%	50 - 140
			Indeno(1,2,3-cd)pyrene	2022/03/05		96	%	50 - 140
			2-Methylnaphthalene	2022/03/05		107	%	50 - 140
			Naphthalene	2022/03/05		100	%	50 - 140
			Phenanthrene	2022/03/05		105	%	50 - 140
			Pyrene	2022/03/05		102	%	50 - 140
A517804	JC7	Method Blank	D10-ANTHRACENE (sur.)	2022/03/05		117	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2022/03/05		95	%	50 - 140
			D8-NAPHTHALENE (sur.)	2022/03/05		97	%	50 - 140
			D9-Acridine (sur.)	2022/03/05		64	%	50 - 140
			TERPHENYL-D14 (sur.)	2022/03/05		112	%	50 - 140
			Acenaphthene	2022/03/05	ND, RDL=0.0050		mg/kg	
			Acenaphthylene	2022/03/05	ND, RDL=0.0050		mg/kg	
			Anthracene	2022/03/05	ND, RDL=0.0040		mg/kg	
			Benzo(a)anthracene	2022/03/05	ND, RDL=0.010		mg/kg	
			Benzo(b&j)fluoranthene	2022/03/05	ND, RDL=0.010		mg/kg	
			Benzo(k)fluoranthene	2022/03/05	ND, RDL=0.010		mg/kg	
			Benzo(g,h,i)perylene	2022/03/05	ND, RDL=0.020		mg/kg	
			Benzo(a)pyrene	2022/03/05	ND, RDL=0.010		mg/kg	
			Chrysene	2022/03/05	ND, RDL=0.010		mg/kg	
			Dibenz(a,h)anthracene	2022/03/05	ND, RDL=0.020		mg/kg	
			Fluoranthene	2022/03/05	ND, RDL=0.010		mg/kg	
			Fluorene	2022/03/05	ND, RDL=0.010		mg/kg	
			Indeno(1,2,3-cd)pyrene	2022/03/05	ND, RDL=0.020		mg/kg	
			2-Methylnaphthalene	2022/03/05	ND, RDL=0.010		mg/kg	
			Naphthalene	2022/03/05	ND, RDL=0.010		mg/kg	
			Phenanthrene	2022/03/05	ND, RDL=0.010		mg/kg	
			Pyrene	2022/03/05	ND, RDL=0.010		mg/kg	
A517804	JC7	RPD [APO823-01]	Acenaphthene	2022/03/05	NC		%	50
			Acenaphthylene	2022/03/05	NC		%	50
			Anthracene	2022/03/05	NC		%	50
			Benzo(a)anthracene	2022/03/05	NC		%	50
			Benzo(b&j)fluoranthene	2022/03/05	9.9		%	50
			Benzo(k)fluoranthene	2022/03/05	NC		%	50
			Benzo(g,h,i)perylene	2022/03/05	8.8		%	50
			Benzo(a)pyrene	2022/03/05	NC		%	50
			Chrysene	2022/03/05	NC		%	50
			Dibenz(a,h)anthracene	2022/03/05	NC		%	50

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Fluoranthene	2022/03/05	NC		%	50
			Fluorene	2022/03/05	NC		%	50
			Indeno(1,2,3-cd)pyrene	2022/03/05	NC		%	50
			2-Methylnaphthalene	2022/03/05	NC		%	50
			Naphthalene	2022/03/05	NC		%	50
			Phenanthrene	2022/03/05	4.6		%	50
			Pyrene	2022/03/05	40		%	50
A519309	RSU	Matrix Spike	1,4-Difluorobenzene (sur.)	2022/03/08		103	%	60 - 140
			4-Bromofluorobenzene (sur.)	2022/03/08		102	%	60 - 140
			D10-o-Xylene (sur.)	2022/03/08		110	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2022/03/08		106	%	60 - 140
			Methyl-tert-butylether (MTBE)	2022/03/08		113	%	50 - 140
			Benzene	2022/03/08		106	%	50 - 140
			Toluene	2022/03/08		106	%	50 - 140
			Ethylbenzene	2022/03/08		107	%	50 - 140
			m & p-Xylene	2022/03/08		108	%	50 - 140
			o-Xylene	2022/03/08		102	%	50 - 140
			Styrene	2022/03/08		105	%	50 - 140
A519309	RSU	Spiked Blank	1,4-Difluorobenzene (sur.)	2022/03/08		104	%	60 - 140
			4-Bromofluorobenzene (sur.)	2022/03/08		104	%	60 - 140
			D10-o-Xylene (sur.)	2022/03/08		104	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2022/03/08		106	%	60 - 140
			Methyl-tert-butylether (MTBE)	2022/03/08		107	%	60 - 130
			Benzene	2022/03/08		102	%	60 - 130
			Toluene	2022/03/08		102	%	60 - 130
			Ethylbenzene	2022/03/08		102	%	60 - 130
			m & p-Xylene	2022/03/08		104	%	60 - 130
			o-Xylene	2022/03/08		100	%	60 - 130
			Styrene	2022/03/08		96	%	60 - 130
A519309	RSU	Method Blank	1,4-Difluorobenzene (sur.)	2022/03/08		102	%	60 - 140
			4-Bromofluorobenzene (sur.)	2022/03/08		101	%	60 - 140
			D10-o-Xylene (sur.)	2022/03/08		100	%	60 - 140
			D4-1,2-Dichloroethane (sur.)	2022/03/08		106	%	60 - 140
			Methyl-tert-butylether (MTBE)	2022/03/08	ND, RDL=0.040		mg/kg	
			Benzene	2022/03/08	ND, RDL=0.0050		mg/kg	
			Toluene	2022/03/08	ND, RDL=0.050		mg/kg	
			Ethylbenzene	2022/03/08	ND, RDL=0.010		mg/kg	
			m & p-Xylene	2022/03/08	ND, RDL=0.040		mg/kg	
			o-Xylene	2022/03/08	ND, RDL=0.040		mg/kg	
			Styrene	2022/03/08	ND, RDL=0.030		mg/kg	
A519309	RSU	RPD	Methyl-tert-butylether (MTBE)	2022/03/08	NC		%	50
			Benzene	2022/03/08	NC		%	50
			Toluene	2022/03/08	NC		%	50
			Ethylbenzene	2022/03/08	NC		%	50
			m & p-Xylene	2022/03/08	NC		%	50
			o-Xylene	2022/03/08	NC		%	50
			Styrene	2022/03/08	NC		%	50

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A520241	ERE	Method Blank	Initial pH of Sample	2022/03/09	4.92		pH	
			Final pH of Leachate	2022/03/09	4.98		pH	
			pH of Leaching Fluid	2022/03/09	4.92		pH	
A520241	ERE	RPD [APO822-01]	Initial pH of Sample	2022/03/09	0.22		%	N/A
			pH after HCl	2022/03/09	5.2		%	N/A
			Final pH of Leachate	2022/03/09	0.16		%	N/A
			pH of Leaching Fluid	2022/03/09	0		%	N/A
A520527	EC0	Matrix Spike	Extractable (Water) Methyl Sulfone (sur.)	2022/03/09		107	%	50 - 140
			Extractable (Water) Ethylene Glycol	2022/03/09		94	%	60 - 140
			Extractable (Water) Diethylene Glycol	2022/03/09		105	%	60 - 140
			Extractable (Water) Triethylene Glycol	2022/03/09		96	%	60 - 140
			Extractable (Water) Propylene Glycol	2022/03/09		97	%	60 - 140
A520527	EC0	Spiked Blank	Extractable (Water) Methyl Sulfone (sur.)	2022/03/09		99	%	50 - 140
			Extractable (Water) Ethylene Glycol	2022/03/09		88	%	60 - 140
			Extractable (Water) Diethylene Glycol	2022/03/09		99	%	60 - 140
			Extractable (Water) Triethylene Glycol	2022/03/09		97	%	60 - 140
			Extractable (Water) Propylene Glycol	2022/03/09		91	%	60 - 140
A520527	EC0	Method Blank	Extractable (Water) Methyl Sulfone (sur.)	2022/03/09		95	%	50 - 140
			Extractable (Water) Ethylene Glycol	2022/03/09	ND, RDL=10		mg/kg	
			Extractable (Water) Diethylene Glycol	2022/03/09	ND, RDL=9.0		mg/kg	
			Extractable (Water) Triethylene Glycol	2022/03/09	ND, RDL=10		mg/kg	
			Extractable (Water) Propylene Glycol	2022/03/09	ND, RDL=10		mg/kg	
A520527	EC0	RPD	Extractable (Water) Ethylene Glycol	2022/03/09	NC		%	50
			Extractable (Water) Diethylene Glycol	2022/03/09	NC		%	50
			Extractable (Water) Triethylene Glycol	2022/03/09	NC		%	50
			Extractable (Water) Propylene Glycol	2022/03/09	NC		%	50
A520553	SOM	Matrix Spike	Total Aluminum (Al)	2022/03/09		NC	%	75 - 125
			Total Antimony (Sb)	2022/03/09		101	%	75 - 125
			Total Arsenic (As)	2022/03/09		100	%	75 - 125
			Total Barium (Ba)	2022/03/09		100	%	75 - 125
			Total Beryllium (Be)	2022/03/09		96	%	75 - 125
			Total Bismuth (Bi)	2022/03/09		106	%	75 - 125
			Total Boron (B)	2022/03/09		105	%	75 - 125
			Total Cadmium (Cd)	2022/03/09		103	%	75 - 125
			Total Calcium (Ca)	2022/03/09		NC	%	75 - 125
			Total Chromium (Cr)	2022/03/09		98	%	75 - 125
			Total Cobalt (Co)	2022/03/09		98	%	75 - 125
			Total Copper (Cu)	2022/03/09		95	%	75 - 125
			Total Iron (Fe)	2022/03/09		NC	%	75 - 125
			Total Lead (Pb)	2022/03/09		99	%	75 - 125
			Total Lithium (Li)	2022/03/09		88	%	75 - 125
			Total Magnesium (Mg)	2022/03/09		NC	%	75 - 125
			Total Manganese (Mn)	2022/03/09		NC	%	75 - 125
			Total Mercury (Hg)	2022/03/09		102	%	75 - 125
			Total Molybdenum (Mo)	2022/03/09		104	%	75 - 125
			Total Nickel (Ni)	2022/03/09		100	%	75 - 125
			Total Phosphorus (P)	2022/03/09		98	%	75 - 125
			Total Potassium (K)	2022/03/09		118	%	75 - 125
			Total Selenium (Se)	2022/03/09		106	%	75 - 125
			Total Silver (Ag)	2022/03/09		101	%	75 - 125

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Sodium (Na)	2022/03/09		119	%	75 - 125
			Total Strontium (Sr)	2022/03/09		105	%	75 - 125
			Total Thallium (Tl)	2022/03/09		106	%	75 - 125
			Total Tin (Sn)	2022/03/09		110	%	75 - 125
			Total Titanium (Ti)	2022/03/09		NC	%	75 - 125
			Total Tungsten (W)	2022/03/09		100	%	75 - 125
			Total Uranium (U)	2022/03/09		102	%	75 - 125
			Total Vanadium (V)	2022/03/09		99	%	75 - 125
			Total Zinc (Zn)	2022/03/09		96	%	75 - 125
			Total Zirconium (Zr)	2022/03/09		122	%	75 - 125
A520553	SOM	QC Standard	Total Aluminum (Al)	2022/03/09		94	%	70 - 130
			Total Antimony (Sb)	2022/03/09		109	%	70 - 130
			Total Arsenic (As)	2022/03/09		87	%	70 - 130
			Total Barium (Ba)	2022/03/09		98	%	70 - 130
			Total Beryllium (Be)	2022/03/09		98	%	70 - 130
			Total Cadmium (Cd)	2022/03/09		102	%	70 - 130
			Total Calcium (Ca)	2022/03/09		98	%	70 - 130
			Total Chromium (Cr)	2022/03/09		90	%	70 - 130
			Total Cobalt (Co)	2022/03/09		97	%	70 - 130
			Total Copper (Cu)	2022/03/09		102	%	70 - 130
			Total Iron (Fe)	2022/03/09		101	%	70 - 130
			Total Lead (Pb)	2022/03/09		111	%	70 - 130
			Total Lithium (Li)	2022/03/09		98	%	70 - 130
			Total Magnesium (Mg)	2022/03/09		108	%	70 - 130
			Total Manganese (Mn)	2022/03/09		99	%	70 - 130
			Total Mercury (Hg)	2022/03/09		80	%	70 - 130
			Total Molybdenum (Mo)	2022/03/09		103	%	70 - 130
			Total Nickel (Ni)	2022/03/09		106	%	70 - 130
			Total Phosphorus (P)	2022/03/09		99	%	70 - 130
			Total Potassium (K)	2022/03/09		86	%	70 - 130
			Total Silver (Ag)	2022/03/09		106	%	70 - 130
			Total Sodium (Na)	2022/03/09		96	%	70 - 130
			Total Strontium (Sr)	2022/03/09		100	%	70 - 130
			Total Thallium (Tl)	2022/03/09		90	%	70 - 130
			Total Tin (Sn)	2022/03/09		106	%	70 - 130
			Total Uranium (U)	2022/03/09		99	%	70 - 130
			Total Vanadium (V)	2022/03/09		98	%	70 - 130
			Total Zinc (Zn)	2022/03/09		102	%	70 - 130
A520553	SOM	Spiked Blank	Total Aluminum (Al)	2022/03/09		103	%	75 - 125
			Total Antimony (Sb)	2022/03/09		106	%	75 - 125
			Total Arsenic (As)	2022/03/09		100	%	75 - 125
			Total Barium (Ba)	2022/03/09		98	%	75 - 125
			Total Beryllium (Be)	2022/03/09		99	%	75 - 125
			Total Bismuth (Bi)	2022/03/09		108	%	75 - 125
			Total Boron (B)	2022/03/09		108	%	75 - 125
			Total Cadmium (Cd)	2022/03/09		104	%	75 - 125
			Total Calcium (Ca)	2022/03/09		104	%	75 - 125
			Total Chromium (Cr)	2022/03/09		100	%	75 - 125
			Total Cobalt (Co)	2022/03/09		102	%	75 - 125
			Total Copper (Cu)	2022/03/09		101	%	75 - 125
			Total Iron (Fe)	2022/03/09		105	%	75 - 125
			Total Lead (Pb)	2022/03/09		101	%	75 - 125
			Total Lithium (Li)	2022/03/09		101	%	75 - 125
			Total Magnesium (Mg)	2022/03/09		113	%	75 - 125

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Manganese (Mn)	2022/03/09		104	%	75 - 125
			Total Mercury (Hg)	2022/03/09		103	%	75 - 125
			Total Molybdenum (Mo)	2022/03/09		102	%	75 - 125
			Total Nickel (Ni)	2022/03/09		102	%	75 - 125
			Total Phosphorus (P)	2022/03/09		102	%	75 - 125
			Total Potassium (K)	2022/03/09		106	%	75 - 125
			Total Selenium (Se)	2022/03/09		106	%	75 - 125
			Total Silver (Ag)	2022/03/09		101	%	75 - 125
			Total Sodium (Na)	2022/03/09		113	%	75 - 125
			Total Strontium (Sr)	2022/03/09		103	%	75 - 125
			Total Thallium (Tl)	2022/03/09		108	%	75 - 125
			Total Tin (Sn)	2022/03/09		109	%	75 - 125
			Total Titanium (Ti)	2022/03/09		102	%	75 - 125
			Total Tungsten (W)	2022/03/09		108	%	75 - 125
			Total Uranium (U)	2022/03/09		104	%	75 - 125
			Total Vanadium (V)	2022/03/09		101	%	75 - 125
			Total Zinc (Zn)	2022/03/09		101	%	75 - 125
			Total Zirconium (Zr)	2022/03/09		105	%	75 - 125
A520553	SOM	Method Blank	Total Aluminum (Al)	2022/03/09	ND, RDL=100		mg/kg	
			Total Antimony (Sb)	2022/03/09	ND, RDL=0.10		mg/kg	
			Total Arsenic (As)	2022/03/09	ND, RDL=0.20		mg/kg	
			Total Barium (Ba)	2022/03/09	ND, RDL=0.10		mg/kg	
			Total Beryllium (Be)	2022/03/09	ND, RDL=0.20		mg/kg	
			Total Bismuth (Bi)	2022/03/09	ND, RDL=0.10		mg/kg	
			Total Boron (B)	2022/03/09	ND, RDL=1.0		mg/kg	
			Total Cadmium (Cd)	2022/03/09	ND, RDL=0.050		mg/kg	
			Total Calcium (Ca)	2022/03/09	ND, RDL=100		mg/kg	
			Total Chromium (Cr)	2022/03/09	ND, RDL=0.50		mg/kg	
			Total Cobalt (Co)	2022/03/09	ND, RDL=0.10		mg/kg	
			Total Copper (Cu)	2022/03/09	ND, RDL=0.50		mg/kg	
			Total Iron (Fe)	2022/03/09	ND, RDL=100		mg/kg	
			Total Lead (Pb)	2022/03/09	ND, RDL=0.10		mg/kg	
			Total Lithium (Li)	2022/03/09	ND, RDL=0.50		mg/kg	
			Total Magnesium (Mg)	2022/03/09	ND, RDL=100		mg/kg	
			Total Manganese (Mn)	2022/03/09	ND, RDL=0.20		mg/kg	
			Total Mercury (Hg)	2022/03/09	ND, RDL=0.050		mg/kg	

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Molybdenum (Mo)	2022/03/09	ND, RDL=0.10		mg/kg	
			Total Nickel (Ni)	2022/03/09	ND, RDL=0.50		mg/kg	
			Total Phosphorus (P)	2022/03/09	ND, RDL=10		mg/kg	
			Total Potassium (K)	2022/03/09	ND, RDL=100		mg/kg	
			Total Selenium (Se)	2022/03/09	ND, RDL=0.50		mg/kg	
			Total Silver (Ag)	2022/03/09	ND, RDL=0.050		mg/kg	
			Total Sodium (Na)	2022/03/09	ND, RDL=100		mg/kg	
			Total Strontium (Sr)	2022/03/09	ND, RDL=0.10		mg/kg	
			Total Thallium (Tl)	2022/03/09	ND, RDL=0.050		mg/kg	
			Total Tin (Sn)	2022/03/09	ND, RDL=0.10		mg/kg	
			Total Titanium (Ti)	2022/03/09	ND, RDL=1.0		mg/kg	
			Total Tungsten (W)	2022/03/09	ND, RDL=0.50		mg/kg	
			Total Uranium (U)	2022/03/09	ND, RDL=0.050		mg/kg	
			Total Vanadium (V)	2022/03/09	ND, RDL=1.0		mg/kg	
			Total Zinc (Zn)	2022/03/09	ND, RDL=1.0		mg/kg	
			Total Zirconium (Zr)	2022/03/09	ND, RDL=0.50		mg/kg	
A520553	SOM	RPD	Total Aluminum (Al)	2022/03/09	3.0		%	40
			Total Antimony (Sb)	2022/03/09	20		%	30
			Total Arsenic (As)	2022/03/09	24		%	30
			Total Barium (Ba)	2022/03/09	24		%	40
			Total Beryllium (Be)	2022/03/09	5.6		%	30
			Total Boron (B)	2022/03/09	23		%	30
			Total Cadmium (Cd)	2022/03/09	27		%	30
			Total Chromium (Cr)	2022/03/09	26		%	30
			Total Cobalt (Co)	2022/03/09	18		%	30
			Total Copper (Cu)	2022/03/09	14		%	30
			Total Iron (Fe)	2022/03/09	16		%	30
			Total Lead (Pb)	2022/03/09	19		%	40
			Total Lithium (Li)	2022/03/09	7.8		%	30
			Total Manganese (Mn)	2022/03/09	13		%	30
			Total Mercury (Hg)	2022/03/09	NC		%	40
			Total Molybdenum (Mo)	2022/03/09	24		%	40
			Total Nickel (Ni)	2022/03/09	29		%	30
			Total Selenium (Se)	2022/03/09	NC		%	30
			Total Silver (Ag)	2022/03/09	NC		%	40
			Total Strontium (Sr)	2022/03/09	17		%	40
			Total Thallium (Tl)	2022/03/09	17		%	30
			Total Tin (Sn)	2022/03/09	30		%	40
			Total Titanium (Ti)	2022/03/09	15		%	40

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Tungsten (W)	2022/03/09	NC		%	40
			Total Uranium (U)	2022/03/09	NC		%	30
			Total Vanadium (V)	2022/03/09	16		%	30
			Total Zinc (Zn)	2022/03/09	14		%	30
A520586	MUP	Spiked Blank	Soluble (2:1) pH	2022/03/09		100	%	97 - 103
A520586	MUP	RPD	Soluble (2:1) pH	2022/03/09	0.65		%	N/A
A520968	SOM	Matrix Spike [APO822-01]	Leachate Antimony (Sb)	2022/03/09		102	%	75 - 125
			Leachate Arsenic (As)	2022/03/09		95	%	75 - 125
			Leachate Barium (Ba)	2022/03/09		89	%	75 - 125
			Leachate Beryllium (Be)	2022/03/09		91	%	75 - 125
			Leachate Boron (B)	2022/03/09		102	%	75 - 125
			Leachate Cadmium (Cd)	2022/03/09		94	%	75 - 125
			Leachate Chromium (Cr)	2022/03/09		95	%	75 - 125
			Leachate Cobalt (Co)	2022/03/09		93	%	75 - 125
			Leachate Copper (Cu)	2022/03/09		90	%	75 - 125
			Leachate Iron (Fe)	2022/03/09		97	%	75 - 125
			Leachate Lead (Pb)	2022/03/09		96	%	75 - 125
			Leachate Mercury (Hg)	2022/03/09		96	%	75 - 125
			Leachate Molybdenum (Mo)	2022/03/09		102	%	75 - 125
			Leachate Nickel (Ni)	2022/03/09		94	%	75 - 125
			Leachate Selenium (Se)	2022/03/09		94	%	75 - 125
			Leachate Silver (Ag)	2022/03/09		92	%	75 - 125
			Leachate Thallium (Tl)	2022/03/09		98	%	75 - 125
			Leachate Uranium (U)	2022/03/09		103	%	75 - 125
			Leachate Vanadium (V)	2022/03/09		94	%	75 - 125
			Leachate Zinc (Zn)	2022/03/09		87	%	75 - 125
			Leachate Zirconium (Zr)	2022/03/09		104	%	75 - 125
A520968	SOM	Spiked Blank	Leachate Antimony (Sb)	2022/03/09		104	%	75 - 125
			Leachate Arsenic (As)	2022/03/09		96	%	75 - 125
			Leachate Barium (Ba)	2022/03/09		94	%	75 - 125
			Leachate Beryllium (Be)	2022/03/09		92	%	75 - 125
			Leachate Boron (B)	2022/03/09		101	%	75 - 125
			Leachate Cadmium (Cd)	2022/03/09		95	%	75 - 125
			Leachate Chromium (Cr)	2022/03/09		97	%	75 - 125
			Leachate Cobalt (Co)	2022/03/09		96	%	75 - 125
			Leachate Copper (Cu)	2022/03/09		92	%	75 - 125
			Leachate Iron (Fe)	2022/03/09		98	%	75 - 125
			Leachate Lead (Pb)	2022/03/09		98	%	75 - 125
			Leachate Mercury (Hg)	2022/03/09		99	%	75 - 125
			Leachate Molybdenum (Mo)	2022/03/09		100	%	75 - 125
			Leachate Nickel (Ni)	2022/03/09		95	%	75 - 125
			Leachate Selenium (Se)	2022/03/09		95	%	75 - 125
			Leachate Silver (Ag)	2022/03/09		93	%	75 - 125
			Leachate Thallium (Tl)	2022/03/09		100	%	75 - 125
			Leachate Uranium (U)	2022/03/09		104	%	75 - 125
			Leachate Vanadium (V)	2022/03/09		95	%	75 - 125
			Leachate Zinc (Zn)	2022/03/09		89	%	75 - 125
			Leachate Zirconium (Zr)	2022/03/09		103	%	75 - 125
A520968	SOM	Method Blank	Leachate Antimony (Sb)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Arsenic (As)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Barium (Ba)	2022/03/09	ND, RDL=0.10		mg/L	

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachate Beryllium (Be)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Boron (B)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Cadmium (Cd)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Chromium (Cr)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Cobalt (Co)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Copper (Cu)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Iron (Fe)	2022/03/09	ND, RDL=0.50		mg/L	
			Leachate Lead (Pb)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Mercury (Hg)	2022/03/09	ND, RDL=0.0020		mg/L	
			Leachate Molybdenum (Mo)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Nickel (Ni)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Selenium (Se)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Silver (Ag)	2022/03/09	ND, RDL=0.010		mg/L	
			Leachate Thallium (Tl)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Uranium (U)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Vanadium (V)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Zinc (Zn)	2022/03/09	ND, RDL=0.10		mg/L	
			Leachate Zirconium (Zr)	2022/03/09	ND, RDL=0.10		mg/L	
A520968	SOM	RPD [APO822-01]	Leachate Antimony (Sb)	2022/03/09	NC		%	35
			Leachate Arsenic (As)	2022/03/09	NC		%	35
			Leachate Barium (Ba)	2022/03/09	0.85		%	35
			Leachate Beryllium (Be)	2022/03/09	NC		%	35
			Leachate Boron (B)	2022/03/09	NC		%	35
			Leachate Cadmium (Cd)	2022/03/09	NC		%	35
			Leachate Chromium (Cr)	2022/03/09	NC		%	35
			Leachate Cobalt (Co)	2022/03/09	NC		%	35
			Leachate Copper (Cu)	2022/03/09	NC		%	35
			Leachate Iron (Fe)	2022/03/09	NC		%	35
			Leachate Lead (Pb)	2022/03/09	NC		%	35
			Leachate Mercury (Hg)	2022/03/09	8.2		%	35
			Leachate Molybdenum (Mo)	2022/03/09	NC		%	35
			Leachate Nickel (Ni)	2022/03/09	NC		%	35
			Leachate Selenium (Se)	2022/03/09	NC		%	35
			Leachate Silver (Ag)	2022/03/09	NC		%	35
			Leachate Thallium (Tl)	2022/03/09	NC		%	35
			Leachate Uranium (U)	2022/03/09	NC		%	35
			Leachate Vanadium (V)	2022/03/09	NC		%	35

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachate Zinc (Zn)	2022/03/09	NC		%	35
			Leachate Zirconium (Zr)	2022/03/09	NC		%	35
A521223	PL	QC Standard	Total Carbon	2022/03/10		95	%	75 - 125
			Total Sulphur (S)	2022/03/10		92	%	75 - 125
A521223	PL	Spiked Blank	Total Carbon	2022/03/10		100	%	75 - 125
			Total Sulphur (S)	2022/03/10		103	%	75 - 125
A521223	PL	Method Blank	Total Carbon	2022/03/10	ND, RDL=0.050		%	
			Total Sulphur (S)	2022/03/10	ND, RDL=0.060		%	
A521223	PL	RPD	Total Carbon	2022/03/10	15		%	30
			Total Sulphur (S)	2022/03/10	5.8		%	30
A528006	MPE	Matrix Spike [APO822-01]	Total Oil and grease	2022/03/17		93	%	65 - 135
A528006	MPE	Spiked Blank	Total Oil and grease	2022/03/17		94	%	65 - 135
A528006	MPE	Method Blank	Total Oil and grease	2022/03/17	ND, RDL=100		ug/g	
A528006	MPE	RPD [APO822-01]	Total Oil and grease	2022/03/17	NC		%	30

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

David Huang, M.Sc., P.Chem., QP, Scientific Services Manager

<original signed by>

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

<original signed by>

Gita Pokhrel, Laboratory Supervisor

<original signed by>

Heather Groves, Dip.BioSci, QP, Senior Laboratory Manager - Inorganics

<original signed by>

Janet Gao, B.Sc., QP, Supervisor, Organics

<original signed by>

Jared Wiseman, B.Sc., P.Chem., QP, Senior Analyst, Organics

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Custody Tracking Form

W45712-R

Please use this form for custody tracking when submitting the work instructions via eCOC (electronic Chain of Custody). Please ensure your form has a barcode or a Bureau Veritas eCOC confirmation number in the top right hand side. This number links your electronic submission to your samples. This form should be placed in the cooler with your samples.

First Sample: Crusher SLP - E
Last Sample: Crusher SLP - W
Sample Count: 3

Relinquished By				Received By			
Lukas Bernatto	<original signed by>	Date	2022/03/02	D Malmloff	<original signed by>	Date	2022/03/03
		Time (24 HR)	15:15			Time (24 HR)	07:50
		Date		Reem Phillipos	<original signed by>	Date	2022/03/04
		Time (24 HR)				Time (24 HR)	07:20
		Date				Date	
		Time (24 HR)				Time (24 HR)	

Unless otherwise agreed to, submissions and use of services are governed by Bureau Veritas' standard terms and conditions which can be found at www.bvna.com.

Triage Information

Sampled By (Print): LB

# of Coolers/Pkgs: 1

Rush ☐ Immediate Test ☐ Food Residue ☐

Micro ☐ Food Chemistry ☐

*** LABORATORY USE ONLY ***

Received At: FSJ

Lab Comments:

Labeled By: 03-Mar-22 07:50 Debbie Nordbruget C213894

Verified By: MXP INS-0114

Custody Seal		Cooling Media	Temperature °C		
Present (Y/N)	Intact (Y/N)	Present (Y/N)	1	2	3
NO		YES	6	5	7
Y	Y	Y	5	5	5
Y	Y	Y	3	3	4

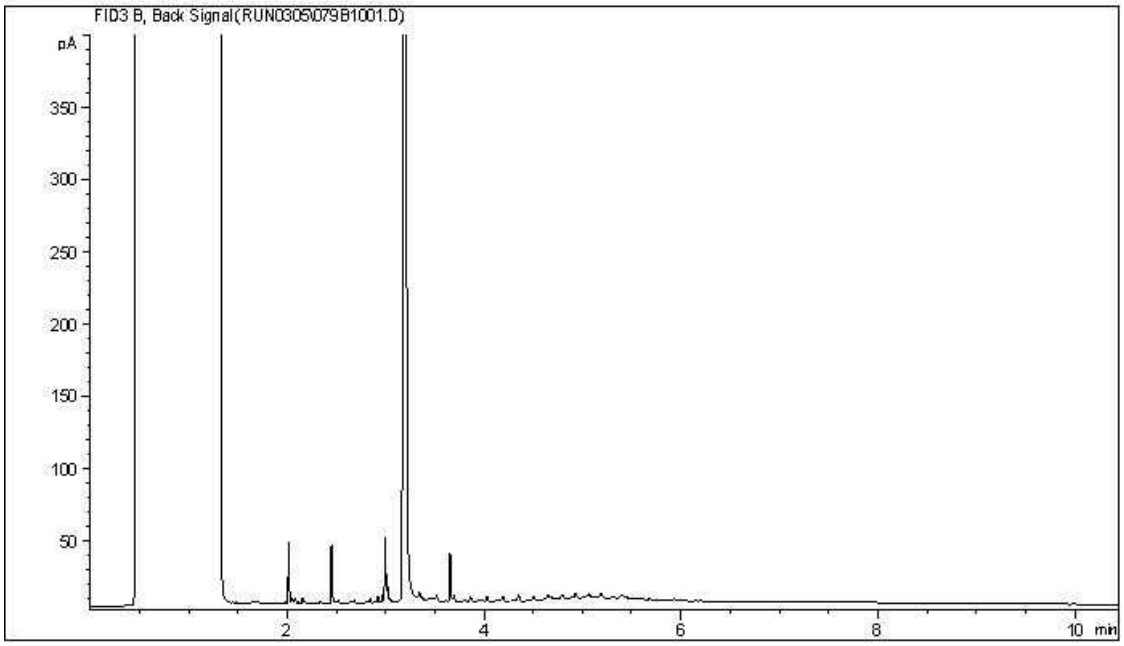
Drinking Water Metals Preservation Check Done (Circle) **YES** **NO**

COR FCD-00383/3

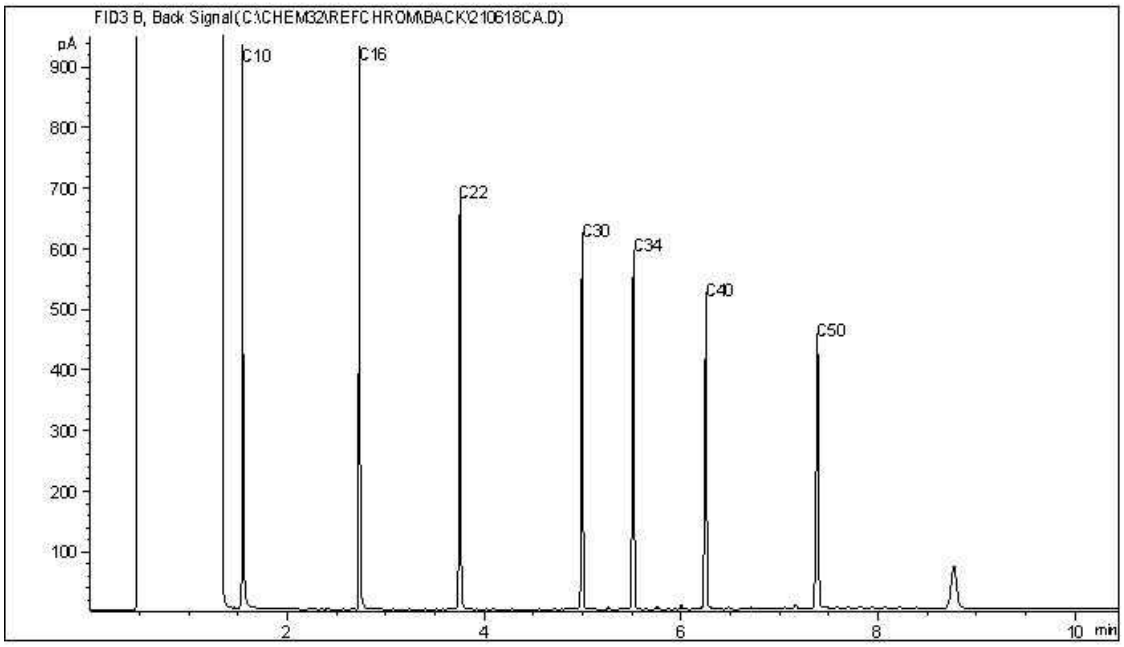
Page 1 of 1

BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



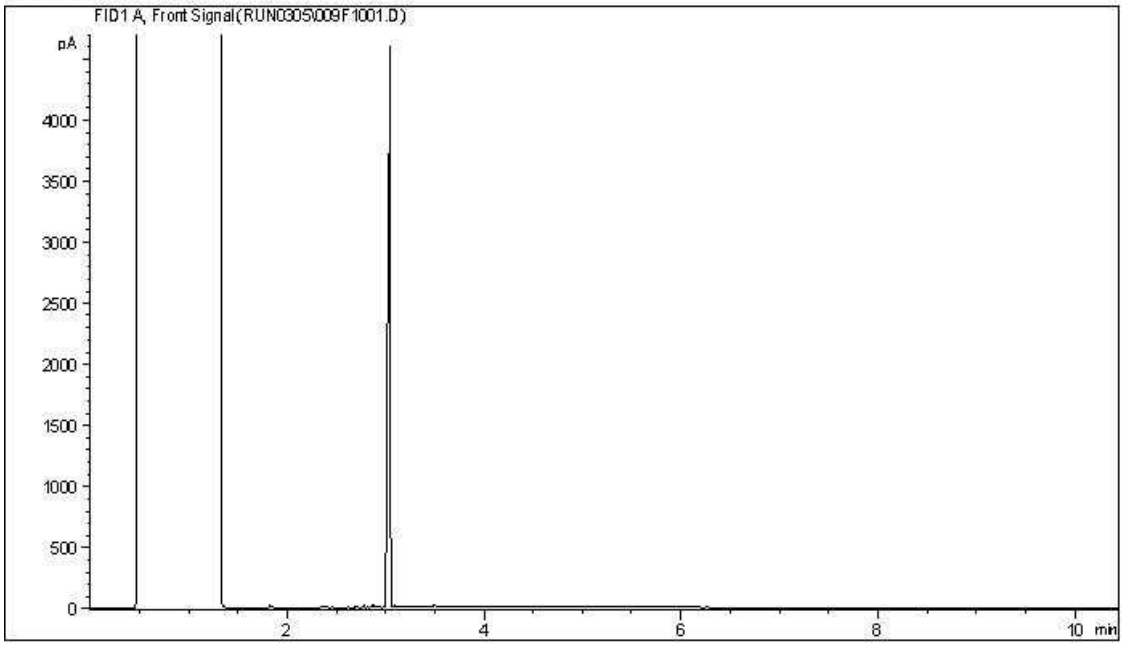
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

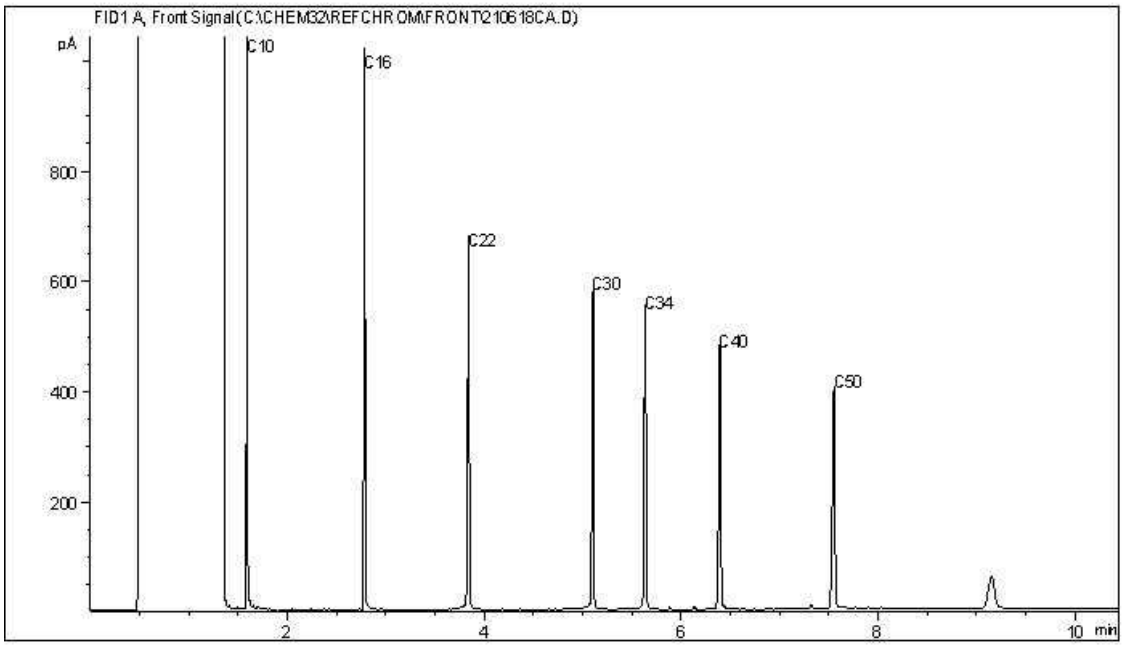
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



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Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
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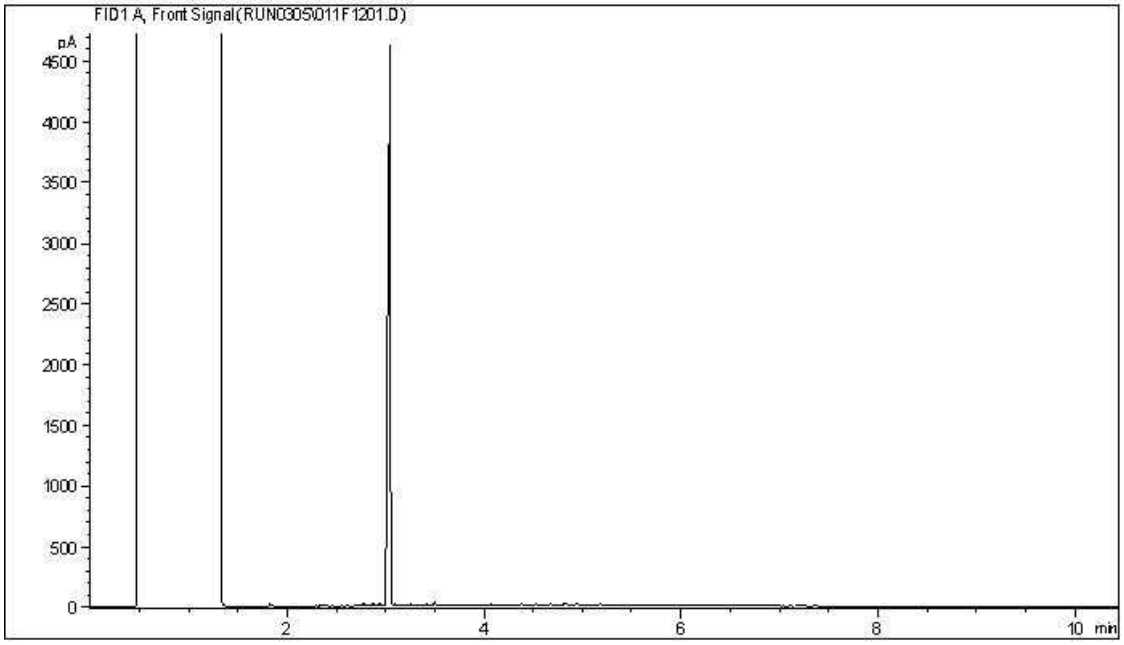
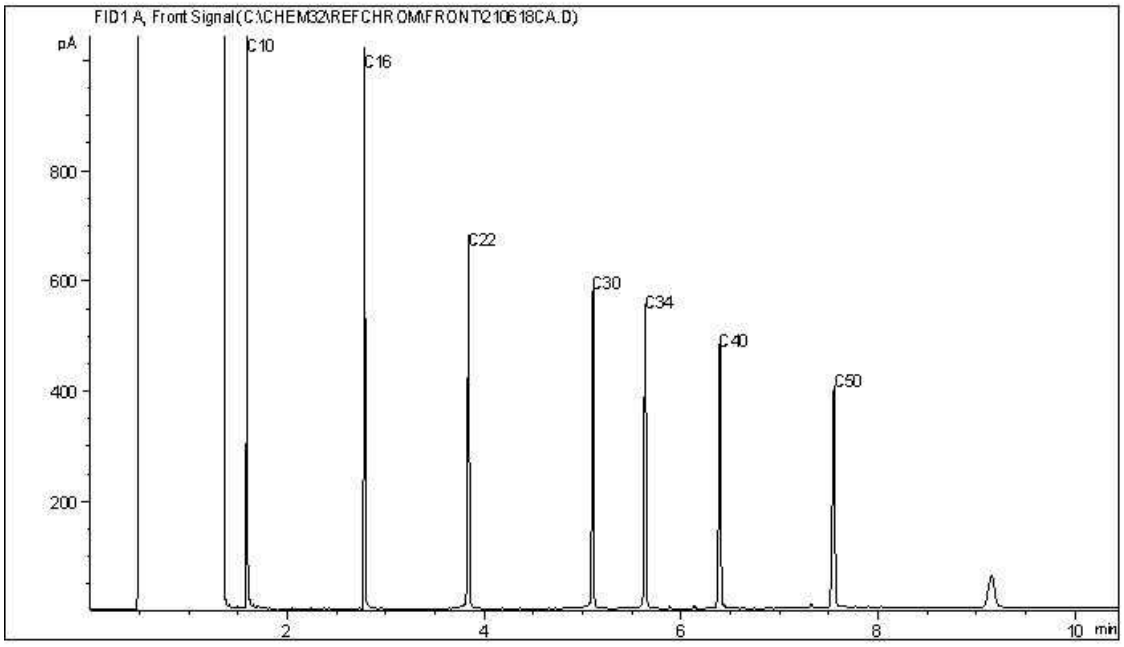
BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



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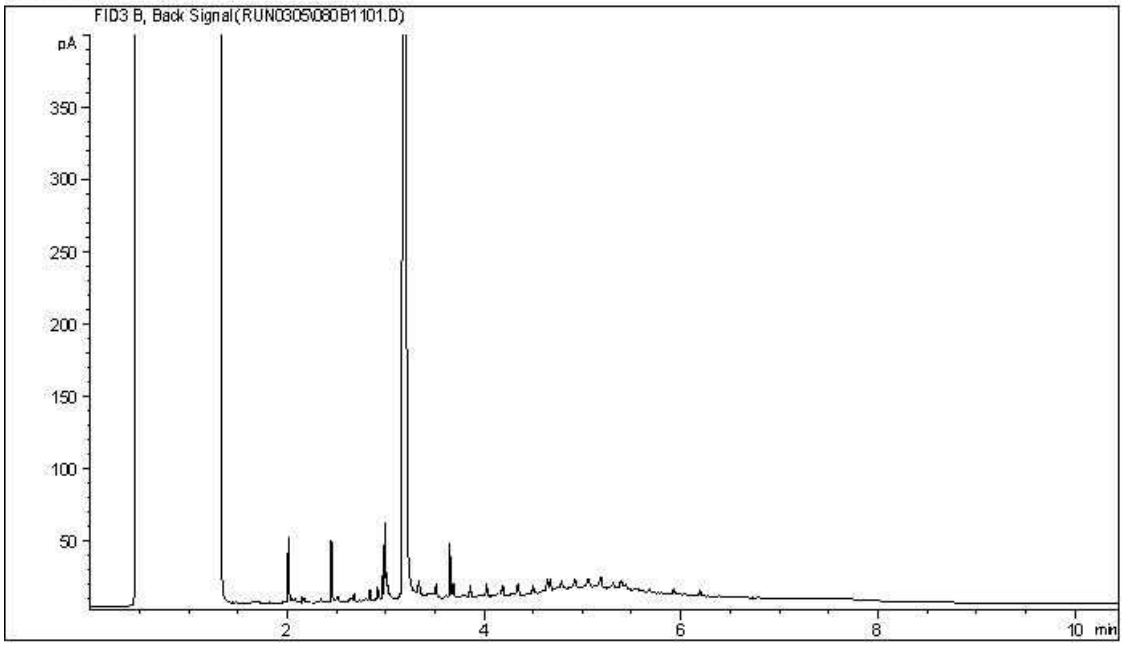
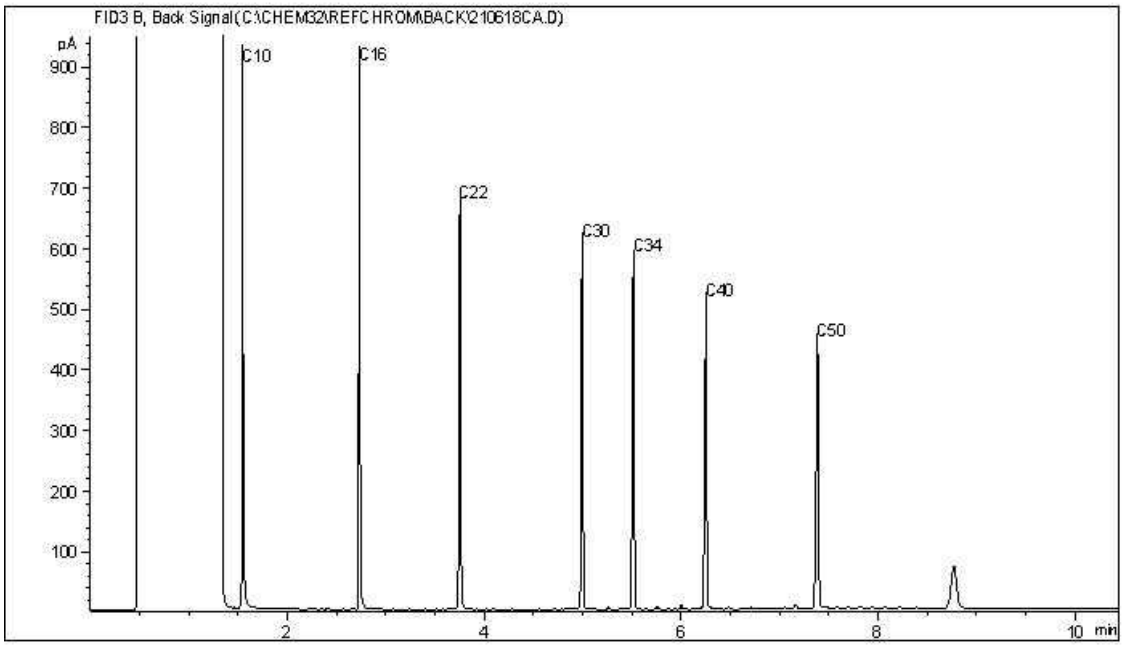
BC Hydrocarbons in Soil by GC/FID Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

eCOC: W45712

Project Information:	C213894
Job Received:	2022/03/03 07:50
Results Required By:	2022/03/03 17:06
Expected Arrival:	2022/03/02 17:06
Submitted By:	Lukas Bennetto
Submitted To:	Burnaby ENV: 4606 Canada Way

Invoice Information

Attn: ACCOUNTS PAYABLE
Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC , V1J 4H6
Email to:
accounts.payable@prhp.ca

Report Information

Attn: Kael Hanak
Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC , V1J 4H6
Email to:
kael.hanak@prhp.ca

Project Information

Quote #:	C20144, C10269
PO/AFE#:	48179
Project #:	
Site Location:	SITE C

Analytical Summary

A: 2022/03/03 17:06

Client Sample ID	Clnt Ref	Sampling Date/Time	Matrix	#Cont	BC BTEX/VPH in Soil	BC LEPH/HEPH Petroleum Hydrocarbons	CSR/CCME Metals in Soil with Hg	TCLP Metals	Carbon, Nitrogen, Sulphur - Combustion	Glycols in Soil by GC/FID	Total Oil and Grease
Crusher SLP - E	1	2022/03/01 15:00	SEDIMENT	6	A	A	A	A	A	A	A
Crusher SLP - C	2	2022/03/02 07:30	SEDIMENT	6	A	A	A	A	A	A	A
Crusher SLP - W	3	2022/03/02 08:00	SEDIMENT	6	A	A	A	A	A	A	A

Deadlines are estimates only and are subject to change. Please refer to your Job Confirmation report for final due dates.

Submission Information

# of Samples:	3
Details:	Please use Scenario 14891

Your P.O. #: 48179
Your Project #: 416-1
Site Location: SITE C
Your C.O.C. #: 54389

Attention: Kael Hanak

Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC
CANADA V1J 4H6

Report Date: 2022/10/12
Report #: R3246702
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C274550
Received: 2022/09/26, 09:40

Sample Matrix: Sediment
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE LH VH F1 in Soil - Field Pres. (2)	1	N/A	2022/09/27	BBY8SOP-00010 / BBY8SOP-00011 / BBY8SOP-00012	BCMOE BCLM Jul 2017
Carbon, Nitrogen, Sulphur - Combustion (1)	1	N/A	2022/10/11	CAL SOP-00263	AN-A-030609-E-01 m
Elements by ICPMS (total) (3)	1	2022/09/30	2022/09/30	BBY7SOP-00004 / BBY7SOP-00001	EPA 6020b R2 m
Metals - TCLP	1	2022/09/28	2022/09/28	BBY7SOP-00001	EPA 1311, 6020bR2 m
Moisture	1	2022/09/27	2022/09/28	BBY8SOP-00017	BCMOE BCLM Dec2000 m
PAH in Soil by GC/MS (SIM)	1	2022/09/27	2022/09/28	BBY8SOP-00022	BCMOE BCLM Jul2017m
Total PAH and B(a)P Calculation (4)	1	N/A	2022/09/28	BBY WI-00033	Auto Calc
pH (2:1 DI Water Extract)	1	2022/09/30	2022/09/30	BBY6SOP-00028	BCMOE BCLM Mar2005 m
TCLP pH Measurements	1	N/A	2022/09/28	BBY7SOP-00005	EPA 1311
EPH less PAH in Soil By GC/FID (5)	1	N/A	2022/09/28	BBY WI-00033	Auto Calc
EPH in Soil by GC/FID	1	2022/09/27	2022/09/27	BBY8SOP-00029	BCMOE BCLM Dec2016 m
Total Oil and Grease	1	2022/10/11	2022/10/11	BBY8SOP-00006	BCMOE BCLM Mar 1997
Volatile HC-BTEX for Soil (6)	1	N/A	2022/09/28	BBY WI-00033	Auto Calc

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope

Your P.O. #: 48179
Your Project #: 416-1
Site Location: SITE C
Your C.O.C. #: 54389

Attention: Kael Hanak

Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC
CANADA V1J 4H6

Report Date: 2022/10/12
Report #: R3246702
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C274550
Received: 2022/09/26, 09:40

dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8
(2) The extraction date for VOC, BTEX, VH, or F1 samples that are field preserved with methanol equals the date sampled, unless otherwise stated.
(3) The sample is prepaired per the BC MOE Lab Manual "Strong Acid Leachable Metals (SALM) in Soil - Prescriptive", Revision Nov 6, 2015.
(4) Total PAHs in Soil include: Quinoline, Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Acridine, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b&j)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, and Benzo(g,h,i)perylene.

Total PAHs in Sediment include (B.C. Reg. 116/2018, Schedule 3.4): Naphthalene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(a)pyrene, and Dibenz(a,h)anthracene.
(5) LEPH = EPH (C10 to C19) - (Naphthalene + Phenanthrene)
HEPH = EPH (C19 to C32) - (Benzo(a)anthracene + Benzo(a)pyrene + Benzo(b)fluoranthene + Benzo(k)fluoranthene + Dibenz(a,h)anthracene + Indeno(1,2,3-cd)pyrene + Pyrene)
(6) VPH = VH - (Benzene + Toluene + Ethylbenzene + m & p-Xylene + o-Xylene + Styrene)

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Debbie Nordbruget, Key Account Specialist
Email: Debra.NORDBRUGET@bureauveritas.com
Phone# (250)385-6112
==========
This report has been generated and distributed using a secure automated process.
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For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Job #: C274550
Report Date: 2022/10/12

Peace River Hydro Partners
Client Project #: 416-1
Site Location: SITE C
Your P.O. #: 48179

RESULTS OF CHEMICAL ANALYSES OF SEDIMENT

Bureau Veritas ID		BCV439		
Sampling Date		2022/09/25 17:00		
COC Number		54389		
	UNITS	WTF-Cell 1-Sludge	RDL	QC Batch
Calculated Parameters				
VPH (VH6 to 10 - BTEX)	mg/kg	ND	26	A731717
Misc. Inorganics				
Total Carbon	%	11	0.050	A751707
Total Sulphur (S)	%	0.30	0.060	A751707
Total Nitrogen (N_2)	%	ND	0.20	A751707
OIL & GREASE				
Total Oil and grease	ug/g	430 (1)	270	A751446
Physical Properties				
Soluble (2:1) pH	pH	9.33	N/A	A736279

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.
N/A = Not Applicable
(1) Detection limits raised due to high moisture content.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C274550
Report Date: 2022/10/12

Peace River Hydro Partners
Client Project #: 416-1
Site Location: SITE C
Your P.O. #: 48179

PHYSICAL TESTING (SEDIMENT)

Bureau Veritas ID		BCV439		
Sampling Date		2022/09/25 17:00		
COC Number		54389		
	UNITS	WTF-Cell 1-Sludge	RDL	QC Batch
Physical Properties				
Moisture	%	63	0.30	A732006
RDL = Reportable Detection Limit				

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

SEMIVOLATILE ORGANICS BY GC-MS (SEDIMENT)

Bureau Veritas ID		BCV439		
Sampling Date		2022/09/25 17:00		
COC Number		54389		
	UNITS	WTF-Cell 1-Sludge	RDL	QC Batch
Calculated Parameters				
Low Molecular Weight PAH`s	mg/kg	0.11	0.050	A731931
High Molecular Weight PAH`s	mg/kg	ND	0.050	A731931
Total PAH	mg/kg	0.11	0.050	A731931
Polycyclic Aromatics				
Naphthalene	mg/kg	0.030 (1)	0.025	A732087
1-Methylnaphthalene	mg/kg	ND (1)	0.13	A732087
2-Methylnaphthalene	mg/kg	0.056 (1)	0.050	A732087
Acenaphthylene	mg/kg	ND (1)	0.013	A732087
Acenaphthene	mg/kg	ND (1)	0.013	A732087
Fluorene	mg/kg	ND (1)	0.050	A732087
Phenanthrene	mg/kg	0.025 (1)	0.025	A732087
Anthracene	mg/kg	ND (1)	0.010	A732087
Acridine	mg/kg	ND (1)	0.13	A732087
Fluoranthene	mg/kg	ND (1)	0.050	A732087
Pyrene	mg/kg	ND (1)	0.050	A732087
Benzo(a)anthracene	mg/kg	ND (1)	0.050	A732087
Chrysene	mg/kg	ND (1)	0.050	A732087
Benzo(b&j)fluoranthene	mg/kg	ND (1)	0.050	A732087
Benzo(b)fluoranthene	mg/kg	ND (1)	0.050	A732087
Benzo(k)fluoranthene	mg/kg	ND (1)	0.050	A732087
Benzo(a)pyrene	mg/kg	ND (1)	0.050	A732087
Indeno(1,2,3-cd)pyrene	mg/kg	ND (1)	0.050	A732087
Dibenz(a,h)anthracene	mg/kg	ND (1)	0.050	A732087
Benzo(g,h,i)perylene	mg/kg	ND (1)	0.13	A732087
Surrogate Recovery (%)				
D10-ANTHRACENE (sur.)	%	80		A732087
D8-ACENAPHTHYLENE (sur.)	%	77		A732087
D8-NAPHTHALENE (sur.)	%	73		A732087

RDL = Reportable Detection Limit

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C274550
Report Date: 2022/10/12

Peace River Hydro Partners
Client Project #: 416-1
Site Location: SITE C
Your P.O. #: 48179

SEMIVOLATILE ORGANICS BY GC-MS (SEDIMENT)

Bureau Veritas ID		BCV439		
Sampling Date		2022/09/25 17:00		
COC Number		54389		
	UNITS	**WTF-Cell 1-Sludge**	**RDL**	**QC Batch**
TERPHENYL-D14 (sur.)	%	72		A732087
RDL = Reportable Detection Limit				

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

ELEMENTS BY ATOMIC SPECTROSCOPY (SEDIMENT)

Bureau Veritas ID		BCV439		
Sampling Date		2022/09/25 17:00		
COC Number		54389		
	UNITS	WTF-Cell 1-Sludge	RDL	QC Batch
TCLP Extraction Procedure				
Leachate Antimony (Sb)	mg/L	ND	0.10	A733675
Leachate Arsenic (As)	mg/L	ND	0.10	A733675
Leachate Barium (Ba)	mg/L	1.05	0.10	A733675
Leachate Beryllium (Be)	mg/L	ND	0.10	A733675
Leachate Boron (B)	mg/L	0.15	0.10	A733675
Leachate Cadmium (Cd)	mg/L	ND	0.10	A733675
Leachate Chromium (Cr)	mg/L	ND	0.10	A733675
Leachate Cobalt (Co)	mg/L	ND	0.10	A733675
Leachate Copper (Cu)	mg/L	ND	0.10	A733675
Leachate Iron (Fe)	mg/L	ND	0.50	A733675
Leachate Lead (Pb)	mg/L	ND	0.10	A733675
Leachate Mercury (Hg)	mg/L	ND	0.0020	A733675
Leachate Molybdenum (Mo)	mg/L	ND	0.10	A733675
Leachate Nickel (Ni)	mg/L	ND	0.10	A733675
Leachate Selenium (Se)	mg/L	ND	0.10	A733675
Leachate Silver (Ag)	mg/L	ND	0.010	A733675
Leachate Thallium (Tl)	mg/L	ND	0.10	A733675
Leachate Uranium (U)	mg/L	ND	0.10	A733675
Leachate Vanadium (V)	mg/L	ND	0.10	A733675
Leachate Zinc (Zn)	mg/L	ND	0.10	A733675
Leachate Zirconium (Zr)	mg/L	ND	0.10	A733675
Initial pH of Sample	pH	9.49	N/A	A732262
pH after HCl	pH	3.35	N/A	A732262
Final pH of Leachate	pH	6.72	N/A	A732262
pH of Leaching Fluid	pH	4.97	N/A	A732262
Total Metals by ICPMS				
Total Aluminum (Al)	mg/kg	2070	100	A736257
Total Antimony (Sb)	mg/kg	0.14	0.10	A736257
Total Arsenic (As)	mg/kg	2.13	0.20	A736257

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.
N/A = Not Applicable

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ELEMENTS BY ATOMIC SPECTROSCOPY (SEDIMENT)

Bureau Veritas ID		BCV439		
Sampling Date		2022/09/25 17:00		
COC Number		54389		
	UNITS	WTF-Cell 1-Sludge	RDL	QC Batch
Total Barium (Ba)	mg/kg	517	0.10	A736257
Total Beryllium (Be)	mg/kg	ND	0.20	A736257
Total Bismuth (Bi)	mg/kg	ND	0.10	A736257
Total Boron (B)	mg/kg	10.9	1.0	A736257
Total Cadmium (Cd)	mg/kg	0.240	0.050	A736257
Total Calcium (Ca)	mg/kg	358000	100	A736257
Total Chromium (Cr)	mg/kg	3.70	0.50	A736257
Total Cobalt (Co)	mg/kg	2.82	0.10	A736257
Total Copper (Cu)	mg/kg	6.74	0.50	A736257
Total Iron (Fe)	mg/kg	2050	100	A736257
Total Lead (Pb)	mg/kg	3.02	0.10	A736257
Total Lithium (Li)	mg/kg	4.20	0.50	A736257
Total Magnesium (Mg)	mg/kg	8430	100	A736257
Total Manganese (Mn)	mg/kg	113	0.20	A736257
Total Mercury (Hg)	mg/kg	ND	0.050	A736257
Total Molybdenum (Mo)	mg/kg	0.26	0.10	A736257
Total Nickel (Ni)	mg/kg	8.62	0.50	A736257
Total Phosphorus (P)	mg/kg	116	10	A736257
Total Potassium (K)	mg/kg	538	100	A736257
Total Selenium (Se)	mg/kg	ND	0.50	A736257
Total Silver (Ag)	mg/kg	0.098	0.050	A736257
Total Sodium (Na)	mg/kg	1350	100	A736257
Total Strontium (Sr)	mg/kg	617	0.10	A736257
Total Thallium (Tl)	mg/kg	ND	0.050	A736257
Total Tin (Sn)	mg/kg	0.58	0.10	A736257
Total Titanium (Ti)	mg/kg	20.0	1.0	A736257
Total Tungsten (W)	mg/kg	ND	0.50	A736257
Total Uranium (U)	mg/kg	1.73	0.050	A736257
Total Vanadium (V)	mg/kg	5.7	1.0	A736257
Total Zinc (Zn)	mg/kg	29.0	1.0	A736257
Total Zirconium (Zr)	mg/kg	2.27	0.50	A736257

RDL = Reportable Detection Limit

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C274550
Report Date: 2022/10/12

Peace River Hydro Partners
Client Project #: 416-1
Site Location: SITE C
Your P.O. #: 48179

BTEX BY GC-MS (SEDIMENT)

Bureau Veritas ID		BCV439		
Sampling Date		2022/09/25 17:00		
COC Number		54389		
	UNITS	WTF-Cell 1-Sludge	RDL	QC Batch
Volatiles				
Methyl-tert-butylether (MTBE)	mg/kg	ND (1)	0.26	A732009
Benzene	mg/kg	ND (1)	0.013	A732009
Toluene	mg/kg	ND (1)	0.13	A732009
Ethylbenzene	mg/kg	ND (1)	0.026	A732009
m & p-Xylene	mg/kg	ND (1)	0.10	A732009
o-Xylene	mg/kg	ND (1)	0.10	A732009
Styrene	mg/kg	ND (1)	0.078	A732009
Xylenes (Total)	mg/kg	ND	0.10	A732009
VH C6-C10	mg/kg	ND (1)	26	A732009
Surrogate Recovery (%)				
1,4-Difluorobenzene (sur.)	%	102		A732009
4-Bromofluorobenzene (sur.)	%	102		A732009
D10-o-Xylene (sur.)	%	101		A732009
D4-1,2-Dichloroethane (sur.)	%	110		A732009

RDL = Reportable Detection Limit

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

TOTAL PETROLEUM HYDROCARBONS (SEDIMENT)

Bureau Veritas ID		BCV439		
Sampling Date		2022/09/25 17:00		
COC Number		54389		
	UNITS	**WTF-Cell 1-Sludge**	**RDL**	**QC Batch**
Calculated Parameters				
LEPH (C10-C19 less PAH)	mg/kg	ND	100	A731932
HEPH (C19-C32 less PAH)	mg/kg	ND	100	A731932
Hydrocarbons				
EPH (C10-C19)	mg/kg	ND	100	A732111
EPH (C19-C32)	mg/kg	ND	100	A732111
Surrogate Recovery (%)				
O-TERPHENYL (sur.)	%	91		A732111

RDL = Reportable Detection Limit
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	7.7°C

Sample BCV439 [WTF-Cell 1-Sludge] : One or more of the pre-weighed sample vials in the order had an extra label attached. To determine the original vial weight used in calculating the sample weight, the weight of any extra labels was approximated using the weight of a label similar to the extra label attached.

Results relate only to the items tested.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A732006	SEW	Method Blank	Moisture	2022/09/28	ND, RDL=0.30		%	
A732006	SEW	RPD	Moisture	2022/09/28	17		%	20
A732009	YXI	Matrix Spike	1,4-Difluorobenzene (sur.)	2022/09/27		99	%	70 - 130
			4-Bromofluorobenzene (sur.)	2022/09/27		101	%	70 - 130
			D10-o-Xylene (sur.)	2022/09/27		108	%	60 - 130
			D4-1,2-Dichloroethane (sur.)	2022/09/27		105	%	70 - 130
			Methyl-tert-butylether (MTBE)	2022/09/27		92	%	60 - 140
			Benzene	2022/09/27		80	%	60 - 140
			Toluene	2022/09/27		79	%	60 - 140
			Ethylbenzene	2022/09/27		83	%	60 - 140
			m & p-Xylene	2022/09/27		82	%	60 - 140
			o-Xylene	2022/09/27		82	%	60 - 140
			Styrene	2022/09/27		88	%	60 - 140
A732009	YXI	Spiked Blank	1,4-Difluorobenzene (sur.)	2022/09/27		99	%	70 - 130
			4-Bromofluorobenzene (sur.)	2022/09/27		100	%	70 - 130
			D10-o-Xylene (sur.)	2022/09/27		99	%	60 - 130
			D4-1,2-Dichloroethane (sur.)	2022/09/27		101	%	70 - 130
			Methyl-tert-butylether (MTBE)	2022/09/27		95	%	70 - 130
			Benzene	2022/09/27		87	%	70 - 130
			Toluene	2022/09/27		86	%	70 - 130
			Ethylbenzene	2022/09/27		91	%	70 - 130
			m & p-Xylene	2022/09/27		89	%	70 - 130
			o-Xylene	2022/09/27		89	%	70 - 130
			Styrene	2022/09/27		92	%	70 - 130
			VH C6-C10	2022/09/27		99	%	70 - 130
A732009	YXI	Method Blank	1,4-Difluorobenzene (sur.)	2022/09/27		106	%	70 - 130
			4-Bromofluorobenzene (sur.)	2022/09/27		101	%	70 - 130
			D10-o-Xylene (sur.)	2022/09/27		100	%	60 - 130
			D4-1,2-Dichloroethane (sur.)	2022/09/27		104	%	70 - 130
			Methyl-tert-butylether (MTBE)	2022/09/27	ND, RDL=0.10		mg/kg	
			Benzene	2022/09/27	ND, RDL=0.0050		mg/kg	
			Toluene	2022/09/27	ND, RDL=0.050		mg/kg	
			Ethylbenzene	2022/09/27	ND, RDL=0.010		mg/kg	
			m & p-Xylene	2022/09/27	ND, RDL=0.040		mg/kg	
			o-Xylene	2022/09/27	ND, RDL=0.040		mg/kg	
			Styrene	2022/09/27	ND, RDL=0.030		mg/kg	
			Xylenes (Total)	2022/09/27	ND, RDL=0.040		mg/kg	
			VH C6-C10	2022/09/27	ND, RDL=10		mg/kg	
A732009	YXI	RPD	Methyl-tert-butylether (MTBE)	2022/09/27	NC		%	40
			Benzene	2022/09/27	NC		%	40
			Toluene	2022/09/27	NC		%	40
			Ethylbenzene	2022/09/27	NC		%	40
			m & p-Xylene	2022/09/27	NC		%	40

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			o-Xylene	2022/09/27	NC		%	40
			Styrene	2022/09/27	NC		%	40
			Xylenes (Total)	2022/09/27	NC		%	40
			VH C6-C10	2022/09/27	NC		%	40
A732087	JP1	Matrix Spike	D10-ANTHRACENE (sur.)	2022/09/28		79	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2022/09/28		79	%	50 - 140
			D8-NAPHTHALENE (sur.)	2022/09/28		79	%	50 - 140
			TERPHENYL-D14 (sur.)	2022/09/28		73	%	50 - 140
			Naphthalene	2022/09/28		80	%	50 - 140
			1-Methylnaphthalene	2022/09/28		78	%	50 - 140
			2-Methylnaphthalene	2022/09/28		82	%	50 - 140
			Acenaphthylene	2022/09/28		79	%	50 - 140
			Acenaphthene	2022/09/28		79	%	50 - 140
			Fluorene	2022/09/28		81	%	50 - 140
			Phenanthrene	2022/09/28		78	%	50 - 140
			Anthracene	2022/09/28		78	%	50 - 140
			Acridine	2022/09/28		105	%	50 - 140
			Fluoranthene	2022/09/28		74	%	50 - 140
			Pyrene	2022/09/28		74	%	50 - 140
			Benzo(a)anthracene	2022/09/28		76	%	50 - 140
			Chrysene	2022/09/28		75	%	50 - 140
			Benzo(b&j)fluoranthene	2022/09/28		79	%	50 - 140
			Benzo(b)fluoranthene	2022/09/28		78	%	50 - 140
			Benzo(k)fluoranthene	2022/09/28		82	%	50 - 140
			Benzo(a)pyrene	2022/09/28		94	%	50 - 140
			Indeno(1,2,3-cd)pyrene	2022/09/28		82	%	50 - 140
			Dibenz(a,h)anthracene	2022/09/28		86	%	50 - 140
			Benzo(g,h,i)perylene	2022/09/28		80	%	50 - 140
A732087	JP1	Spiked Blank	D10-ANTHRACENE (sur.)	2022/09/27		80	%	50 - 140
			D8-ACENAPHTHYLENE (sur.)	2022/09/27		75	%	50 - 140
			D8-NAPHTHALENE (sur.)	2022/09/27		72	%	50 - 140
			TERPHENYL-D14 (sur.)	2022/09/27		75	%	50 - 140
			Naphthalene	2022/09/27		78	%	50 - 140
			1-Methylnaphthalene	2022/09/27		77	%	50 - 140
			2-Methylnaphthalene	2022/09/27		80	%	50 - 140
			Acenaphthylene	2022/09/27		78	%	50 - 140
			Acenaphthene	2022/09/27		78	%	50 - 140
			Fluorene	2022/09/27		80	%	50 - 140
			Phenanthrene	2022/09/27		78	%	50 - 140
			Anthracene	2022/09/27		78	%	50 - 140
			Acridine	2022/09/27		105	%	50 - 140
			Fluoranthene	2022/09/27		74	%	50 - 140
			Pyrene	2022/09/27		74	%	50 - 140
			Benzo(a)anthracene	2022/09/27		76	%	50 - 140
			Chrysene	2022/09/27		76	%	50 - 140
			Benzo(b&j)fluoranthene	2022/09/27		80	%	50 - 140
			Benzo(b)fluoranthene	2022/09/27		77	%	50 - 140
			Benzo(k)fluoranthene	2022/09/27		83	%	50 - 140
			Benzo(a)pyrene	2022/09/27		92	%	50 - 140
			Indeno(1,2,3-cd)pyrene	2022/09/27		81	%	50 - 140
			Dibenz(a,h)anthracene	2022/09/27		83	%	50 - 140
			Benzo(g,h,i)perylene	2022/09/27		79	%	50 - 140
A732087	JP1	Method Blank	D10-ANTHRACENE (sur.)	2022/09/27		78	%	50 - 140

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			D8-ACENAPHTHYLENE (sur.)	2022/09/27		71	%	50 - 140
			D8-NAPHTHALENE (sur.)	2022/09/27		66	%	50 - 140
			TERPHENYL-D14 (sur.)	2022/09/27		74	%	50 - 140
			Naphthalene	2022/09/27	ND, RDL=0.010		mg/kg	
			1-Methylnaphthalene	2022/09/27	ND, RDL=0.050		mg/kg	
			2-Methylnaphthalene	2022/09/27	ND, RDL=0.020		mg/kg	
			Acenaphthylene	2022/09/27	ND, RDL=0.0050		mg/kg	
			Acenaphthene	2022/09/27	ND, RDL=0.0050		mg/kg	
			Fluorene	2022/09/27	ND, RDL=0.020		mg/kg	
			Phenanthrene	2022/09/27	ND, RDL=0.010		mg/kg	
			Anthracene	2022/09/27	ND, RDL=0.0040		mg/kg	
			Acridine	2022/09/27	ND, RDL=0.050		mg/kg	
			Fluoranthene	2022/09/27	ND, RDL=0.020		mg/kg	
			Pyrene	2022/09/27	ND, RDL=0.020		mg/kg	
			Benzo(a)anthracene	2022/09/27	ND, RDL=0.020		mg/kg	
			Chrysene	2022/09/27	ND, RDL=0.020		mg/kg	
			Benzo(b&j)fluoranthene	2022/09/27	ND, RDL=0.020		mg/kg	
			Benzo(b)fluoranthene	2022/09/27	ND, RDL=0.020		mg/kg	
			Benzo(k)fluoranthene	2022/09/27	ND, RDL=0.020		mg/kg	
			Benzo(a)pyrene	2022/09/27	ND, RDL=0.020		mg/kg	
			Indeno(1,2,3-cd)pyrene	2022/09/27	ND, RDL=0.020		mg/kg	
			Dibenz(a,h)anthracene	2022/09/27	ND, RDL=0.020		mg/kg	
			Benzo(g,h,i)perylene	2022/09/27	ND, RDL=0.050		mg/kg	
A732087	JP1	RPD	Naphthalene	2022/09/28	NC		%	50
			1-Methylnaphthalene	2022/09/28	NC		%	50
			2-Methylnaphthalene	2022/09/28	NC		%	50
			Acenaphthylene	2022/09/28	NC		%	50
			Acenaphthene	2022/09/28	NC		%	50
			Fluorene	2022/09/28	NC		%	50
			Phenanthrene	2022/09/28	NC		%	50
			Anthracene	2022/09/28	NC		%	50
			Fluoranthene	2022/09/28	NC		%	50
			Pyrene	2022/09/28	NC		%	50
			Benzo(a)anthracene	2022/09/28	NC		%	50

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Chrysene	2022/09/28	NC		%	50
			Benzo(b&j)fluoranthene	2022/09/28	NC		%	50
			Benzo(b)fluoranthene	2022/09/28	NC		%	50
			Benzo(k)fluoranthene	2022/09/28	NC		%	50
			Benzo(a)pyrene	2022/09/28	NC		%	50
			Indeno(1,2,3-cd)pyrene	2022/09/28	NC		%	50
			Dibenz(a,h)anthracene	2022/09/28	NC		%	50
			Benzo(g,h,i)perylene	2022/09/28	NC		%	50
A732111	PN2	Matrix Spike	O-TERPHENYL (sur.)	2022/09/27		68	%	60 - 140
			EPH (C10-C19)	2022/09/27		90	%	60 - 140
			EPH (C19-C32)	2022/09/27		86	%	60 - 140
A732111	PN2	Spiked Blank	O-TERPHENYL (sur.)	2022/09/27		76	%	60 - 140
			EPH (C10-C19)	2022/09/27		105	%	70 - 130
			EPH (C19-C32)	2022/09/27		93	%	70 - 130
A732111	PN2	Method Blank	O-TERPHENYL (sur.)	2022/09/27		63	%	60 - 140
			EPH (C10-C19)	2022/09/27	ND, RDL=100		mg/kg	
			EPH (C19-C32)	2022/09/27	ND, RDL=100		mg/kg	
A732111	PN2	RPD	EPH (C10-C19)	2022/09/27	NC		%	40
			EPH (C19-C32)	2022/09/27	NC		%	40
A732262	NGE	Method Blank	Initial pH of Sample	2022/09/28	4.97		pH	
			Final pH of Leachate	2022/09/28	4.93		pH	
			pH of Leaching Fluid	2022/09/28	4.97		pH	
A732262	NGE	RPD	Initial pH of Sample	2022/09/28	1.3		%	N/A
			pH after HCl	2022/09/28	1.4		%	N/A
			Final pH of Leachate	2022/09/28	0.20		%	N/A
			pH of Leaching Fluid	2022/09/28	0		%	N/A
A733675	LWA	Matrix Spike	Leachate Antimony (Sb)	2022/09/28		100	%	75 - 125
			Leachate Arsenic (As)	2022/09/28		100	%	75 - 125
			Leachate Barium (Ba)	2022/09/28		99	%	75 - 125
			Leachate Beryllium (Be)	2022/09/28		97	%	75 - 125
			Leachate Boron (B)	2022/09/28		101	%	75 - 125
			Leachate Cadmium (Cd)	2022/09/28		100	%	75 - 125
			Leachate Chromium (Cr)	2022/09/28		99	%	75 - 125
			Leachate Cobalt (Co)	2022/09/28		100	%	75 - 125
			Leachate Copper (Cu)	2022/09/28		99	%	75 - 125
			Leachate Iron (Fe)	2022/09/28		97	%	75 - 125
			Leachate Lead (Pb)	2022/09/28		98	%	75 - 125
			Leachate Mercury (Hg)	2022/09/28		101	%	75 - 125
			Leachate Molybdenum (Mo)	2022/09/28		100	%	75 - 125
			Leachate Nickel (Ni)	2022/09/28		94	%	75 - 125
			Leachate Selenium (Se)	2022/09/28		99	%	75 - 125
			Leachate Silver (Ag)	2022/09/28		89	%	75 - 125
			Leachate Thallium (Tl)	2022/09/28		94	%	75 - 125
			Leachate Uranium (U)	2022/09/28		97	%	75 - 125
			Leachate Vanadium (V)	2022/09/28		99	%	75 - 125
			Leachate Zinc (Zn)	2022/09/28		96	%	75 - 125
			Leachate Zirconium (Zr)	2022/09/28		101	%	75 - 125
A733675	LWA	Spiked Blank	Leachate Antimony (Sb)	2022/09/28		110	%	75 - 125
			Leachate Arsenic (As)	2022/09/28		106	%	75 - 125
			Leachate Barium (Ba)	2022/09/28		107	%	75 - 125
			Leachate Beryllium (Be)	2022/09/28		103	%	75 - 125

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachate Boron (B)	2022/09/28		104	%	75 - 125
			Leachate Cadmium (Cd)	2022/09/28		106	%	75 - 125
			Leachate Chromium (Cr)	2022/09/28		104	%	75 - 125
			Leachate Cobalt (Co)	2022/09/28		108	%	75 - 125
			Leachate Copper (Cu)	2022/09/28		107	%	75 - 125
			Leachate Iron (Fe)	2022/09/28		106	%	75 - 125
			Leachate Lead (Pb)	2022/09/28		107	%	75 - 125
			Leachate Mercury (Hg)	2022/09/28		106	%	75 - 125
			Leachate Molybdenum (Mo)	2022/09/28		107	%	75 - 125
			Leachate Nickel (Ni)	2022/09/28		100	%	75 - 125
			Leachate Selenium (Se)	2022/09/28		106	%	75 - 125
			Leachate Silver (Ag)	2022/09/28		95	%	75 - 125
			Leachate Thallium (Tl)	2022/09/28		102	%	75 - 125
			Leachate Uranium (U)	2022/09/28		104	%	75 - 125
			Leachate Vanadium (V)	2022/09/28		104	%	75 - 125
			Leachate Zinc (Zn)	2022/09/28		102	%	75 - 125
			Leachate Zirconium (Zr)	2022/09/28		107	%	75 - 125
A733675	LWA	Method Blank	Leachate Antimony (Sb)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Arsenic (As)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Barium (Ba)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Beryllium (Be)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Boron (B)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Cadmium (Cd)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Chromium (Cr)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Cobalt (Co)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Copper (Cu)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Iron (Fe)	2022/09/28	ND, RDL=0.50		mg/L	
			Leachate Lead (Pb)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Mercury (Hg)	2022/09/28	ND, RDL=0.0020		mg/L	
			Leachate Molybdenum (Mo)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Nickel (Ni)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Selenium (Se)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Silver (Ag)	2022/09/28	ND, RDL=0.010		mg/L	
			Leachate Thallium (Tl)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Uranium (U)	2022/09/28	ND, RDL=0.10		mg/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachate Vanadium (V)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Zinc (Zn)	2022/09/28	ND, RDL=0.10		mg/L	
			Leachate Zirconium (Zr)	2022/09/28	ND, RDL=0.10		mg/L	
A733675	LWA	RPD	Leachate Antimony (Sb)	2022/09/28	NC		%	35
			Leachate Arsenic (As)	2022/09/28	NC		%	35
			Leachate Barium (Ba)	2022/09/28	1.7		%	35
			Leachate Beryllium (Be)	2022/09/28	NC		%	35
			Leachate Boron (B)	2022/09/28	NC		%	35
			Leachate Cadmium (Cd)	2022/09/28	NC		%	35
			Leachate Chromium (Cr)	2022/09/28	NC		%	35
			Leachate Cobalt (Co)	2022/09/28	NC		%	35
			Leachate Copper (Cu)	2022/09/28	NC		%	35
			Leachate Iron (Fe)	2022/09/28	0.061		%	35
			Leachate Lead (Pb)	2022/09/28	NC		%	35
			Leachate Mercury (Hg)	2022/09/28	NC		%	35
			Leachate Molybdenum (Mo)	2022/09/28	NC		%	35
			Leachate Nickel (Ni)	2022/09/28	NC		%	35
			Leachate Selenium (Se)	2022/09/28	NC		%	35
			Leachate Silver (Ag)	2022/09/28	NC		%	35
			Leachate Thallium (Tl)	2022/09/28	NC		%	35
			Leachate Uranium (U)	2022/09/28	NC		%	35
			Leachate Vanadium (V)	2022/09/28	NC		%	35
			Leachate Zinc (Zn)	2022/09/28	NC		%	35
			Leachate Zirconium (Zr)	2022/09/28	NC		%	35
A736257	SOM	Matrix Spike	Total Aluminum (Al)	2022/09/30		NC	%	75 - 125
			Total Antimony (Sb)	2022/09/30		101	%	75 - 125
			Total Arsenic (As)	2022/09/30		104	%	75 - 125
			Total Barium (Ba)	2022/09/30		105	%	75 - 125
			Total Beryllium (Be)	2022/09/30		101	%	75 - 125
			Total Bismuth (Bi)	2022/09/30		101	%	75 - 125
			Total Boron (B)	2022/09/30		101	%	75 - 125
			Total Cadmium (Cd)	2022/09/30		103	%	75 - 125
			Total Calcium (Ca)	2022/09/30		NC	%	75 - 125
			Total Chromium (Cr)	2022/09/30		101	%	75 - 125
			Total Cobalt (Co)	2022/09/30		104	%	75 - 125
			Total Copper (Cu)	2022/09/30		102	%	75 - 125
			Total Iron (Fe)	2022/09/30		NC	%	75 - 125
			Total Lead (Pb)	2022/09/30		105	%	75 - 125
			Total Lithium (Li)	2022/09/30		99	%	75 - 125
			Total Magnesium (Mg)	2022/09/30		NC	%	75 - 125
			Total Manganese (Mn)	2022/09/30		NC	%	75 - 125
			Total Mercury (Hg)	2022/09/30		105	%	75 - 125
			Total Molybdenum (Mo)	2022/09/30		106	%	75 - 125
			Total Nickel (Ni)	2022/09/30		98	%	75 - 125
			Total Phosphorus (P)	2022/09/30		89	%	75 - 125
			Total Potassium (K)	2022/09/30		103	%	75 - 125
			Total Selenium (Se)	2022/09/30		105	%	75 - 125
			Total Silver (Ag)	2022/09/30		90	%	75 - 125
			Total Sodium (Na)	2022/09/30		134 (1)	%	75 - 125
			Total Strontium (Sr)	2022/09/30		110	%	75 - 125

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Thallium (Tl)	2022/09/30		101	%	75 - 125
			Total Tin (Sn)	2022/09/30		108	%	75 - 125
			Total Titanium (Ti)	2022/09/30		NC	%	75 - 125
			Total Tungsten (W)	2022/09/30		92	%	75 - 125
			Total Uranium (U)	2022/09/30		101	%	75 - 125
			Total Vanadium (V)	2022/09/30		104	%	75 - 125
			Total Zinc (Zn)	2022/09/30		98	%	75 - 125
			Total Zirconium (Zr)	2022/09/30		111	%	75 - 125
A736257	SOM	QC Standard	Total Aluminum (Al)	2022/09/30		91	%	70 - 130
			Total Antimony (Sb)	2022/09/30		114	%	70 - 130
			Total Arsenic (As)	2022/09/30		93	%	70 - 130
			Total Barium (Ba)	2022/09/30		98	%	70 - 130
			Total Beryllium (Be)	2022/09/30		103	%	70 - 130
			Total Cadmium (Cd)	2022/09/30		93	%	70 - 130
			Total Calcium (Ca)	2022/09/30		101	%	70 - 130
			Total Chromium (Cr)	2022/09/30		98	%	70 - 130
			Total Cobalt (Co)	2022/09/30		99	%	70 - 130
			Total Copper (Cu)	2022/09/30		101	%	70 - 130
			Total Iron (Fe)	2022/09/30		101	%	70 - 130
			Total Lead (Pb)	2022/09/30		115	%	70 - 130
			Total Lithium (Li)	2022/09/30		105	%	70 - 130
			Total Magnesium (Mg)	2022/09/30		107	%	70 - 130
			Total Manganese (Mn)	2022/09/30		101	%	70 - 130
			Total Mercury (Hg)	2022/09/30		112	%	70 - 130
			Total Molybdenum (Mo)	2022/09/30		108	%	70 - 130
			Total Nickel (Ni)	2022/09/30		104	%	70 - 130
			Total Phosphorus (P)	2022/09/30		91	%	70 - 130
			Total Potassium (K)	2022/09/30		86	%	70 - 130
			Total Silver (Ag)	2022/09/30		120	%	70 - 130
			Total Sodium (Na)	2022/09/30		91	%	70 - 130
			Total Strontium (Sr)	2022/09/30		103	%	70 - 130
			Total Thallium (Tl)	2022/09/30		90	%	70 - 130
			Total Tin (Sn)	2022/09/30		99	%	70 - 130
			Total Uranium (U)	2022/09/30		99	%	70 - 130
			Total Vanadium (V)	2022/09/30		101	%	70 - 130
			Total Zinc (Zn)	2022/09/30		103	%	70 - 130
A736257	SOM	Spiked Blank	Total Aluminum (Al)	2022/09/30		101	%	75 - 125
			Total Antimony (Sb)	2022/09/30		106	%	75 - 125
			Total Arsenic (As)	2022/09/30		107	%	75 - 125
			Total Barium (Ba)	2022/09/30		104	%	75 - 125
			Total Beryllium (Be)	2022/09/30		104	%	75 - 125
			Total Bismuth (Bi)	2022/09/30		103	%	75 - 125
			Total Boron (B)	2022/09/30		106	%	75 - 125
			Total Cadmium (Cd)	2022/09/30		103	%	75 - 125
			Total Calcium (Ca)	2022/09/30		107	%	75 - 125
			Total Chromium (Cr)	2022/09/30		103	%	75 - 125
			Total Cobalt (Co)	2022/09/30		108	%	75 - 125
			Total Copper (Cu)	2022/09/30		105	%	75 - 125
			Total Iron (Fe)	2022/09/30		105	%	75 - 125
			Total Lead (Pb)	2022/09/30		104	%	75 - 125
			Total Lithium (Li)	2022/09/30		100	%	75 - 125
			Total Magnesium (Mg)	2022/09/30		105	%	75 - 125
			Total Manganese (Mn)	2022/09/30		103	%	75 - 125

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Mercury (Hg)	2022/09/30		105	%	75 - 125
			Total Molybdenum (Mo)	2022/09/30		104	%	75 - 125
			Total Nickel (Ni)	2022/09/30		102	%	75 - 125
			Total Phosphorus (P)	2022/09/30		100	%	75 - 125
			Total Potassium (K)	2022/09/30		103	%	75 - 125
			Total Selenium (Se)	2022/09/30		106	%	75 - 125
			Total Silver (Ag)	2022/09/30		89	%	75 - 125
			Total Sodium (Na)	2022/09/30		106	%	75 - 125
			Total Strontium (Sr)	2022/09/30		100	%	75 - 125
			Total Thallium (Tl)	2022/09/30		101	%	75 - 125
			Total Tin (Sn)	2022/09/30		107	%	75 - 125
			Total Titanium (Ti)	2022/09/30		99	%	75 - 125
			Total Tungsten (W)	2022/09/30		108	%	75 - 125
			Total Uranium (U)	2022/09/30		100	%	75 - 125
			Total Vanadium (V)	2022/09/30		102	%	75 - 125
			Total Zinc (Zn)	2022/09/30		102	%	75 - 125
			Total Zirconium (Zr)	2022/09/30		105	%	75 - 125
A736257	SOM	Method Blank	Total Aluminum (Al)	2022/09/30	ND, RDL=100		mg/kg	
			Total Antimony (Sb)	2022/09/30	ND, RDL=0.10		mg/kg	
			Total Arsenic (As)	2022/09/30	ND, RDL=0.20		mg/kg	
			Total Barium (Ba)	2022/09/30	ND, RDL=0.10		mg/kg	
			Total Beryllium (Be)	2022/09/30	ND, RDL=0.20		mg/kg	
			Total Bismuth (Bi)	2022/09/30	ND, RDL=0.10		mg/kg	
			Total Boron (B)	2022/09/30	ND, RDL=1.0		mg/kg	
			Total Cadmium (Cd)	2022/09/30	ND, RDL=0.050		mg/kg	
			Total Calcium (Ca)	2022/09/30	ND, RDL=100		mg/kg	
			Total Chromium (Cr)	2022/09/30	ND, RDL=0.50		mg/kg	
			Total Cobalt (Co)	2022/09/30	ND, RDL=0.10		mg/kg	
			Total Copper (Cu)	2022/09/30	ND, RDL=0.50		mg/kg	
			Total Iron (Fe)	2022/09/30	ND, RDL=100		mg/kg	
			Total Lead (Pb)	2022/09/30	ND, RDL=0.10		mg/kg	
			Total Lithium (Li)	2022/09/30	ND, RDL=0.50		mg/kg	
			Total Magnesium (Mg)	2022/09/30	ND, RDL=100		mg/kg	
			Total Manganese (Mn)	2022/09/30	ND, RDL=0.20		mg/kg	
			Total Mercury (Hg)	2022/09/30	ND, RDL=0.050		mg/kg	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Molybdenum (Mo)	2022/09/30	ND, RDL=0.10		mg/kg	
			Total Nickel (Ni)	2022/09/30	ND, RDL=0.50		mg/kg	
			Total Phosphorus (P)	2022/09/30	ND, RDL=10		mg/kg	
			Total Potassium (K)	2022/09/30	ND, RDL=100		mg/kg	
			Total Selenium (Se)	2022/09/30	ND, RDL=0.50		mg/kg	
			Total Silver (Ag)	2022/09/30	ND, RDL=0.050		mg/kg	
			Total Sodium (Na)	2022/09/30	ND, RDL=100		mg/kg	
			Total Strontium (Sr)	2022/09/30	ND, RDL=0.10		mg/kg	
			Total Thallium (Tl)	2022/09/30	ND, RDL=0.050		mg/kg	
			Total Tin (Sn)	2022/09/30	ND, RDL=0.10		mg/kg	
			Total Titanium (Ti)	2022/09/30	ND, RDL=1.0		mg/kg	
			Total Tungsten (W)	2022/09/30	ND, RDL=0.50		mg/kg	
			Total Uranium (U)	2022/09/30	ND, RDL=0.050		mg/kg	
			Total Vanadium (V)	2022/09/30	ND, RDL=1.0		mg/kg	
			Total Zinc (Zn)	2022/09/30	ND, RDL=1.0		mg/kg	
			Total Zirconium (Zr)	2022/09/30	ND, RDL=0.50		mg/kg	
A736257	SOM	RPD	Total Aluminum (Al)	2022/09/30	0.50		%	40
			Total Antimony (Sb)	2022/09/30	24		%	30
			Total Arsenic (As)	2022/09/30	6.8		%	30
			Total Barium (Ba)	2022/09/30	0.48		%	40
			Total Beryllium (Be)	2022/09/30	0.65		%	30
			Total Bismuth (Bi)	2022/09/30	NC		%	30
			Total Boron (B)	2022/09/30	5.1		%	30
			Total Cadmium (Cd)	2022/09/30	15		%	30
			Total Calcium (Ca)	2022/09/30	0.14		%	30
			Total Chromium (Cr)	2022/09/30	0.95		%	30
			Total Cobalt (Co)	2022/09/30	1.1		%	30
			Total Copper (Cu)	2022/09/30	1.6		%	30
			Total Iron (Fe)	2022/09/30	3.2		%	30
			Total Lead (Pb)	2022/09/30	2.3		%	40
			Total Lithium (Li)	2022/09/30	1.0		%	30
			Total Magnesium (Mg)	2022/09/30	2.5		%	30
			Total Manganese (Mn)	2022/09/30	2.0		%	30
			Total Mercury (Hg)	2022/09/30	27		%	40
			Total Molybdenum (Mo)	2022/09/30	4.1		%	40
			Total Nickel (Ni)	2022/09/30	3.2		%	30
			Total Phosphorus (P)	2022/09/30	2.0		%	30
			Total Potassium (K)	2022/09/30	0.068		%	40

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Selenium (Se)	2022/09/30	NC		%	30
			Total Silver (Ag)	2022/09/30	0.90		%	40
			Total Sodium (Na)	2022/09/30	1.5		%	40
			Total Strontium (Sr)	2022/09/30	0.27		%	40
			Total Thallium (Tl)	2022/09/30	2.3		%	30
			Total Tin (Sn)	2022/09/30	1.3		%	40
			Total Titanium (Ti)	2022/09/30	0.019		%	40
			Total Tungsten (W)	2022/09/30	NC		%	40
			Total Uranium (U)	2022/09/30	3.7		%	30
			Total Vanadium (V)	2022/09/30	1.2		%	30
			Total Zinc (Zn)	2022/09/30	1.2		%	30
			Total Zirconium (Zr)	2022/09/30	1.2		%	40
A736279	CJY	Spiked Blank	Soluble (2:1) pH	2022/09/30		99	%	97 - 103
A736279	CJY	RPD	Soluble (2:1) pH	2022/09/30	0.40		%	N/A
A751446	MPE	Matrix Spike [BCV439-01]	Total Oil and grease	2022/10/11		97	%	65 - 135
A751446	MPE	Spiked Blank	Total Oil and grease	2022/10/11		97	%	65 - 135
A751446	MPE	Method Blank	Total Oil and grease	2022/10/11	ND, RDL=100		ug/g	
A751446	MPE	RPD [BCV439-01]	Total Oil and grease	2022/10/11	6.8 (2)		%	30
A751707	PL	QC Standard	Total Carbon	2022/10/11		85	%	75 - 125
			Total Sulphur (S)	2022/10/11		106	%	75 - 125
			Total Nitrogen (N_2)	2022/10/11		100	%	75 - 125
A751707	PL	Spiked Blank	Total Carbon	2022/10/11		99	%	75 - 125
			Total Sulphur (S)	2022/10/11		95	%	75 - 125
			Total Nitrogen (N_2)	2022/10/11		99	%	75 - 125
A751707	PL	Method Blank	Total Carbon	2022/10/11	ND, RDL=0.050		%	
			Total Sulphur (S)	2022/10/11	ND, RDL=0.060		%	
			Total Nitrogen (N_2)	2022/10/11	ND, RDL=0.20		%	
A751707	PL	RPD	Total Nitrogen (N_2)	2022/10/11	2.0		%	30

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Detection limits raised due to high moisture content.

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Bureau Veritas Job #: C274550
Report Date: 2022/10/12

Peace River Hydro Partners
Client Project #: 416-1
Site Location: SITE C
Your P.O. #: 48179

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

David Huang, M.Sc., P.Chem., QP, Scientific Services Manager

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Custody Tracking Form

W54389

Please use this form for custody tracking when submitting the work instructions via eCOC (electronic Chain of Custody). Please ensure your form has a barcode or a Bureau Veritas eCOC confirmation number in the top right hand side. This number links your electronic submission to your samples. This form should be placed in the cooler with your samples.

First Sample: WTF-Cell 1-Sludge
Last Sample: WTF-Cell 1-Sludge
Sample Count: 1

Relinquished By				Received By			
Perry Savage	<original signed by>	Date	2022/09/26	D. Malmloff	<original signed by>	Date	2022/09/26
		Time (24 HR)	11:00			Time (24 HR)	11:40
		Date		Edelane Caoili	<original signed by>	Date	2022/09/27
		Time (24 HR)				Time (24 HR)	0850
		Date				Date	
		Time (24 HR)				Time (24 HR)	

Unless otherwise agreed to, submissions and use of services are governed by Bureau Veritas' standard terms and conditions which can be found at www.bvna.com.

Triage Information

Sampled By (Print): PS

# of Coolers/Pkgs: 1

Rush ☐ Immediate Test ☐ Food Residue ☐

Micro ☐ Food Chemistry ☐

*** LABORATORY USE ONLY ***

Received At: FSJ

Lab Comments:

Labeled By:

Verified By:

C274550_COC

Custody Seal		Cooling Media	Temperature °C		
Present (Y/N)	Intact (Y/N)	Present (Y/N)	1	2	3
NO		Yes	8	7	8
yes	yes	yes	9	8	6
yes	yes	yes	9	7	7

Drinking Water Metals Preservation Check Done (Circle) YES NO

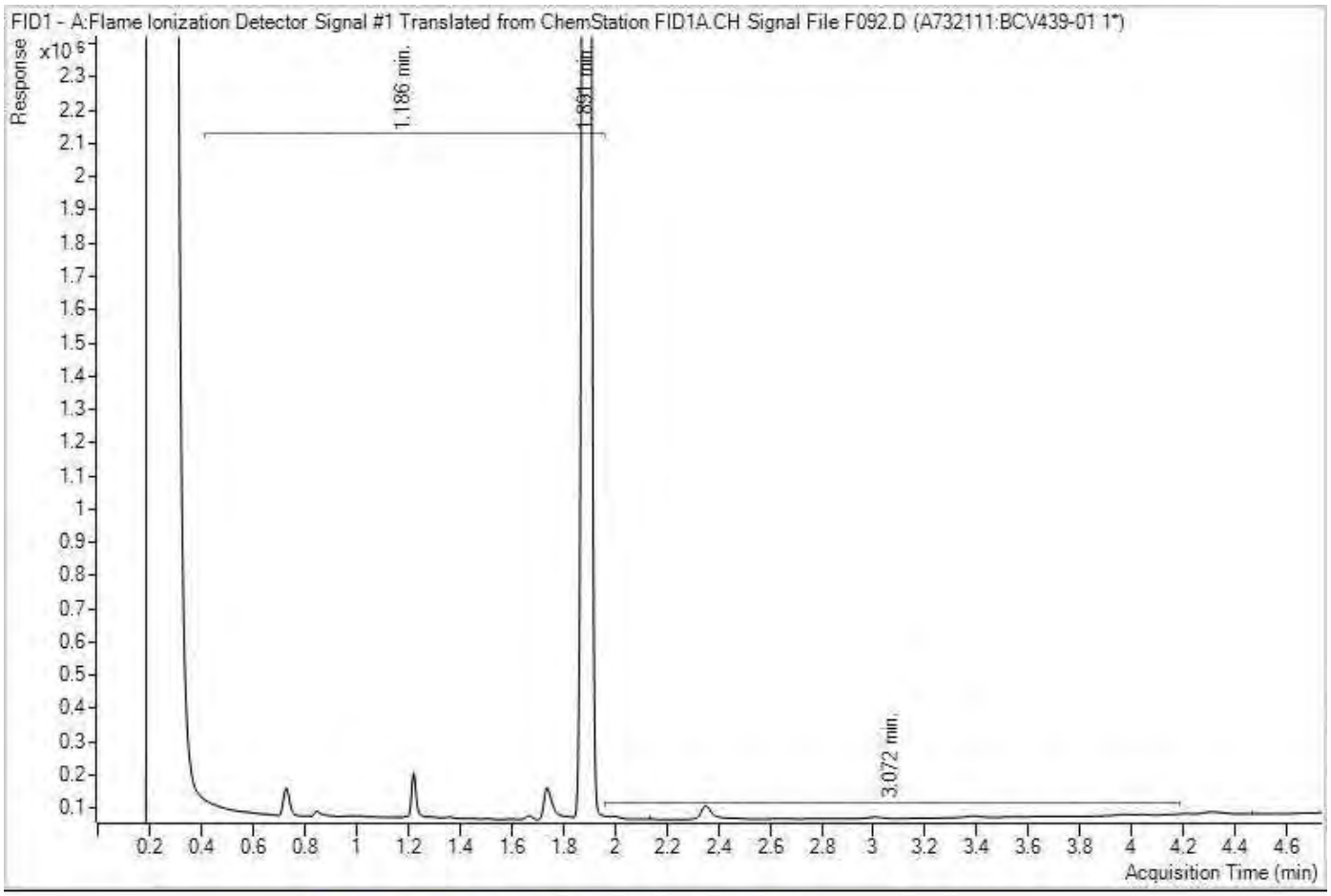
COR FCD-00383/3

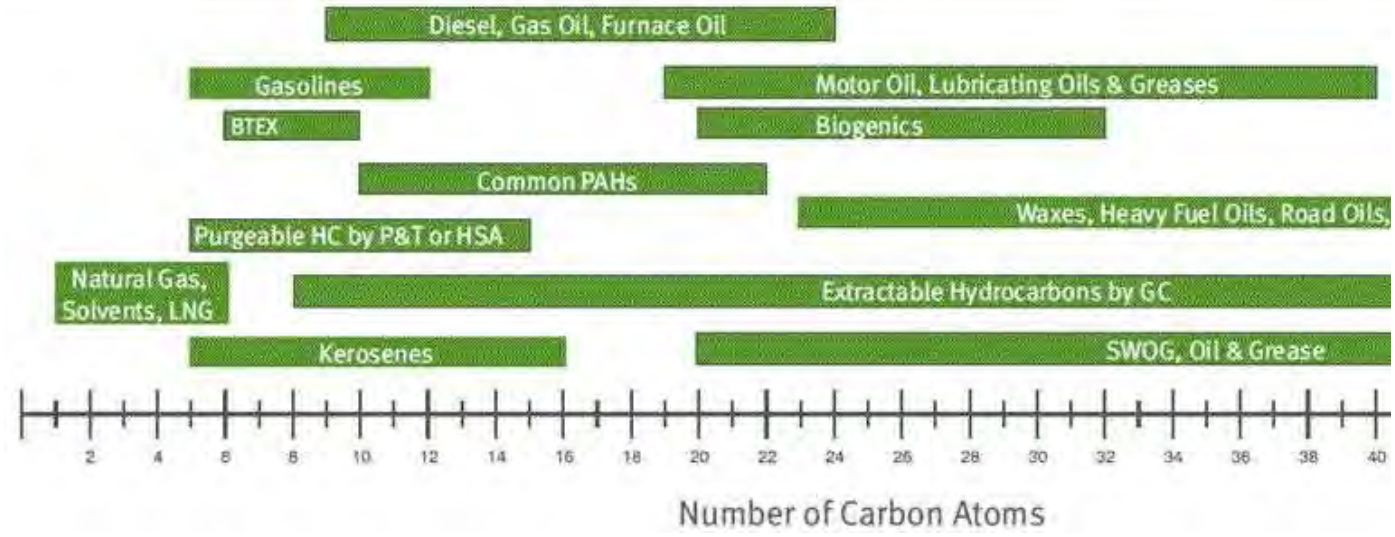
Page 1 of 1

Bureau Veritas Job #: C274550
Report Date: 2022/10/12
Bureau Veritas Sample: BCV439

Peace River Hydro Partners
Client Project #: 416-1
Site Reference: SITE C
Client ID: WTF-Cell 1-Sludge

EPH in Soil by GC/FID Chromatogram





Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

eCOC: W54389

Project Information:	C274550
Job Received:	2022/09/26 09:40
Expected TAT:	Standard TAT
Expected Arrival:	2022/09/26 11:00
Submitted By:	Axel Chore
Submitted To:	Burnaby ENV: 4606 Canada Way

Invoice Information

Attn: ACCOUNTS PAYABLE
Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC , V1J 4H6
Email to:
accounts.payable@prhp.ca

Report Information

Attn: Kael Hanak
Peace River Hydro Partners
Box 6100 Site C Dam
Fort St John , BC , V1J 4H6
Email to:
kael.hanak@prhp.ca

Project Information

Quote #:	B61674, C10269
PO/AFE#:	48179
Project #:	
Site Location:	SITE C

Analytical Summary

A: Standard TAT

Client Sample ID	Clnt Ref	Sampling Date/Time	Matrix	#Cont	BC BTEX/VPH in Soil	BC LEPH/HEPH Petroleum Hydrocarbons	CSR/CCME Metals in Soil with Hg	TCLP Metals	Carbon, Nitrogen, Sulphur - Combustion	Total Oil and Grease
WTF-Cell 1-Sludge	1	2022/09/25 17:00	SEDIMENT	6	A	A	A	A	A	A

Deadlines are estimates only and are subject to change. Please refer to your Job Confirmation report for final due dates.

Submission Information

# of Samples:	1
Details:	Please use Scenario 14891

Appendix 3-A: 2022 In Situ Continuous Sonde Measurement Water Quality Data (i.e., continuously logged measurements from in-pond fixed probes)

PEACE RIVER
HYDRO PARTNERS

RSEM-R6W													
Day	**Number of measurements***	**Temperature (°C)**			**Specific Conductivity (µS/cm)**			**pH**			**Turbidity (NTU)**		
		Minimum	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**
01-Jan	96	-0.11	-0.09	0.17	609.5	768.9	807.1	6.83	6.87	6.96	6.7	10.1	32.7
02-Jan	96	-0.10	-0.09	0.02	662.2	786.7	800.3	6.84	6.90	6.92	6.4	8.8	30.2
03-Jan	96	-0.10	-0.09	0.02	702.3	769.2	802.5	6.79	6.83	6.90	6.5	11.1	43.3
04-Jan	96	-0.11	-0.10	-0.07	622.9	737.9	760.6	6.79	6.81	6.82	6.6	9.2	63.3
05-Jan	96	-11.11	-0.23	-0.10	3.2	436.2	756.9	6.78	6.92	7.83	6.6	554.1	26235.0
06-Jan	96	-0.10	-0.10	-0.10	35.6	49.3	70.7	6.78	6.91	7.17	642.9	726.2	798.8
07-Jan	96	-0.10	-0.09	0.00	54.8	589.7	781.6	6.76	6.80	6.82	5.2	130.6	831.6
08-Jan	96	-0.10	-0.08	0.08	763.0	779.4	790.0	6.80	6.82	6.84	5.0	6.6	14.3
09-Jan	96	-0.10	-0.08	0.14	612.0	783.2	793.4	6.80	6.81	6.83	4.9	6.9	67.1
10-Jan	96	-0.10	-0.04	0.06	736.9	786.9	797.7	6.76	6.80	6.83	4.2	5.9	12.4
11-Jan	96	-0.11	-0.09	0.10	725.4	759.3	797.3	6.69	6.74	6.81	3.3	9.4	21.9
12-Jan	96	-0.10	-0.07	0.32	712.3	741.9	802.5	6.70	6.80	6.93	3.8	9.5	27.6
13-Jan	96	-0.10	-0.08	0.06	716.4	759.2	841.8	6.92	7.04	7.30	7.9	48.5	207.2
14-Jan	96	-0.10	-0.08	-0.01	716.2	757.2	844.1	7.31	7.61	7.81	106.7	533.9	4312.5
15-Jan	96	-0.09	0.08	2.28	0.6	802.9	1122.9	6.96	7.81	7.99	0.0	325.3	660.1
16-Jan	46	-0.10	0.03	0.34	679.4	856.4	1137.1	7.71	7.82	7.95	269.7	942.3	5380.1
17-Jan													
18-Jan													
19-Jan	30	-0.10	-0.07	0.01	106.9	666.9	742.4	7.92	7.98	8.24	38.0	59.2	143.8
20-Jan	96	-0.09	-0.08	-0.06	528.3	738.9	774.0	7.89	7.96	8.02	29.2	46.0	237.4
21-Jan	96	-0.10	-0.09	-0.08	468.9	739.1	753.4	7.76	7.91	8.01	26.0	34.0	99.7
22-Jan	96	-0.09	-0.02	0.13	537.1	732.2	757.8	7.80	7.85	7.89	26.8	39.3	154.0
23-Jan	96	-0.07	0.11	0.34	550.2	667.2	725.3	7.78	7.89	8.00	45.8	66.9	120.1
24-Jan	96	-0.08	-0.01	1.15	550.2	618.0	681.3	7.91	8.05	8.41	13.0	38.8	77.0
25-Jan	96	-0.03	0.05	0.19	664.5	683.2	709.1	8.06	8.09	8.13	9.8	18.5	36.4
26-Jan	96	-0.05	-0.02	0.08	672.5	701.1	726.3	7.95	8.03	8.09	5.6	14.4	25.3
27-Jan	96	-0.05	-0.03	0.02	684.8	724.1	740.2	7.39	7.71	8.03	8.8	16.0	66.9
28-Jan	96	-0.05	-0.03	0.01	727.8	738.9	745.5	7.39	7.46	7.55	9.4	16.8	44.7
29-Jan	96	-0.05	-0.03	0.00	740.9	750.3	757.4	7.39	7.44	7.52	9.7	14.8	23.6
30-Jan	96	-0.06	-0.02	0.02	757.5	765.5	774.7	7.44	7.47	7.52	10.7	14.2	21.7
31-Jan	96	-0.05	-0.03	0.02	765.1	780.3	791.4	7.47	7.51	7.59	11.3	14.0	26.3
01-Feb	96	-0.05	-0.02	0.06	755.9	799.2	812.5	7.53	7.57	7.66	9.4	14.0	32.0
02-Feb	96	-0.06	-0.02	0.02	740.5	816.4	832.6	7.57	7.61	7.86	7.7	15.2	95.3
03-Feb	96	-0.04	-0.02	0.01	830.6	838.8	846.1	7.60	7.64	7.68	6.9	9.7	21.0
04-Feb	96	-0.04	-0.03	-0.01	834.8	850.0	857.6	7.64	7.66	7.67	6.6	9.1	14.8
05-Feb	96	-0.05	-0.04	-0.01	853.7	860.9	873.4	7.62	7.65	7.67	7.5	10.9	37.3
06-Feb	96	-0.05	-0.04	-0.01	817.5	858.6	887.7	7.50	7.61	7.65	6.4	10.0	25.1
07-Feb	96	-0.05	-0.03	0.01	771.9	802.2	817.2	7.06	7.25	7.52	3.8	5.7	14.4
08-Feb	96	-0.04	-0.02	0.01	741.9	755.0	771.3	7.30	7.36	7.38	3.0	8.1	20.0
09-Feb	96	-0.04	0.00	0.05	669.9	747.9	789.7	7.34	7.44	7.69	2.7	20.5	131.5
10-Feb	96	-0.01	0.03	0.12	155.4	411.1	669.9	7.68	8.14	8.83	16.3	57.5	103.1
11-Feb	96	-0.03	-0.02	-0.01	267.4	372.0	509.2	7.63	7.96	8.28	8.7	30.5	52.2
12-Feb	96	-0.04	-0.02	0.12	509.4	562.8	624.4	7.08	7.45	7.68	2.7	6.7	44.3
13-Feb	96	-0.04	-0.02	0.00	562.1	578.2	605.2	6.97	6.99	7.08	4.1	5.9	9.0
14-Feb	96	-0.04	-0.04	-0.02	552.0	554.7	561.7	6.95	7.00	7.08	3.5	5.1	6.9
15-Feb	96	-0.04	-0.03	0.01	554.0	559.3	566.6	7.03	7.06	7.10	3.3	5.9	17.0
16-Feb	96	-0.05	-0.02	0.06	565.2	570.9	576.6	6.91	6.97	7.04	4.9	9.2	17.2
17-Feb	96	-0.04	-0.01	0.06	569.3	576.2	581.6	6.90	6.92	6.94	6.5	10.6	34.0
18-Feb	96	-0.04	-0.02	0.02	569.8	578.6	584.5	6.86	6.88	6.92	5.2	8.7	23.2
19-Feb	96	-0.04	-0.02	0.02	543.7	569.1	578.7	6.92	6.96	7.00	6.3	15.6	58.6
20-Feb	96	-0.05	-0.03	0.01	555.7	569.1	580.9	7.00	7.06	7.10	7.2	29.6	72.3
21-Feb	96	-0.05	-0.04	-0.01	575.4	583.8	597.6	6.96	7.06	7.10	6.5	27.1	137.9
22-Feb	96	-0.08	-0.06	-0.04	287.3	534.4	581.7	6.95	6.98	7.01	7.1	72.8	142.0
23-Feb	96	-0.06	-0.06	-0.05	0.1	58.1	259.1	7.00	7.09	7.16	82.4	130.4	372.3
24-Feb	96	-0.08	-0.06	0.00	0.1	186.9	573.6	7.16	7.32	7.69	4.2	86.7	149.0
25-Feb	96	-0.09	-0.06	-0.05	0.1	165.7	602.6	7.71	7.92	8.01	6.5	397.7	784.4
26-Feb	96	-0.06	-0.05	-0.05	0.1	0.1	0.3	7.34	7.60	7.92	682.1	733.0	786.5
27-Feb	83	-0.07	-0.02	1.72	0.1	251.1	566.2	7.20	7.43	7.66	2.6	384.9	704.1
28-Feb	96	-0.06	-0.04	-0.03	472.7	530.0	567.0	7.20	7.40	7.60	6.1	157.1	511.6
01-Mar	91	-0.05	-0.02	1.48	419.1	493.7	550.1	7.19	7.66	8.02	0.9	24.1	112.3
02-Mar	96	-0.06	-0.05	-0.04	248.8	487.4	634.2	7.44	7.65	7.99	0.4	0.9	2.0
03-Mar	96	-0.05	-0.04	-0.03	553.3	564.0	569.0	7.49	7.84	8.00	0.2	0.6	1.7
04-Mar	96	-0.04	-0.04	-0.01	567.9	570.2	577.8	7.24	7.52	7.71	0.1	0.5	1.2
05-Mar	96	-0.05	-0.04	0.01	576.3	581.5	591.6	6.77	7.32	7.46	0.3	0.7	2.1
06-Mar	96	-0.05	-0.04	-0.01	435.2	585.6	603.0	6.72	6.95	7.12	0.4	17.8	127.0
07-Mar	96	-0.05	-0.04	-0.02	580.0	587.8	601.7	6.75	6.96	7.09	1.1	3.6	7.4
08-Mar	96	-0.05	-0.04	0.01	600.5	601.5	603.4	6.83	7.07	7.35	3.6	4.8	8.7
09-Mar	96	-0.05	-0.04	-0.01	525.0	602.2	607.7	6.87	7.15	7.73	3.6	8.2	101.9
10-Mar	96	-0.05	-0.03	0.01	585.5	598.1	607.6	7.04	7.12	7.32	4.6	9.2	70.2
11-Mar	96	-0.05	-0.04	-0.01	578.5	594.7	602.3	7.03	7.07	7.10	5.3	7.1	22.5
12-Mar	96	-0.05	-0.04	-0.02	589.0	594.7	610.3	7.00	7.04	7.06	4.8	6.7	20.9
13-Mar	96	-1.04	-0.06	-0.05	7.4	352.5	596.1	6.95	7.01	8.34	5.7	23.1	100.0
14-Mar	96	-0.05	-0.05	-0.05	164.0	170.7	177.7	6.95	6.96	6.97	5.8	6.7	8.9
15-Mar	96	-0.05	-0.05	-0.05	125.3	180.4	209.8	6.95	6.96	6.97	4.9	6.8	8.2
16-Mar	96	-0.05	-0.04	-0.02	101.5	177.3	234.0	6.96	7.44	8.19	4.0	57.7	249.5
17-Mar	96	-0.04	0.04	0.34	101.6	299.1	607.2	7.00	7.87	8.64	4.0	66.3	152.3
18-Mar	96	-0.05	-0.03	0.04	470.4	550.6	566.6	7.54	7.62	7.76	2.9	13.2	48.0
19-Mar	96	-0.05	-0.03	0.05	541.4	554.1	589.1	7.54	7.65	7.70	0.7	5.4	38.3
20-Mar	96	-0.05	-0.03	0.03	443.8	524.4	549.5	7.48	7.51	7.55	0.3	9.0	33.8
21-Mar	96	-0.05	-0.02	0.04	385.6	459.7	506.5	7.32	7.43	7.55	0.0	8.7	43.9
22-Mar	96	-0.05	0.00	0.26	127.3	447.8	512.7	7.31	7.39	8.19	2.0	19.2	128.4
23-Mar	96	-0.05	0.02	0.30	109.3	392.8	511.9	7.24	7.53	8.34	3.6	29.5	115.7
24-Mar	96	-0.05	0.02	0.25	95.5	341.4	492.3	7.27	7.55	8.32	0.9	16.4	51.8
25-Mar	96	-0.05	-0.03	0.04	353.1	443.9	527.5	7.27	7.33	7.41	0.8	6.3	14.3
26-Mar	96	-0.05	-0.04	0.08	482.6	514.3	589.7	7.27	7.28	7.31	0.0	1.7	10.3
27-Mar	96	-0.06	-0.02	0.13	103.3	472.9	603.6	7.28	7.40	8.11	0.0	6.1	36.6
28-Mar	96	-0.05	0.04	0.36	75.4	363.3	632.3	7.35	7.54	8.16	0.1	15.8	44.3
29-Mar	96	-0.05	0.15	0.70	87.9	240.8	385.5	7.16	7.51	7.96	18.5	26.6	56.9
30-Mar	96	-0.03	0.18	0.97	69.1	203.5	303.2	7.19	7.41	7.88	14.0	27.9	55.2
31-Mar	96	-0.03	0.29	1.69	63.7	179.3	400.9	7.07	7.48	7.94	5.5	28.0	58.1
01-Apr	96	-0.03	0.16	1.09	164.5	327.0	463.0	6.94	7.43	7.70	4.9	20.8	66.0
02-Apr	96	0.05	0.26	1.01	141.2	279.9	519.4	7.35	7.50	7.79	0.0	21.1	66.3

RSEM-R6W													
Day	**Number of measurements***	**Temperature (°C)**			**Specific Conductivity (µS/cm)**			**pH**			**Turbidity (NTU)**		
		Minimum	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**
03-Apr	95	0.05	0.22	0.90	119.9	294.4	430.3	7.23	7.43	7.88	0.0	10.2	43.0
04-Apr	96	0.05	0.26	1.00	253.8	391.4	454.6	7.07	7.21	7.39	0.0	5.6	17.3
05-Apr	96	0.05	0.31	1.11	207.4	405.3	474.3	6.95	7.11	7.52	0.0	11.3	173.7
06-Apr	96	0.06	0.34	1.28	170.8	467.1	549.2	6.86	6.95	7.30	0.0	6.4	20.2
07-Apr	96	0.06	0.28	0.81	240.5	476.3	562.1	6.80	6.92	7.25	0.0	11.0	46.0
08-Apr	96	0.11	0.29	0.71	226.3	417.2	529.6	6.89	7.00	7.29	3.1	22.1	39.6
09-Apr	96	0.07	0.34	0.87	477.3	532.9	592.9	6.93	7.04	7.14	0.0	13.0	23.5
10-Apr	89	0.09	0.40	1.04	535.0	603.5	649.3	7.09	7.15	7.18	0.0	4.4	13.7
11-Apr	96	0.40	0.63	0.89	631.8	643.5	658.5	7.15	7.19	7.21	0.0	2.0	6.1
12-Apr	96	0.24	0.47	1.44	608.1	642.0	660.6	7.16	7.21	7.23	0.0	2.6	9.6
13-Apr	96	0.21	0.55	1.17	611.3	641.3	665.3	7.17	7.23	7.26	0.0	2.7	8.9
14-Apr	96	0.28	0.82	1.74	608.0	640.8	664.3	7.19	7.24	7.28	0.0	4.2	13.7
15-Apr	96	0.48	0.97	1.89	610.6	640.9	659.1	7.21	7.27	7.29	0.0	5.0	14.6
16-Apr	96	0.39	0.71	1.12	582.3	631.9	652.2	7.24	7.29	7.31	0.0	5.9	15.5
17-Apr	96	0.37	0.58	0.89	501.7	568.8	627.8	7.25	7.31	7.36	0.0	5.1	20.8
18-Apr	96	0.25	0.38	0.50	484.2	508.2	539.6	7.29	7.36	7.39	0.2	5.8	13.3
19-Apr	96	0.18	0.36	0.91	490.9	518.7	606.8	7.28	7.36	7.42	0.0	5.2	13.3
20-Apr	96	-0.05	0.35	2.41	363.0	469.2	552.1	7.28	7.45	7.85	0.0	4.2	14.3
21-Apr	93	-0.06	0.54	2.12	218.9	336.7	473.0	7.36	7.51	7.82	0.3	21.2	216.6
22-Apr	96	-0.06	1.05	3.64	196.2	283.6	371.2	7.24	7.48	7.76	0.8	5.2	25.1
23-Apr	96	0.13	1.19	2.92	175.6	343.8	565.2	7.02	7.25	7.58	0.2	6.0	40.9
24-Apr	96	0.61	1.53	4.18	458.9	596.4	680.0	6.90	6.97	7.06	4.6	9.6	34.3
25-Apr	96	1.30	3.08	5.21	411.2	542.7	587.6	6.91	6.98	7.07	7.2	12.1	19.1
26-Apr	96	1.97	4.94	7.56	541.0	567.4	590.0	6.92	6.97	7.01	10.6	12.6	18.2
27-Apr	96	4.22	4.79	5.70	570.5	584.4	596.1	6.98	7.03	7.10	12.1	15.9	20.9
28-Apr	96	3.16	3.58	4.16	560.2	575.5	590.6	7.12	7.22	7.34	17.8	27.3	47.2
29-Apr	96	2.84	3.63	4.56	546.9	553.3	559.4	7.35	7.43	7.52	23.2	30.7	40.4
30-Apr	96	3.95	4.83	6.06	548.0	550.7	552.6	7.51	7.54	7.58	12.5	23.3	32.2
01-May	96	4.71	6.31	8.04	550.9	559.5	576.2	7.47	7.53	7.58	10.9	16.5	45.7
02-May	96	6.37	6.74	7.10	575.2	598.0	640.2	7.34	7.42	7.49	7.7	11.8	22.8
03-May	96	6.45	7.47	8.29	627.9	666.6	696.1	7.30	7.36	7.41	8.4	10.2	14.4
04-May	94	7.62	8.88	10.14	689.9	726.4	760.0	7.39	7.44	7.50	7.1	9.6	15.0
05-May	96	9.41	10.67	11.94	755.1	768.4	783.6	7.46	7.50	7.56	7.1	9.1	15.2
06-May	96	9.12	10.07	11.08	779.6	793.8	806.1	7.52	7.61	7.72	7.8	10.7	15.4
07-May	96	8.23	8.65	9.09	804.4	811.3	817.7	7.71	7.81	7.91	9.4	12.5	18.8
08-May	96	7.19	7.70	8.23	817.4	826.3	845.2	7.84	7.89	7.93	10.8	13.0	18.0
09-May	96	5.97	6.48	7.18	843.7	865.4	878.0	7.75	7.79	7.84	10.8	13.2	32.4
10-May	96	5.39	7.23	9.36	876.7	898.9	936.6	7.65	7.72	7.79	10.3	12.5	14.5
11-May	94	7.00	9.01	11.06	938.2	985.2	1014.9	7.47	7.54	7.65	9.2	11.9	14.1
12-May	96	9.30	10.98	12.44	1012.4	1032.3	1049.4	7.40	7.46	7.51	8.2	10.4	48.2
13-May	96	10.53	11.69	14.05	1044.2	1069.2	1097.3	7.34	7.43	7.48	7.5	9.7	19.4
14-May	96	10.60	11.84	13.04	1094.2	1121.0	1167.5	7.39	7.45	7.54	7.4	9.2	14.0
15-May	96	11.08	12.77	14.53	1141.9	1162.8	1181.9	7.45	7.52	7.61	5.6	7.3	13.3
16-May	96	12.58	13.35	14.32	1163.5	1181.3	1198.5	7.55	7.64	7.76	5.2	7.7	24.4
17-May	96	12.06	13.01	13.92	1186.6	1198.1	1213.2	7.67	7.83	8.01	5.7	8.2	17.9
18-May	96	12.10	13.06	14.15	1205.9	1216.2	1225.7	7.83	7.93	8.04	6.2	8.3	22.5
19-May	96	11.73	12.14	12.82	1222.3	1229.6	1234.0	7.88	8.00	8.12	5.9	7.7	10.0
20-May	96	10.70	12.58	14.65	1230.5	1236.7	1242.9	7.90	7.96	8.07	5.1	6.9	8.6
21-May	96	11.39	13.69	16.04	1230.2	1239.3	1246.1	7.89	7.97	8.12	5.8	9.0	17.7
22-May	96	12.64	14.84	17.00	1221.4	1239.9	1316.9	7.91	8.00	8.06	7.3	16.6	110.4
23-May	96	13.90	15.01	15.79	1214.4	1240.7	1260.7	7.98	8.09	8.22	6.5	24.7	79.1
24-May	96	14.55	15.56	16.45	1221.5	1243.3	1265.2	7.96	8.06	8.16	10.7	36.0	185.9
25-May	95	14.77	15.68	16.66	1239.4	1247.3	1256.4	7.98	8.10	8.28	11.1	34.3	234.0
26-May	96	14.75	15.62	16.39	1240.5	1252.1	1282.0	7.65	8.18	8.36	11.2	36.0	118.2
27-May	96	14.65	15.40	16.35	1242.6	1255.6	1277.8	8.17	8.27	8.36	7.3	18.5	79.2
28-May	96	13.24	13.98	14.99	1238.4	1248.4	1265.5	8.08	8.14	8.30	9.2	28.0	76.6
29-May	95	12.72	14.28	16.18	1261.7	1271.2	1286.7	8.03	8.10	8.18	33.3	72.6	179.2
30-May	96	13.30	15.94	18.95	1283.2	1302.5	1319.6	8.01	8.09	8.18	38.7	91.3	277.7
31-May	96	14.69	17.55	20.74	1314.2	1326.9	1340.9	8.05	8.13	8.22	27.7	129.6	420.8
01-Jun	91	15.66	18.03	20.66	1326.0	1337.9	1379.9	8.09	8.20	8.25	20.2	52.6	114.0
02-Jun	96	16.70	18.76	20.95	1333.1	1352.4	1396.3	8.12	8.21	8.29	17.0	53.5	165.1
03-Jun	96	17.65	19.20	20.47	1354.5	1370.8	1388.5	8.17	8.27	8.37	14.1	43.4	162.3
04-Jun	96	18.52	19.41	20.77	1349.8	1396.5	1437.6	8.27	8.33	8.39	8.9	41.8	203.6
05-Jun	96	18.22	18.85	19.42	1401.2	1422.7	1445.5	8.28	8.34	8.38	11.3	45.9	121.7
06-Jun	96	17.47	17.73	18.19	1437.7	1448.5	1464.3	8.14	8.23	8.30	10.5	27.4	52.7
07-Jun	96	17.10	18.93	21.81	1455.6	1467.2	1480.5	8.13	8.26	8.46	5.5	25.8	57.9
08-Jun	91	18.29	19.06	19.79	1455.0	1470.5	1493.9	8.30	8.41	8.52	5.3	23.0	115.9
09-Jun	96	18.31	20.05	22.03	1454.0	1472.3	1579.7	8.37	8.46	8.57	3.6	26.1	124.3
10-Jun	96	19.72	20.31	20.93	1454.7	1472.2	1491.7	8.49	8.62	8.74	3.6	27.9	175.1
11-Jun	96	18.95	19.80	20.44	1464.6	1480.8	1535.0	8.56	8.68	8.77	6.2	18.6	137.4
12-Jun	96	18.62	19.62	20.57	1477.9	1489.7	1512.5	8.61	8.70	8.79	3.7	11.9	38.3
13-Jun	96	18.12	19.72	21.37	1480.7	1496.7	1507.6	8.62	8.68	8.79	3.1	7.7	56.0
14-Jun	96	18.36	19.60	21.17	1488.8	1500.2	1507.4	8.67	8.72	8.82	3.8	11.8	199.8
15-Jun	96	18.87	19.83	21.31	1463.4	1502.5	1612.7	8.68	8.75	8.82	3.8	8.0	29.0
16-Jun	96	19.43	20.22	21.24	1487.1	1500.9	1533.3	8.74	8.84	8.95	3.2	12.8	101.5
17-Jun	94	18.33	18.92	19.90	1475.4	1483.5	1501.6	8.77	8.83	8.89	6.6	14.0	28.2
18-Jun	96	17.88	18.35	18.97	1461.3	1477.1	1481.3	8.72	8.77	8.82	5.2	14.8	169.7
19-Jun	96	17.66	19.09	20.65	1462.2	1469.6	1484.7	8.65	8.70	8.78	6.0	12.0	21.3
20-Jun	96	18.54	20.38	22.32	1452.6	1466.7	1490.7	8.59	8.67	8.75	5.6	14.4	58.2
21-Jun	96	19.50	20.21	20.77	1449.8	1462.2	1566.7	8.55	8.74	8.85	6.2	19.1	299.7
22-Jun	96	19.02	20.05	20.90	1437.3	1456.4	1564.9	8.64	8.75	8.86	3.8	13.4	79.3
23-Jun	96	18.23	18.78	19.91	1439.3	1448.6	1466.7	8.67	8.72	8.82	5.0	9.1	21.1
24-Jun	96	17.50	19.52	22.03	1419.8	1434.0	1443.1	8.59	8.66	8.81	5.0	18.3	130.4
25-Jun	96	18.63	20.96	23.50	1391.1	1415.9	1475.1	8.69	8.76	8.86	5.1	22.1	105.2
26-Jun	96	19.92	21.64	23.92	1359.1	1387.9	1441.1	8.70	8.79	8.88	5.6	43.9	383.3
27-Jun	96	20.81	21.36	22.21	1330.0	1357.7	1444.9	8.68	8.79	8.87	9.1	58.5	698.6
28-Jun	96	20.51	21.43	22.36	1305.7	1335.3	1373.5	8.69	8.80	8.90	9.1	34.2	307.3
29-Jun	96	20.31	21.94	23.56	1292.6	1321.1	1427.3	8.78	8.85	8.97	6.6	33.9	409.8
30-Jun	96	21.10	23.01	25.43	1266.8	1302.5	1405.5	8.88	8.95	9.04	4.1	30.0	432.2
01-Jul	96	18.62	19.65	21.08	565.3	571.9	575.2	8.22	8.28	8.33	0.0	9.7	275.9
02-Jul	96	17.36	19.46	21.79	570.7	577.4	582.2	8.12	8.24	8.33	0.0	10.1	470.9
03-Jul	96	17.47	20.18	22.51	569.5	573.5	577.0	8.18	8.29	8.36	0.0	9.5	142.1
04-Jul	96	19.21	20.79	22.44	564.3	570.5	574.4	8.25	8.32	8.38	0.0	5.5	103.5

RSEM-R6W													
Day	**Number of measurements***	**Temperature (°C)**			**Specific Conductivity (µS/cm)**			**pH**			**Turbidity (NTU)**		
		Minimum	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**
05-Jul	96	19.03	19.82	20.56	561.7	571.1	576.2	8.23	8.30	8.36	0.0	7.4	385.6
06-Jul	96	18.29	20.04	21.68	545.9	573.0	579.6	8.25	8.33	8.40	0.0	2.3	83.4
07-Jul	96	19.56	20.72	21.88	560.1	568.4	574.5	7.86	8.34	8.39	0.0	4.6	126.4
08-Jul	96	18.79	20.16	21.39	562.6	570.9	683.2	8.23	8.33	8.40	0.0	2.2	28.0
09-Jul	96	18.45	19.19	19.97	557.1	566.0	573.6	8.23	8.33	8.41	0.0	1.2	34.2
10-Jul	96	17.86	18.96	20.08	549.6	560.0	571.6	8.14	8.33	8.46	0.0	1.6	75.0
11-Jul	96	17.95	19.33	21.00	539.0	555.2	568.4	8.16	8.35	8.47	0.0	1.6	63.3
12-Jul	96	18.67	19.91	21.46	539.5	551.2	561.0	8.21	8.35	8.46	0.0	1.3	57.2
13-Jul	96	18.17	18.92	19.59	547.5	555.0	568.2	8.20	8.35	8.45	0.0	1.8	42.6
14-Jul	96	17.48	18.67	19.79	543.0	555.5	565.8	8.16	8.33	8.47	0.0	4.1	96.3
15-Jul	96	17.99	19.47	20.81	547.2	555.1	564.2	8.22	8.36	8.45	0.0	4.9	195.1
16-Jul	96	18.31	19.94	21.38	545.0	557.1	568.7	8.19	8.37	8.46	0.0	6.5	59.9
17-Jul	96	18.79	20.97	23.25	528.1	549.9	568.3	8.15	8.36	8.49	0.0	9.7	199.0
18-Jul	96	19.96	21.39	22.87	536.0	550.8	560.5	8.23	8.38	8.48	0.0	12.1	84.4
19-Jul	96	19.79	20.63	21.83	540.2	555.3	569.8	8.16	8.34	8.50	0.0	5.6	57.5
20-Jul	96	18.89	20.34	21.69	545.4	559.4	821.1	8.14	8.33	8.47	0.0	1.8	17.4
21-Jul	96	18.50	19.72	21.19	561.2	574.5	581.8	7.88	8.27	8.40	1.4	13.6	489.8
22-Jul	96	18.03	20.43	22.70	575.3	590.2	605.0	8.07	8.24	8.37	2.8	108.1	890.2
23-Jul	96	19.56	21.09	22.71	561.9	583.1	600.4	8.11	8.27	8.38	1.8	218.6	2645.3
24-Jul	96	19.74	20.95	22.28	576.7	597.7	613.8	8.13	8.24	8.37	0.5	11.4	98.2
25-Jul	96	18.99	21.32	23.52	572.6	599.2	616.7	7.96	8.24	8.40	1.1	11.2	69.0
26-Jul	96	20.25	22.82	25.19	554.8	579.0	597.4	7.97	8.25	8.40	0.0	16.7	130.9
27-Jul	96	21.68	24.40	27.35	549.2	565.9	573.6	7.90	8.18	8.39	0.4	18.4	100.7
28-Jul	96	23.05	25.11	27.05	523.7	548.3	567.0	7.80	8.25	8.44	0.0	35.6	1849.1
29-Jul	96	23.12	24.69	26.82	518.5	540.3	553.3	7.87	8.27	8.47	0.0	6.8	47.1
30-Jul	96	22.53	23.61	24.84	519.3	536.6	552.2	8.14	8.29	8.44	0.0	6.1	59.4
31-Jul	96	22.07	22.94	24.38	527.1	540.9	553.7	8.15	8.30	8.44	0.0	2.7	49.1
01-Aug	96	21.05	22.31	23.80	551.1	576.4	698.0	8.08	8.29	8.48	0.0	9.2	128.9
02-Aug	96	19.97	21.21	22.43	720.7	928.3	1036.9	7.76	8.07	8.27	0.6	22.1	165.7
03-Aug	96	19.51	20.64	21.80	905.6	931.0	967.3	8.10	8.25	8.35	0.0	9.3	99.2
04-Aug	96	17.34	18.73	20.13	785.9	865.9	906.9	8.08	8.23	8.35	0.0	3.2	17.0
05-Aug	96	16.34	18.58	21.04	768.2	842.3	923.5	7.99	8.25	8.35	1.1	6.7	20.5
06-Aug	96	17.39	18.81	20.08	714.1	748.3	779.6	8.18	8.26	8.34	0.0	4.3	21.8
07-Aug	96	18.27	19.63	20.80	659.5	686.5	719.5	8.12	8.29	8.40	0.4	4.6	58.5
08-Aug	96	18.55	20.30	22.15	605.3	634.9	662.2	8.14	8.30	8.45	0.9	8.6	81.2
09-Aug	96	18.75	20.97	22.96	569.1	593.4	614.9	8.20	8.34	8.45	0.5	13.3	81.9
10-Aug	96	19.49	21.94	24.55	530.7	553.8	571.5	8.19	8.39	8.53	0.7	33.8	450.2
11-Aug	96	19.55	21.22	22.90	493.6	518.1	538.1	8.15	8.47	8.69	0.0	12.8	89.2
12-Aug	96	20.05	22.20	25.06	475.8	492.6	507.6	8.29	8.55	8.70	0.0	14.0	154.9
13-Aug	96	20.82	22.11	24.36	448.3	469.4	480.5	8.51	8.65	8.85	0.0	15.1	160.0
14-Aug	96	18.90	20.04	21.18	470.4	492.4	530.6	8.17	8.33	8.56	0.0	21.8	209.5
15-Aug	96	17.86	19.86	21.85	532.4	592.4	631.5	8.04	8.30	8.50	1.2	9.5	200.8
16-Aug	96	18.36	20.42	22.75	543.6	566.9	582.5	8.26	8.47	8.66	1.6	12.6	96.2
17-Aug	96	18.90	21.59	24.22	527.3	549.3	567.7	8.28	8.50	8.66	3.5	13.8	73.5
18-Aug	96	20.12	22.76	25.53	503.1	522.8	539.2	8.40	8.59	8.74	3.1	21.5	114.6
19-Aug	96	20.95	23.28	25.93	483.6	502.5	518.4	8.41	8.66	8.82	8.6	37.2	194.2
20-Aug	96	21.11	23.05	24.99	465.8	489.0	507.6	8.44	8.68	8.88	13.1	35.1	160.8
21-Aug	96	21.28	22.83	24.42	454.8	475.2	491.7	8.48	8.70	8.85	18.0	47.6	150.1
22-Aug	96	21.46	23.74	26.40	448.7	467.9	480.4	8.48	8.69	8.89	29.0	54.7	171.7
23-Aug	96	21.68	23.91	26.37	453.7	470.5	486.7	8.42	8.65	8.78	12.8	52.3	287.6
24-Aug	96	22.07	24.12	26.33	454.9	467.1	479.8	8.50	8.68	8.81	0.0	16.7	124.7
25-Aug	96	22.12	24.29	26.93	456.3	466.9	478.5	8.47	8.65	8.78	0.0	6.3	80.8
26-Aug	96	21.92	22.90	24.21	443.6	468.9	482.2	8.33	8.55	8.70	0.0	28.2	440.2
27-Aug	96	19.51	20.88	21.94	473.7	486.0	495.8	8.10	8.33	8.50	0.0	3.9	62.6
28-Aug	96	17.98	18.89	19.77	483.8	495.1	507.0	8.10	8.33	8.53	0.0	0.8	6.0
29-Aug	96	17.63	18.59	19.71	484.0	495.3	503.0	8.13	8.35	8.47	0.0	2.1	27.2
30-Aug	96	17.91	19.00	19.94	485.9	494.1	501.0	8.24	8.40	8.49	0.0	3.5	28.3
31-Aug	96	18.07	19.12	20.41	474.7	488.2	501.2	8.17	8.37	8.49	0.3	3.2	83.7
01-Sep	96	17.34	18.30	19.70	467.6	483.4	496.1	8.17	8.35	8.49	0.4	3.3	38.2
02-Sep	96	16.38	18.22	21.01	470.8	487.5	499.7	8.18	8.34	8.48	0.0	4.7	80.9
03-Sep	96	16.46	18.00	19.69	468.2	484.1	500.2	8.21	8.38	8.47	1.6	6.0	59.6
04-Sep	96	17.19	17.63	17.99	473.7	486.0	498.1	8.27	8.36	8.43	0.0	7.8	61.6
05-Sep	96	15.88	16.46	17.20	479.8	490.8	500.9	8.17	8.36	8.52	0.0	1.4	124.8
06-Sep	96	14.56	15.54	16.77	468.6	482.9	496.0	8.27	8.38	8.50	0.0	0.0	2.2
07-Sep	96	14.44	14.91	15.60	477.2	486.3	493.7	8.27	8.40	8.49	0.0	2.7	30.2
08-Sep	96	13.85	14.69	16.41	478.4	486.4	492.9	8.23	8.37	8.46	0.7	5.5	14.3
09-Sep	96	13.13	14.23	15.94	479.9	489.5	495.6	8.26	8.34	8.40	1.5	4.9	12.9
10-Sep	96	12.53	13.48	14.48	481.3	488.4	496.6	8.21	8.33	8.41	2.7	8.0	17.2
11-Sep	96	12.23	13.40	15.67	474.4	483.7	490.5	8.25	8.33	8.40	2.7	8.0	52.1
12-Sep	96	12.10	13.02	14.17	468.0	475.8	483.9	8.24	8.32	8.39	0.2	15.6	90.6
13-Sep	96	12.37	13.72	15.72	451.3	464.7	475.4	8.26	8.36	8.45	3.9	14.1	44.3
14-Sep	96	12.74	13.90	15.84	447.5	458.1	464.3	8.26	8.35	8.43	5.0	18.5	43.1
15-Sep	96	12.55	13.77	15.63	450.4	460.8	469.9	8.26	8.38	8.45	5.4	15.3	113.1
16-Sep	96	12.31	12.78	13.55	460.7	466.4	474.6	8.29	8.36	8.43	2.4	13.7	101.3
17-Sep	96	11.53	11.89	12.29	471.9	615.0	804.9	8.22	8.29	8.35	3.1	12.0	38.1
18-Sep	96	11.32	11.87	12.78	685.6	738.3	822.7	8.23	8.30	8.38	6.6	14.7	36.0
19-Sep	96	11.36	12.12	12.93	579.8	622.6	685.4	8.28	8.36	8.45	3.3	10.0	49.8
20-Sep	96	11.49	12.54	14.22	508.6	540.3	579.4	8.31	8.39	8.48	5.2	9.3	19.4
21-Sep	96	11.91	13.33	15.51	482.2	495.5	509.1	8.36	8.43	8.50	4.8	10.6	36.8
22-Sep	96	12.49	13.37	14.87	469.8	482.2	491.0	8.32	8.43	8.48	4.4	16.8	75.6
23-Sep	96	12.65	13.08	13.59	468.2	477.8	488.2	8.32	8.42	8.53	6.6	13.5	21.8
24-Sep	96	11.80	12.49	13.16	453.5	462.9	471.4	8.34	8.46	8.57	4.4	10.1	16.6
25-Sep	96	12.07	12.84	13.85	450.3	456.3	462.8	8.37	8.46	8.55	4.3	12.9	54.6
26-Sep	96	12.73	13.96	15.66	441.2	448.7	456.1	8.36	8.45	8.52	4.5	9.8	19.3
27-Sep	96	13.45	14.36	15.48	431.3	440.2	447.4	8.35	8.46	8.52	1.8	12.4	107.4
28-Sep	96	13.55	14.64	16.30	428.1	436.4	443.7	8.32	8.44	8.52	3.9	33.3	2041.8
29-Sep	96	14.08	14.80	15.79	391.6	436.9	441.8	8.39	8.45	8.52	13.8	18.4	25.7
30-Sep	96	14.28	14.98	15.96	424.0	433.7	437.7	8.39	8.46	8.53	8.4	14.8	77.8
01-Oct	96	14.60	15.33	16.04	1177.2	1213.6	1258.8	8.14	8.26	8.36	0.0	0.1	3.2
02-Oct	96	14.88	15.57	16.52	1157.1	1192.8	1288.5	8.11	8.27	8.47	0.0	0.2	5.9
03-Oct	96	14.07	14.80	15.55	1157.8	1179.4	1258.9	7.83	8.09	8.60	0.0	0.1	9.2
04-Oct	96	12.97	13.62	14.32	1155.9	1169.3	1183.3	7.88	8.15	8.46	0.0	0.0	0.0
05-Oct	96	12.89	13.24	13.78	1124.5	1149.1	1188.0	8.25	8.50	8.75	0.0	0.1	9.8

RSEM-R6W													
Day	**Number of measurements***	**Temperature (°C)**			**Specific Conductivity (µS/cm)**			**pH**			**Turbidity (NTU)**		
		Minimum	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**
06-Oct	96	12.29	12.68	13.25	1094.7	1115.4	1181.5	7.90	8.64	8.82	0.0	0.0	0.0
07-Oct	96	11.71	12.09	12.70	1082.0	1094.0	1102.0	8.31	8.63	8.80	0.0	0.0	0.0
08-Oct	96	10.80	11.40	12.06	1054.9	1086.3	1092.6	7.98	8.39	8.70	0.0	0.0	0.0
09-Oct	96	10.65	11.29	11.91	1052.8	1078.4	1093.5	8.26	8.43	8.57	0.0	0.0	0.5
10-Oct	96	10.71	11.34	11.73	1054.8	1084.5	1099.0	8.19	8.35	8.59	0.0	1.0	12.4
11-Oct	96	9.59	10.05	10.70	1079.8	1093.7	1118.6	7.88	8.08	8.24	0.0	0.4	4.7
12-Oct	96	8.89	9.37	9.90	1094.0	1103.4	1108.9	7.77	8.03	8.33	0.0	0.0	0.0
13-Oct	96	9.08	9.71	10.41	1107.3	1114.2	1119.3	7.71	7.97	8.05	0.0	0.0	0.0
14-Oct	96	10.01	10.54	11.33	1088.3	1112.6	1127.5	7.64	7.95	8.16	0.0	0.4	26.6
15-Oct	96	9.85	10.18	10.51	1091.6	1118.5	1195.7	7.74	7.90	8.15	0.0	0.3	17.7
16-Oct	96	9.24	9.71	10.32	1097.9	1123.7	1187.8	7.52	7.85	8.11	0.0	0.5	48.1
17-Oct	96	8.89	9.47	10.31	1095.7	1135.2	1210.0	7.16	7.43	7.80	0.0	4.0	46.1
18-Oct	96	9.04	9.68	10.61	1106.5	1136.5	1211.0	7.12	7.32	7.68	0.0	2.5	75.8
19-Oct	96	9.36	9.85	10.39	1107.5	1142.5	1171.0	7.14	7.34	7.54	0.0	3.7	65.7
20-Oct	96	9.07	9.42	9.82	1133.0	1150.1	1166.5	7.51	7.61	7.76	0.0	0.8	5.9
21-Oct	96	8.42	8.84	9.30	1123.8	1137.2	1148.6	7.65	7.79	8.27	0.0	3.1	257.4
22-Oct	96	6.77	7.61	8.37	1095.8	1115.1	1135.7	7.72	8.01	8.24	0.0	2.1	12.4
23-Oct	96	5.85	6.17	6.77	1057.7	1075.9	1101.7	8.11	8.30	8.43	0.0	3.9	10.6
24-Oct	96	5.01	5.60	5.93	1018.6	1042.2	1066.7	8.26	8.35	8.44	0.0	5.3	10.4
25-Oct	96	4.21	4.58	5.03	982.5	997.5	1023.1	8.24	8.32	8.40	0.0	6.3	12.9
26-Oct	96	3.33	3.85	4.30	951.4	967.7	996.7	8.29	8.36	8.42	0.0	5.4	12.0
27-Oct	96	3.90	4.26	4.73	900.1	934.5	960.3	8.24	8.34	8.45	0.0	10.0	19.5
28-Oct	96	3.80	4.19	4.47	859.1	885.5	908.1	8.27	8.39	8.50	0.0	7.9	18.2
29-Oct	96	3.68	3.95	4.19	826.2	846.8	869.2	8.42	8.51	8.58	0.0	6.5	14.1
30-Oct	96	3.70	3.94	4.19	798.3	816.7	832.8	8.55	8.60	8.64	0.0	10.8	22.9
31-Oct	96	2.64	3.14	3.73	776.4	787.0	800.0	8.61	8.63	8.66	0.0	6.6	17.2
01-Nov	96	0.43	1.85	2.88	766.8	774.2	781.6	8.62	8.65	8.69	0.0	9.5	21.9
02-Nov	96	0.13	0.34	0.58	767.4	774.9	785.2	8.60	8.63	8.68	0.0	2.9	10.1
03-Nov	96	0.12	0.33	0.60	778.0	782.3	788.0	8.55	8.60	8.62	0.0	0.1	2.2
04-Nov	96	0.09	0.44	1.46	713.4	757.2	782.2	8.21	8.42	8.57	0.0	0.2	2.1
05-Nov	96	0.17	0.43	1.57	675.8	706.4	726.0	8.05	8.13	8.23	0.0	1.7	27.3
06-Nov	96	0.04	0.38	1.59	639.1	667.6	684.1	8.01	8.05	8.09	0.0	1.3	6.1
07-Nov	96	-0.04	0.15	1.63	630.0	644.7	650.6	7.99	8.02	8.05	0.0	1.3	6.2
08-Nov	96	-0.06	0.06	1.40	602.9	622.3	637.4	7.96	8.00	8.02	0.0	4.3	12.4
09-Nov	96	-0.08	0.06	1.80	585.8	601.6	617.0	7.96	8.02	8.06	0.0	4.7	9.8
10-Nov	96	-0.10	-0.02	0.45	559.1	573.8	589.9	7.95	7.98	8.01	0.0	6.1	12.3
11-Nov	96	-0.06	0.19	1.28	526.7	562.4	574.9	7.89	7.93	7.96	0.0	5.9	10.0
12-Nov	96	-0.06	0.40	2.08	524.2	535.2	547.9	7.85	7.91	7.93	0.0	4.5	13.5
13-Nov	96	0.00	0.47	1.90	484.0	520.8	533.0	7.83	7.89	7.92	0.0	0.3	5.5
14-Nov	96	-0.01	0.46	2.22	413.1	455.6	516.1	7.82	7.87	7.90	0.0	0.1	2.1
15-Nov	96	0.23	0.68	2.94	356.7	427.8	518.1	7.81	7.86	7.92	0.0	0.2	2.8
16-Nov	96	0.40	0.78	3.01	376.0	467.0	523.0	7.82	7.90	7.94	0.0	0.1	4.0
17-Nov	96	0.23	0.77	3.12	515.6	524.2	537.1	7.87	7.97	8.11	0.0	0.6	7.2
18-Nov	96	0.17	0.61	2.86	516.3	528.5	541.3	8.07	8.20	8.29	0.0	0.8	4.7
19-Nov	96	0.11	0.40	1.89	512.8	521.6	534.4	8.22	8.28	8.31	0.0	1.5	4.8
20-Nov	96	0.10	0.38	1.75	414.4	482.1	517.3	8.16	8.23	8.27	0.0	0.2	2.9
21-Nov	96	0.26	0.59	1.96	361.2	435.6	482.1	8.14	8.18	8.21	0.0	0.3	5.4
22-Nov	96	0.55	0.88	2.75	325.9	397.4	485.6	8.06	8.15	8.22	0.0	0.3	5.8
23-Nov	96	0.62	1.11	3.15	404.9	441.3	480.3	8.10	8.17	8.21	0.0	0.2	4.2
24-Nov	96	1.01	1.78	3.00	415.4	462.8	477.8	8.08	8.15	8.19	0.0	0.5	5.4
25-Nov	96	2.29	2.94	3.62	463.2	472.7	489.7	8.08	8.12	8.15	0.0	1.1	5.0
26-Nov	96	2.78	3.28	3.63	460.8	470.2	474.4	8.08	8.10	8.13	1.8	10.9	23.5
27-Nov	96	2.43	3.06	3.58	463.2	468.2	473.0	8.09	8.13	8.18	8.4	21.8	43.4
28-Nov	96	1.39	2.16	2.97	466.4	472.5	480.3	8.13	8.16	8.18	8.2	24.6	40.4
29-Nov	96	1.24	1.54	2.65	427.8	483.1	487.8	8.10	8.16	8.18	0.0	8.7	36.4
30-Nov	96	1.15	1.45	2.49	481.7	490.8	502.0	8.06	8.13	8.16	0.0	0.0	0.0
01-Dec	96	0.62	0.87	1.68	497.7	505.2	508.9	8.08	8.09	8.12	0.0	0.0	0.0
02-Dec	96	0.42	0.57	1.04	506.5	509.4	511.4	8.09	8.13	8.17	0.0	0.0	0.0
03-Dec	96	0.33	0.44	0.83	501.7	507.9	514.2	8.16	8.19	8.21	0.0	0.0	2.3
04-Dec	96	0.35	0.54	1.15	490.3	495.3	503.8	8.13	8.17	8.20	0.0	0.0	0.4
05-Dec	96	0.54	0.68	2.03	486.8	492.2	498.6	8.05	8.13	8.16	0.0	0.4	2.1
06-Dec	96	0.18	0.48	2.34	490.8	503.4	511.9	8.08	8.11	8.13	0.0	0.4	2.2
07-Dec	96	0.12	0.40	1.89	498.0	510.5	517.8	8.10	8.15	8.20	0.0	0.1	1.1
08-Dec	96	0.29	0.43	2.32	510.7	516.8	523.8	8.18	8.22	8.27	0.0	1.1	2.8
09-Dec	96	0.24	0.43	2.52	515.1	523.3	530.1	7.95	8.19	8.27	0.0	2.5	3.9
10-Dec	96	0.21	0.46	3.39	509.3	528.5	535.8	7.81	8.04	8.17	0.0	2.8	4.7
11-Dec	96	0.14	0.30	2.33	512.6	531.5	540.5	7.82	7.90	7.95	0.0	2.8	3.7
12-Dec	96	0.11	0.39	3.18	509.0	520.3	528.7	7.80	7.89	7.91	0.8	2.7	3.9
13-Dec	96	0.08	0.29	1.65	494.0	514.6	527.3	7.84	7.88	7.91	0.0	4.8	8.4
14-Dec	96	0.16	0.41	3.02	460.4	480.1	503.3	7.87	7.96	8.09	0.8	7.6	10.7
15-Dec	96	0.28	0.54	2.95	430.2	460.3	490.1	7.99	8.13	8.22	0.1	6.9	10.3
16-Dec	96	0.27	0.91	3.04	464.6	478.5	494.6	7.97	8.14	8.21	2.3	5.9	9.0
17-Dec	96	0.29	0.54	2.92	473.1	482.5	504.0	7.96	8.10	8.14	4.2	7.2	9.2
18-Dec	96	0.23	0.38	2.03	485.9	498.3	511.8	7.96	8.08	8.10	5.1	8.1	9.7
19-Dec	96	0.07	0.28	2.26	507.1	518.3	529.4	7.96	8.05	8.08	3.4	6.6	10.2
20-Dec	96	-0.02	0.13	1.81	511.8	529.8	538.0	7.97	8.03	8.05	1.3	3.5	5.6
21-Dec	96	-0.06	0.07	0.82	520.4	531.3	537.6	8.04	8.08	8.11	1.2	3.1	4.2
22-Dec	96	-0.08	0.06	1.32	516.5	533.5	541.7	8.03	8.08	8.10	1.4	3.4	4.5
23-Dec	96	-0.04	0.10	0.96	522.3	531.4	541.1	8.08	8.12	8.14	1.6	3.3	5.8
24-Dec	96	-0.08	0.04	0.99	523.1	529.1	533.8	8.05	8.11	8.13	1.6	4.2	5.6
25-Dec	96	-0.12	0.00	1.11	521.7	529.1	535.2	7.94	8.05	8.10	0.0	4.6	5.6
26-Dec	96	-0.12	0.08	1.68	520.5	528.1	534.5	7.85	7.96	8.00	1.1	5.3	7.7
27-Dec	96	-0.12	0.03	0.93	520.8	525.0	528.4	7.84	7.90	7.94	1.9	5.8	9.0
28-Dec	96	-0.12	0.01	0.86	501.4	516.3	524.8	7.82	7.87	7.89	3.9	7.1	9.2
29-Dec	96	-0.12	0.05	2.27	498.9	517.9	537.6	7.77	7.85	7.87	4.2	7.4	10.4
30-Dec	96	-0.11	0.22	2.04	515.4	529.6	564.7	7.78	7.84	7.86	4.6	7.6	9.5
31-Dec	96	-0.10	0.12	1.68	500.9	526.6	566.6	7.81	7.85	7.88	4.7	9.2	12.0

*Based on temperature readings

RSEM-R6E													
Day	**Number of measurements***	**Temperature (°C)**			**Specific Conductivity (µS/cm)**			**pH**			**Turbidity (NTU)**		
		Minimum	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**
01-Jan	96	-0.04	0.04	0.42	1375.5	1392.5	1410.2	7.59	7.63	7.68	3.1	6.2	115.5
02-Jan	96	-0.04	0.05	0.36	1395.5	1402.6	1423.5	7.60	7.62	7.66	3.2	4.3	15.9
03-Jan	96	-0.05	0.01	0.32	1400.6	1411.0	1422.5	7.58	7.61	7.65	3.2	4.0	16.8
04-Jan	96	-0.05	0.03	0.32	1391.8	1415.3	1438.8	7.57	7.60	7.62	3.2	4.9	36.8
05-Jan	96	-0.06	-0.04	0.08	1048.7	1387.0	1438.0	7.58	7.60	7.62	3.2	35.3	2217.2
06-Jan	96	-0.04	-0.01	0.13	1356.1	1426.4	1442.7	7.57	7.60	8.00	3.2	6.5	161.3
07-Jan	96	-0.04	0.02	0.31	1416.4	1434.4	1448.7	7.55	7.58	7.62	3.2	3.7	11.8
08-Jan	96	-0.04	0.00	0.32	1412.7	1439.5	1451.7	7.54	7.57	7.59	3.2	4.0	17.9
09-Jan	96	-0.04	0.04	0.32	1442.1	1451.7	1467.6	7.54	7.55	7.56	3.3	4.7	20.6
10-Jan	96	-0.05	-0.01	0.20	1442.5	1460.9	1471.6	7.53	7.54	7.55	4.0	6.5	15.8
11-Jan	96	-0.05	-0.03	0.10	1460.5	1467.0	1490.6	7.52	7.53	7.54	4.6	7.3	11.3
12-Jan	96	-0.05	-0.04	0.12	1461.5	1468.1	1480.2	7.51	7.52	7.53	3.7	4.4	6.1
13-Jan	96	-0.05	-0.03	0.12	1460.5	1466.7	1479.2	7.50	7.51	7.52	3.4	4.3	8.0
14-Jan	96	-0.06	-0.03	0.12	1463.4	1468.9	1473.1	7.50	7.51	7.54	3.3	3.6	5.6
15-Jan	96	-0.05	-0.01	0.62	1214.7	1409.6	1475.1	7.49	7.55	7.64	3.0	5.4	34.1
16-Jan	96	-0.05	-0.01	0.17	1087.5	1325.1	1426.8	7.52	7.58	7.63	3.0	7.1	20.4
17-Jan	96	-0.06	-0.02	0.16	1347.4	1403.5	1438.6	7.52	7.56	7.62	4.4	11.1	34.9
18-Jan	96	-0.06	-0.02	0.20	1368.3	1431.6	1454.4	7.51	7.54	7.55	4.3	8.4	20.9
19-Jan	96	-0.06	0.00	0.16	1447.9	1458.3	1469.1	7.51	7.52	7.53	3.8	5.4	8.3
20-Jan	96	-0.06	-0.03	0.03	1445.9	1471.9	1500.6	7.51	7.52	7.52	4.9	7.2	15.5
21-Jan	96	-0.06	-0.04	0.10	1465.8	1476.1	1485.7	7.50	7.52	7.54	5.1	7.3	12.1
22-Jan	96	-0.05	0.04	0.21	391.5	1069.2	1479.2	7.50	7.84	8.38	4.1	70.4	281.4
23-Jan	96	0.00	0.20	1.00	290.3	341.6	389.9	8.13	8.26	8.51	92.2	226.8	497.2
24-Jan	96	-0.03	0.00	0.04	0.1	354.9	373.8	8.08	8.18	8.26	3.8	60.8	140.9
25-Jan	96	-0.02	0.01	0.05	360.8	378.7	388.4	8.00	8.09	8.18	31.7	43.3	56.8
26-Jan	96	-0.02	0.00	0.02	382.0	412.9	441.4	7.90	8.01	8.11	21.6	28.7	38.7
27-Jan	96	-0.02	-0.01	0.03	427.8	449.6	478.5	7.89	7.95	8.00	12.1	17.5	26.5
28-Jan	96	-0.03	-0.02	0.01	461.7	479.1	512.6	7.84	7.91	7.96	9.4	12.6	24.1
29-Jan	96	-0.03	-0.01	0.00	495.5	509.7	524.8	7.83	7.89	7.94	7.9	9.8	13.8
30-Jan	96	-0.03	-0.02	-0.01	517.6	526.9	544.1	7.81	7.86	7.89	6.7	8.0	10.9
31-Jan	96	-0.03	0.00	0.12	543.9	585.8	669.3	7.78	7.84	7.87	6.1	10.2	35.9
01-Feb	96	-0.04	-0.01	0.09	601.8	631.1	691.1	7.77	7.81	7.84	5.5	7.9	27.5
02-Feb	96	-0.04	0.02	0.13	649.6	701.7	745.9	7.76	7.79	7.83	4.3	6.9	14.8
03-Feb	96	-0.04	-0.03	0.00	720.9	734.4	746.7	7.76	7.79	7.81	3.6	4.9	6.5
04-Feb	96	-0.04	-0.01	0.08	745.6	752.7	782.1	7.73	7.77	7.79	3.5	4.2	5.7
05-Feb	96	-0.04	-0.03	0.00	637.8	769.8	783.3	7.72	7.76	7.77	3.4	3.7	5.0
06-Feb	96	-0.04	-0.02	0.00	781.7	786.6	792.6	7.72	7.75	7.77	3.2	3.6	4.5
07-Feb	96	-0.03	0.01	0.06	433.3	610.0	795.5	7.73	7.95	8.22	3.2	50.5	138.7
08-Feb	96	-0.03	0.27	1.37	0.1	517.4	1045.1	7.62	8.09	8.64	3.1	73.8	195.7
09-Feb	96	0.12	0.51	1.35	402.4	766.9	1301.8	7.48	8.04	8.76	12.4	232.6	3892.8
10-Feb	96	-0.01	0.13	0.29	396.7	403.8	463.5	8.40	8.60	8.70	30.2	110.2	320.3
11-Feb	96	-0.03	0.00	0.15	406.2	410.8	429.1	8.32	8.45	8.59	18.1	31.6	72.8
12-Feb	96	-0.03	0.00	0.05	413.3	424.0	434.9	8.26	8.40	8.49	10.4	19.8	33.3
13-Feb	95	-0.03	0.00	0.05	433.3	442.4	454.0	8.27	8.36	8.44	8.5	12.5	19.7
14-Feb	96	-0.03	0.01	0.09	449.8	459.9	481.2	8.24	8.34	8.41	6.7	10.8	21.7
15-Feb	96	-0.03	0.01	0.11	454.2	469.7	503.3	8.18	8.29	8.37	6.2	10.3	67.4
16-Feb	96	-0.03	0.00	0.06	468.8	481.0	492.8	8.15	8.24	8.32	6.0	9.0	21.8
17-Feb	96	-0.03	0.01	0.09	484.0	504.4	525.6	8.10	8.18	8.28	6.0	12.8	66.0
18-Feb	96	-0.03	0.00	0.12	493.9	525.3	548.0	8.04	8.13	8.21	6.1	11.4	27.3
19-Feb	96	-0.04	-0.01	0.08	526.7	544.1	555.1	7.96	8.06	8.13	5.9	9.2	15.9
20-Feb	96	-0.04	0.00	0.12	553.9	566.9	579.0	7.96	8.03	8.08	7.1	11.7	45.8
21-Feb	96	-0.04	0.00	0.11	577.9	590.3	603.7	7.93	8.00	8.04	8.7	13.7	27.2
22-Feb	96	-0.04	-0.02	0.05	602.2	610.8	623.2	7.92	7.98	8.02	10.5	13.2	24.1
23-Feb	96	-0.05	-0.02	0.09	607.1	626.2	636.7	7.91	7.96	7.99	9.2	18.0	539.7
24-Feb	96	-0.07	-0.03	0.05	2.6	633.3	648.4	7.00	7.94	7.97	7.7	11.9	139.6
25-Feb	96	-0.05	-0.03	0.05	566.0	651.0	658.9	7.88	7.93	7.95	7.4	10.2	20.2
26-Feb	96	-0.06	-0.04	0.03	651.7	660.9	668.1	7.87	7.92	7.95	6.8	8.6	10.7
27-Feb	96	-0.07	-0.04	0.04	607.7	665.2	675.2	7.86	7.91	7.94	6.5	8.0	17.6
28-Feb	96	-0.11	-0.06	0.01	587.3	667.2	695.6	7.87	7.91	7.93	6.3	7.8	13.5
01-Mar	96	-0.09	-0.05	-0.04	0.3	41.1	443.2	7.86	7.90	8.02	5.4	13.2	62.1
02-Mar	96	-0.04	-0.04	-0.04	29.5	108.9	213.3	7.84	7.87	7.90	5.0	6.9	9.2
03-Mar	96	-0.04	-0.04	-0.03	202.8	461.0	690.8	7.84	7.87	7.89	6.1	7.0	13.6
04-Mar	96	-0.04	-0.03	-0.01	641.0	691.5	693.9	7.82	7.86	7.88	5.7	6.5	8.2
05-Mar	96	-0.04	-0.03	-0.02	684.4	695.5	697.8	7.81	7.85	7.86	5.4	6.2	7.3
06-Mar	96	-0.04	-0.03	-0.02	685.9	698.4	699.9	7.81	7.84	7.85	5.4	6.1	10.0
07-Mar	96	-0.04	-0.03	-0.02	697.3	700.4	701.7	7.77	7.83	7.84	4.7	5.6	20.6
08-Mar	96	-0.04	-0.03	0.03	543.5	700.2	704.7	7.78	7.82	7.84	4.7	5.6	7.7
09-Mar	96	-0.04	-0.02	0.03	639.5	706.0	713.8	7.78	7.82	7.84	4.2	6.3	17.0
10-Mar	96	-0.04	-0.01	0.02	665.1	713.0	719.9	7.76	7.80	7.82	4.0	18.6	840.8
11-Mar	96	-0.01	0.02	0.11	626.6	718.9	729.5	7.76	7.80	7.82	4.5	44.5	3623.8
12-Mar	96	-0.01	0.00	0.02	715.4	730.3	734.1	7.76	7.79	7.81	4.6	7.5	88.5
13-Mar	96	-0.01	0.02	0.10	646.6	727.0	738.9	7.73	7.78	7.80	4.6	15.2	373.2
14-Mar	96	-0.04	-0.02	0.05	715.1	745.3	787.2	7.70	7.77	7.79	5.2	16.2	336.5
15-Mar	96	-0.03	-0.02	0.04	631.5	750.9	765.5	7.74	7.77	7.79	4.8	15.7	726.1
16-Mar	95	-0.02	0.00	0.09	543.7	734.3	766.7	7.71	7.83	8.36	4.8	15.3	78.8
17-Mar	96	-0.03	0.00	0.06	436.0	451.2	538.2	8.29	8.46	8.54	12.6	47.1	89.7
18-Mar	96	-0.03	0.01	0.11	436.0	506.8	625.2	7.89	8.20	8.46	7.3	16.1	26.9
19-Mar	96	-0.02	0.02	0.18	458.9	551.1	675.7	7.94	8.06	8.15	6.8	55.9	217.9
20-Mar	96	-0.03	0.04	0.17	313.4	505.0	599.5	7.96	8.12	8.41	12.8	66.9	208.7
21-Mar	96	-0.04	0.07	0.30	345.1	454.4	533.4	8.11	8.21	8.34	11.8	57.3	130.0
22-Mar	80	-0.04	0.13	0.33	104.9	381.0	475.6	8.00	8.24	8.38	13.3	399.2	9853.3
23-Mar	75	0.04	0.12	0.33	207.1	414.7	470.1	8.21	8.30	8.61	34.7	62.1	229.4
24-Mar	67	0.04	0.21	0.76	173.1	426.3	536.2	8.18	8.27	8.66	23.4	51.8	154.8
25-Mar													
26-Mar	52	-0.01	0.04	0.65	242.8	447.7	518.0	8.03	8.29	8.91	10.6	39.0	127.5
27-Mar	96	-0.02	0.05	0.44	193.6	426.7	543.3	7.96	8.16	8.60	17.7	35.1	80.4
28-Mar	96	-0.01	0.16	1.43	251.9	329.2	538.0	8.04	8.29	8.95	43.9	60.5	89.2
29-Mar	96	0.00	0.07	0.16	270.0	361.8	425.0	8.06	8.20	8.89	37.5	59.1	83.3
30-Mar	96	-0.04	0.31	1.47	319.4	466.6	605.5	8.03	8.13	8.26	27.8	40.8	63.7
31-Mar	96	0.11	0.28	1.12	276.9	451.5	591.7	8.06	8.17	8.45	42.4	72.2	119.8
01-Apr	96	0.03	0.16	0.46	279.4	360.4	457.0	8.12	8.22	8.33	57.6	81.5	145.2
02-Apr	96	-0.04	0.15	0.74	319.9	384.5	470.5	8.05	8.16	8.29	34.8	56.4	76.5

RSEM-R6E													
Day	**Number of measurements***	**Temperature (°C)**			**Specific Conductivity (µS/cm)**			**pH**			**Turbidity (NTU)**		
		Minimum	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**
03-Apr	95	0.01	0.22	0.99	367.9	453.0	500.9	8.05	8.16	8.85	22.8	33.0	43.0
04-Apr	96	0.03	0.20	0.57	450.1	464.0	480.5	8.07	8.20	9.04	15.5	24.2	33.5
05-Apr	96	0.00	0.35	1.29	372.6	418.1	451.9	8.06	8.14	8.43	14.6	21.2	26.2
06-Apr	96	0.00	0.55	2.26	393.8	421.4	434.2	8.04	8.11	8.15	13.4	20.8	26.3
07-Apr	96	0.13	0.66	1.68	391.0	411.2	426.3	8.03	8.10	8.40	13.9	22.1	31.7
08-Apr	96	0.19	0.76	1.63	390.3	492.4	682.0	8.02	8.07	8.10	13.3	56.6	128.1
09-Apr	96	0.17	0.72	1.45	599.5	646.2	672.5	8.04	8.08	8.11	15.4	38.9	81.2
10-Apr	96	0.20	0.73	1.67	607.7	633.3	652.1	8.02	8.07	8.22	7.0	16.7	26.5
11-Apr	96	0.11	0.31	0.61	604.3	613.8	619.4	7.98	8.03	8.06	3.8	8.9	14.1
12-Apr	96	0.07	0.21	0.44	606.2	615.8	626.2	7.97	8.05	8.29	2.8	6.7	11.9
13-Apr	96	0.10	0.32	0.71	623.8	637.5	648.6	7.98	8.06	8.21	1.3	5.0	8.9
14-Apr	96	0.11	0.38	0.90	625.7	639.2	655.8	7.97	8.05	8.23	0.5	3.2	6.0
15-Apr	96	0.09	0.36	0.78	611.2	633.5	647.5	7.95	8.03	8.20	0.0	2.6	5.4
16-Apr	96	0.19	0.44	0.84	620.2	635.3	649.7	7.93	8.01	8.18	0.1	2.6	4.4
17-Apr	96	0.26	0.51	0.78	614.9	633.3	643.4	7.94	8.00	8.12	0.5	2.7	7.8
18-Apr	96	0.27	0.46	0.69	613.7	625.8	637.7	7.94	7.98	8.07	0.7	3.1	4.6
19-Apr	96	0.27	0.40	0.59	611.8	620.9	634.9	7.92	7.97	8.06	0.0	2.3	3.9
20-Apr	96	0.28	0.44	0.68	595.1	606.6	620.0	7.93	7.97	8.03	0.1	1.8	3.3
21-Apr	96	0.35	0.65	1.10	602.3	612.9	625.8	7.93	7.97	8.03	0.0	1.5	4.2
22-Apr	96	0.59	1.28	2.17	601.7	614.5	639.0	7.92	7.96	8.01	0.3	2.0	5.8
23-Apr	96	1.48	2.19	4.88	463.5	569.2	630.0	7.93	7.96	8.01	1.1	2.9	6.0
24-Apr	96	1.65	3.24	5.58	458.4	525.6	551.1	7.91	7.97	8.01	2.0	4.4	9.6
25-Apr	96	3.72	5.41	8.04	498.0	537.5	560.6	7.95	8.01	8.05	3.9	7.3	27.8
26-Apr	96	4.35	6.65	9.02	560.2	595.1	617.4	7.98	8.04	8.08	5.5	10.2	42.4
27-Apr	96	4.52	5.67	7.31	616.4	620.7	627.1	8.05	8.09	8.13	9.1	25.6	65.8
28-Apr	96	3.19	3.68	4.42	627.0	640.5	657.1	8.11	8.15	8.18	42.7	68.5	129.0
29-Apr	96	2.66	3.29	3.99	656.8	683.9	709.8	8.08	8.14	8.18	37.5	63.4	94.6
30-Apr	96	3.42	4.65	6.23	709.4	726.4	743.9	8.01	8.06	8.10	3.8	23.7	58.5
01-May	96	4.25	6.71	8.69	743.9	780.9	838.0	7.98	8.03	8.09	3.6	9.7	35.1
02-May	96	6.30	6.74	7.20	839.0	852.7	877.8	8.02	8.04	8.15	5.4	10.8	14.5
03-May	96	5.63	7.06	8.14	867.7	890.5	910.4	8.04	8.07	8.10	6.2	16.0	25.8
04-May	95	6.88	8.51	10.04	899.7	907.7	911.8	8.06	8.12	8.17	15.8	26.5	151.2
05-May	96	8.87	10.57	11.97	897.4	906.6	911.3	8.13	8.17	8.21	9.6	19.0	33.0
06-May	96	8.63	9.70	11.04	895.3	905.8	910.7	8.19	8.22	8.26	10.9	21.0	35.4
07-May	96	7.77	8.17	8.61	902.9	904.5	907.1	8.25	8.28	8.31	19.6	36.8	56.5
08-May	93	6.66	7.15	7.77	903.1	904.5	907.1	8.29	8.31	8.34	24.8	38.0	57.9
09-May	96	5.53	5.93	6.61	907.1	909.9	912.9	8.30	8.33	8.35	21.8	35.9	54.2
10-May	96	4.90	6.91	9.70	912.5	923.0	934.5	8.28	8.32	8.35	24.0	37.2	53.6
11-May	94	6.38	8.57	10.74	934.7	953.3	962.2	8.30	8.32	8.35	24.0	44.9	80.5
12-May	96	9.03	10.97	12.62	959.5	965.2	972.7	8.31	8.35	8.38	41.1	54.4	97.9
13-May	96	10.69	11.74	14.32	967.4	972.7	981.5	8.34	8.38	8.41	10.5	87.4	171.0
14-May	96	10.53	11.93	13.27	977.2	980.3	986.5	8.32	8.37	8.39	51.5	191.7	395.8
15-May	96	11.18	13.05	15.00	983.4	992.5	999.3	8.31	8.35	8.39	72.8	250.0	476.8
16-May	96	12.81	13.58	14.91	993.7	1003.1	1011.3	8.35	8.38	8.42	12.7	204.9	369.1
17-May	96	11.82	12.88	13.87	1011.9	1101.6	1193.6	8.32	8.35	8.39	18.0	125.5	273.6
18-May	96	11.69	12.83	13.92	1152.1	1192.9	1204.7	8.30	8.33	8.35	39.8	163.4	291.9
19-May	96	11.25	11.81	12.71	1197.0	1237.5	1271.3	8.29	8.32	8.35	2.2	17.6	147.3
20-May	96	10.04	12.13	14.52	1155.3	1199.0	1248.3	8.28	8.31	8.34	5.2	7.6	9.6
21-May	96	10.69	13.13	15.65	1030.0	1096.9	1176.3	8.24	8.28	8.33	8.4	19.4	101.8
22-May	96	11.42	13.76	16.24	976.0	1014.0	1066.1	8.20	8.25	8.28	12.9	31.5	161.1
23-May	96	12.50	13.80	14.80	912.6	949.4	984.3	8.16	8.22	8.26	15.1	28.0	93.8
24-May	96	13.30	14.58	15.74	867.9	897.2	931.0	8.16	8.20	8.24	7.4	28.3	147.7
25-May	95	13.56	14.65	15.86	826.9	848.7	871.5	8.16	8.21	8.25	7.0	12.1	36.4
26-May	96	13.22	14.35	15.40	794.9	809.3	826.4	8.19	8.22	8.27	7.9	14.2	57.4
27-May	96	12.82	13.81	15.36	746.6	777.3	795.9	8.17	8.22	8.28	7.4	18.4	84.1
28-May	96	10.71	11.71	13.33	779.8	1046.4	1116.1	7.97	8.15	8.23	15.6	64.5	622.4
29-May	95	10.34	11.92	13.94	1046.3	1076.5	1110.0	7.91	7.99	8.05	16.2	60.1	541.9
30-May	96	12.03	14.82	17.86	1012.9	1025.9	1045.3	7.95	8.04	8.16	7.7	38.7	237.6
31-May	96	14.00	16.91	19.86	1003.3	1017.2	1028.0	8.08	8.22	8.32	5.3	10.6	25.9
01-Jun	91	14.75	17.43	19.75	901.9	967.6	1011.3	8.26	8.31	8.34	3.4	14.5	63.8
02-Jun	96	15.84	18.19	20.19	852.2	897.1	927.5	8.12	8.27	8.31	2.0	10.5	59.6
03-Jun	96	16.81	18.65	19.97	810.7	847.7	873.4	8.14	8.22	8.27	2.4	13.5	100.7
04-Jun	96	17.44	18.55	19.85	777.0	809.8	829.3	8.13	8.20	8.25	7.4	26.9	135.7
05-Jun	96	15.98	17.14	18.35	759.2	772.9	789.5	8.15	8.21	8.26	11.9	29.5	90.9
06-Jun	96	15.00	15.49	15.93	735.4	748.6	758.9	8.13	8.20	8.25	9.1	13.0	38.5
07-Jun	96	14.28	17.19	20.71	725.3	734.1	739.4	8.14	8.21	8.29	10.4	18.3	109.7
08-Jun	91	16.63	17.43	18.34	677.1	715.5	730.3	8.16	8.22	8.27	10.2	37.6	222.5
09-Jun	96	15.48	18.04	20.69	701.4	716.5	733.6	8.17	8.22	8.26	13.3	45.1	197.9
10-Jun	96	17.55	18.10	18.99	666.9	704.0	720.0	8.18	8.25	8.32	13.8	66.2	269.6
11-Jun	96	16.35	17.35	18.20	668.8	694.3	706.1	8.15	8.25	8.34	18.4	53.1	184.5
12-Jun	96	15.92	17.23	18.45	653.3	676.1	690.2	8.14	8.27	8.37	22.6	46.4	240.7
13-Jun	96	15.46	17.52	19.58	649.4	663.2	671.6	8.15	8.27	8.38	24.2	63.4	250.0
14-Jun	96	15.55	16.95	18.39	628.8	646.0	655.5	8.21	8.31	8.39	16.5	58.7	163.0
15-Jun	96	15.94	17.36	19.33	612.0	635.9	650.7	8.15	8.28	8.34	18.0	47.9	237.6
16-Jun	96	16.88	17.98	19.43	598.8	621.0	636.9	8.22	8.30	8.37	14.7	45.8	245.8
17-Jun	94	15.30	16.07	17.46	613.8	651.2	672.0	8.17	8.22	8.30	22.2	47.2	68.4
18-Jun	96	14.87	15.58	16.68	664.7	671.3	676.5	8.10	8.22	8.31	33.4	46.8	147.3
19-Jun	96	14.88	16.94	18.85	662.0	667.1	671.8	8.21	8.30	8.38	23.1	41.5	131.4
20-Jun	96	16.76	19.08	21.52	643.6	655.8	663.6	8.24	8.33	8.39	13.2	39.6	123.3
21-Jun	96	17.81	18.70	19.54	621.8	634.9	649.3	8.19	8.32	8.38	10.6	35.9	154.2
22-Jun	96	16.95	18.18	19.11	601.7	616.7	627.5	8.21	8.32	8.40	4.1	20.1	168.4
23-Jun	96	15.83	16.65	17.90	599.7	608.7	615.9	8.18	8.27	8.35	0.4	4.4	73.5
24-Jun	96	15.09	18.08	21.56	604.4	610.2	616.1	8.12	8.28	8.37	0.8	6.5	81.7
25-Jun	96	16.70	19.87	22.77	595.0	601.5	606.7	8.25	8.32	8.37	0.3	12.9	148.3
26-Jun	96	18.46	20.52	22.98	576.4	590.8	600.8	8.27	8.33	8.41	0.0	20.3	212.7
27-Jun	96	19.40	20.06	20.95	581.4	589.8	594.8	8.24	8.31	8.36	0.1	16.5	226.7
28-Jun	96	18.51	19.91	21.16	586.5	590.3	594.3	8.21	8.29	8.35	0.0	8.4	77.1
29-Jun	96	17.65	19.92	22.01	579.7	588.5	592.9	8.23	8.30	8.36	0.0	7.5	49.4
30-Jun	96	18.69	21.20	24.26	562.9	576.8	584.2	8.22	8.29	8.38	0.0	11.0	73.0
01-Jul	96	21.51	22.12	23.07	1268.6	1293.1	1386.8	8.93	9.02	9.08	2.1	12.3	291.6
02-Jul	96	20.52	21.89	23.42	1269.9	1284.1	1331.9	8.95	9.02	9.16	1.3	10.0	115.6
03-Jul	96	20.89	22.48	24.36	1250.9	1272.7	1347.3	9.04	9.10	9.22	1.3	4.8	129.9

RSEM-R6E													
Day	**Number of measurements***	**Temperature (°C)**			**Specific Conductivity (µS/cm)**			**pH**			**Turbidity (NTU)**		
		Minimum	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**
04-Jul	96	21.75	22.77	23.82	1238.6	1264.5	1350.6	9.12	9.20	9.29	1.2	4.6	76.4
05-Jul	96	21.92	22.37	22.84	1227.0	1252.6	1271.4	9.18	9.25	9.34	1.3	6.2	219.6
06-Jul	96	21.46	22.50	23.56	1213.0	1246.3	1273.2	9.25	9.32	9.43	1.4	7.6	164.5
07-Jul	96	21.99	22.74	23.63	1224.8	1241.1	1258.7	9.34	9.39	9.45	1.3	4.6	172.0
08-Jul	96	21.63	22.54	23.37	1232.9	1242.4	1271.1	9.34	9.42	9.50	1.5	3.3	22.5
09-Jul	96	20.77	21.47	22.48	1238.1	1245.4	1255.4	9.42	9.47	9.52	1.8	3.9	39.7
10-Jul	96	19.97	20.76	21.50	1243.2	1246.5	1251.6	9.44	9.50	9.56	2.0	2.8	6.3
11-Jul	96	19.79	20.84	22.10	1236.9	1246.1	1256.0	9.47	9.51	9.55	2.0	5.0	55.9
12-Jul	96	20.36	21.32	22.26	1230.9	1242.9	1248.9	9.36	9.41	9.49	1.9	3.1	8.4
13-Jul	96	20.13	20.68	21.34	1238.4	1246.8	1260.2	9.18	9.27	9.36	2.5	4.7	28.9
14-Jul	96	19.33	20.26	21.06	1249.3	1258.3	1266.6	8.98	9.09	9.18	2.7	4.7	20.5
15-Jul	96	19.85	20.88	21.83	1257.5	1275.0	1283.1	8.82	8.87	8.99	2.6	5.1	45.2
16-Jul	96	20.01	21.27	22.41	1279.4	1289.9	1300.5	8.68	8.74	8.82	2.2	4.5	17.2
17-Jul	96	20.43	22.14	23.97	1281.0	1302.4	1370.6	8.50	8.63	8.73	2.8	8.5	42.8
18-Jul	96	21.38	22.51	23.68	1290.3	1308.8	1326.0	8.47	8.59	8.67	3.4	14.6	252.7
19-Jul	96	21.33	21.97	22.69	1306.4	1314.0	1321.2	8.46	8.56	8.66	3.3	13.4	142.4
20-Jul	96	20.51	21.80	22.93	1298.3	1312.7	1319.1	8.43	8.53	8.62	5.0	9.5	53.8
21-Jul	96	20.87	21.73	22.67	1287.7	1302.2	1319.4	8.48	8.59	8.68	3.5	9.8	25.0
22-Jul	96	20.74	22.36	24.18	1275.8	1298.2	1350.2	8.51	8.63	8.73	3.1	11.5	258.5
23-Jul	96	21.68	23.03	24.47	1266.8	1291.1	1353.9	8.62	8.71	8.78	2.9	19.0	290.8
24-Jul	96	22.25	22.99	23.81	1249.0	1281.8	1363.1	8.67	8.72	8.79	3.2	16.5	211.0
25-Jul	96	21.49	23.25	24.99	1235.2	1277.1	1371.4	8.62	8.66	8.72	2.2	7.0	90.6
26-Jul	96	22.34	24.26	26.58	1214.4	1258.0	1346.2	8.64	8.71	8.76	2.0	24.3	486.7
27-Jul	96	23.37	25.70	28.42	1173.4	1251.1	1333.0	8.60	8.71	8.77	2.1	21.9	296.7
28-Jul	96	24.74	26.34	28.25	1186.5	1239.7	1319.3	8.65	8.72	8.79	2.0	12.8	242.4
29-Jul	96	25.17	26.22	27.89	1196.6	1226.3	1270.1	8.48	8.59	8.72	1.7	7.5	313.7
30-Jul	96	24.68	25.42	26.43	1169.8	1195.5	1219.0	8.24	8.35	8.47	1.5	14.2	398.0
31-Jul	96	24.20	24.77	25.65	1150.6	1164.2	1177.3	8.13	8.23	8.40	1.6	5.1	127.4
01-Aug	96	23.20	24.04	24.87	1122.8	1143.4	1155.6	8.12	8.23	8.38	2.1	4.8	15.6
02-Aug	96	22.24	23.08	24.18	1116.4	1126.2	1130.5	8.14	8.26	8.36	2.7	6.3	17.5
03-Aug	96	21.56	22.31	22.94	1110.0	1116.1	1119.3	8.18	8.31	8.45	2.7	5.1	25.7
04-Aug	96	20.00	20.88	22.08	1094.3	1104.7	1115.0	8.28	8.33	8.39	2.8	5.0	13.8
05-Aug	96	19.05	20.59	22.34	1080.2	1090.1	1097.4	8.26	8.38	8.56	2.1	4.0	23.6
06-Aug	96	19.60	20.56	21.53	1035.9	1061.6	1083.6	8.36	8.48	8.57	1.9	3.5	7.9
07-Aug	96	20.14	21.07	21.95	963.4	994.5	1036.2	8.33	8.46	8.58	3.6	11.5	286.9
08-Aug	96	20.14	21.58	23.20	924.6	946.4	969.6	8.35	8.45	8.59	1.2	7.8	116.1
09-Aug	96	20.43	22.05	23.90	913.8	928.6	954.1	8.40	8.53	8.71	1.2	9.4	159.0
10-Aug	96	21.10	22.93	25.18	905.9	920.6	987.2	8.49	8.63	8.74	1.3	8.2	53.8
11-Aug	96	21.37	22.60	23.96	892.7	915.1	997.3	8.64	8.74	8.86	1.1	11.0	295.0
12-Aug	96	21.82	23.36	25.56	892.5	910.5	956.5	8.67	8.77	8.90	1.3	6.7	40.4
13-Aug	96	22.46	23.34	25.00	860.6	904.1	974.3	8.68	8.83	8.91	1.2	21.6	523.1
14-Aug	96	21.24	21.97	22.86	889.9	901.8	932.4	8.67	8.74	8.84	0.9	11.3	228.2
15-Aug	96	20.10	21.48	22.84	874.2	895.1	953.0	8.62	8.74	8.85	1.1	6.1	67.0
16-Aug	96	20.58	22.00	23.73	871.7	889.8	904.3	8.72	8.80	8.95	1.5	11.9	150.1
17-Aug	96	20.85	22.76	25.03	878.4	887.2	904.2	8.75	8.82	8.91	1.4	8.9	51.2
18-Aug	96	21.71	23.55	25.95	863.6	885.2	945.7	8.74	8.85	8.93	0.6	12.5	512.6
19-Aug	96	22.32	23.83	26.09	873.4	882.2	909.7	8.80	8.85	8.94	0.2	10.3	138.1
20-Aug	96	22.47	23.75	25.18	865.5	889.4	947.6	8.67	8.77	8.86	0.0	2.2	77.4
21-Aug	96	22.77	23.72	24.88	886.4	899.0	910.6	8.59	8.73	8.87	0.0	5.5	219.7
22-Aug	96	22.88	24.34	26.34	906.1	919.1	931.0	8.57	8.68	8.84	0.0	10.0	554.5
23-Aug	96	23.10	24.51	26.51	912.5	936.0	995.8	8.64	8.75	8.90	0.0	10.7	318.5
24-Aug	96	23.38	24.73	26.46	921.7	944.3	1012.6	8.70	8.81	8.95	0.0	10.6	309.8
25-Aug	96	23.54	24.95	26.77	926.8	951.1	1001.9	8.76	8.87	9.02	0.0	41.7	1167.6
26-Aug	96	23.33	23.99	24.73	905.7	946.2	1024.1	8.86	9.00	9.12	0.0	37.9	1108.0
27-Aug	96	21.77	22.46	23.42	933.8	956.0	1050.9	8.84	8.96	9.06	0.0	0.0	1.5
28-Aug	96	20.41	20.91	21.73	937.1	956.7	969.2	8.90	9.02	9.12	0.0	0.1	5.3
29-Aug	96	19.96	20.63	21.44	921.4	932.8	988.6	8.95	9.06	9.18	0.0	0.0	2.6
30-Aug	96	20.17	20.92	21.64	893.2	914.7	930.8	8.99	9.10	9.19	0.0	0.1	2.6
31-Aug	96	19.89	20.78	21.53	877.0	897.8	911.8	8.98	9.06	9.16	0.0	0.0	1.5
01-Sep	96	19.19	20.13	20.98	861.9	883.3	896.4	8.82	8.99	9.10	0.0	0.3	15.5
02-Sep	96	18.50	20.26	22.40	848.8	872.6	884.5	8.64	8.90	9.12	0.0	1.5	137.5
03-Sep	96	19.09	20.20	21.31	847.8	865.1	931.8	8.95	9.07	9.18	0.0	0.1	5.3
04-Sep	96	19.20	19.77	20.14	837.9	867.1	911.5	9.06	9.15	9.24	0.0	0.3	12.0
05-Sep	96	17.65	18.37	19.17	869.3	891.6	936.3	9.12	9.22	9.31	0.0	0.2	15.4
06-Sep	96	16.46	17.31	17.98	898.0	909.4	919.7	9.19	9.25	9.32	0.0	0.0	0.0
07-Sep	96	16.50	16.92	17.37	914.3	923.1	927.6	9.21	9.28	9.35	0.0	0.0	0.6
08-Sep	96	15.90	16.64	17.47	922.8	931.0	936.2	9.24	9.31	9.39	0.0	0.0	0.0
09-Sep	96	15.39	16.38	17.53	931.1	937.9	943.2	9.29	9.34	9.44	0.0	0.0	0.0
10-Sep	96	15.21	16.05	16.90	938.5	947.0	964.7	9.29	9.35	9.42	0.0	0.0	0.0
11-Sep	96	15.01	16.00	17.60	946.2	961.5	991.0	9.27	9.34	9.42	0.0	0.0	3.4
12-Sep	96	14.88	15.60	16.62	989.7	1019.0	1070.6	9.25	9.32	9.40	0.0	0.1	12.6
13-Sep	96	14.83	15.77	17.30	1052.8	1074.8	1093.1	9.22	9.27	9.39	0.0	0.1	8.2
14-Sep	96	14.80	15.71	17.22	1074.8	1097.8	1157.9	9.28	9.35	9.45	0.0	0.1	6.6
15-Sep	96	14.61	15.67	16.84	1084.6	1107.5	1127.2	9.34	9.42	9.51	0.0	0.1	6.8
16-Sep	96	13.87	14.45	15.40	1100.1	1126.6	1138.0	8.28	9.07	9.48	0.0	0.3	24.3
17-Sep	96	12.99	13.33	13.86	1127.0	1146.0	1181.3	7.43	7.69	8.36	0.0	0.1	10.5
18-Sep	96	12.54	12.92	13.31	1171.8	1197.9	1219.1	7.41	7.61	7.84	0.0	0.5	43.3
19-Sep	96	12.13	12.68	13.13	1215.9	1232.7	1246.8	7.39	7.56	7.83	0.0	0.0	1.0
20-Sep	96	12.09	12.74	13.88	1243.4	1254.1	1266.8	7.16	7.44	7.73	0.0	0.0	0.0
21-Sep	96	12.41	13.16	14.67	1177.8	1252.6	1323.6	7.16	7.35	7.86	0.0	0.0	0.0
22-Sep	96	12.95	13.69	14.85	1202.5	1254.4	1365.6	7.19	7.39	7.68	0.0	0.4	38.5
23-Sep	96	13.18	13.56	13.91	1203.0	1253.0	1373.8	7.19	7.31	7.70	0.0	0.2	11.9
24-Sep	96	12.44	13.00	13.47	1225.7	1254.3	1284.7	7.14	7.32	7.63	0.0	0.3	9.4
25-Sep	96	12.69	13.27	13.89	1192.0	1248.0	1283.0	7.06	7.18	7.43	0.0	0.1	2.1
26-Sep	96	13.18	13.80	14.82	1213.6	1245.5	1343.8	6.98	7.10	7.31	0.0	1.9	157.3
27-Sep	96	13.70	14.44	15.43	1163.3	1235.7	1325.8	7.01	7.09	7.27	0.0	10.6	530.1
28-Sep	96	13.82	14.60	15.48	1157.3	1228.6	1318.9	6.96	7.06	7.33	0.0	5.0	154.7
29-Sep	96	14.39	15.06	16.18	1163.2	1230.8	1335.1	6.97	7.37	7.77	0.0	7.4	442.5
30-Sep	96	14.63	15.29	16.39	1169.7	1222.5	1261.6	7.80	8.03	8.24	0.0	0.1	4.4
01-Oct	96	13.99	14.79	15.45	424.3	429.9	449.4	8.38	8.46	8.53	8.4	13.3	28.1
02-Oct	96	14.35	15.00	16.03	414.3	425.4	432.0	8.42	8.49	8.56	7.1	15.1	45.9
03-Oct	96	12.82	13.68	14.66	430.7	439.9	447.7	8.36	8.45	8.54	8.9	14.7	37.1

RSEM-R6E													
Day	**Number of measurements***	**Temperature (°C)**			**Specific Conductivity (µS/cm)**			**pH**			**Turbidity (NTU)**		
		Minimum	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**
04-Oct	96	11.19	12.02	12.80	432.7	442.5	458.2	8.45	8.48	8.52	21.7	37.8	77.6
05-Oct	96	11.46	11.97	12.71	456.9	465.2	468.3	8.43	8.45	8.49	33.1	49.7	67.9
06-Oct	96	10.97	11.49	11.98	459.8	463.8	467.7	8.38	8.45	8.53	16.0	25.0	41.3
07-Oct	96	6.83	9.76	11.66	0.1	252.8	461.5	8.36	8.51	8.70	0.7	1.7	4.9
08-Oct	96	10.03	10.51	11.02	454.4	460.0	466.0	8.44	8.52	8.61	0.0	0.3	1.8
09-Oct	96	9.99	10.67	11.31	447.8	451.7	455.7	8.46	8.52	8.59	0.0	0.6	5.6
10-Oct	96	10.87	11.53	11.95	443.7	449.8	452.8	8.46	8.52	8.59	0.0	0.5	5.3
11-Oct	96	8.84	9.63	10.87	447.1	450.7	454.2	8.45	8.53	8.60	0.3	2.6	13.5
12-Oct	96	8.20	8.60	8.99	447.7	451.6	454.1	8.50	8.55	8.59	2.6	4.4	7.2
13-Oct	96	8.58	9.56	10.87	441.2	447.4	452.1	8.51	8.56	8.61	1.5	2.9	5.9
14-Oct	96	10.78	11.30	11.92	429.8	437.0	442.1	8.53	8.58	8.63	0.9	1.7	5.7
15-Oct	96	10.26	10.70	11.26	418.7	425.7	430.8	8.47	8.55	8.61	0.1	1.3	5.5
16-Oct	96	9.19	9.72	10.50	427.2	432.0	436.4	8.46	8.53	8.61	1.1	2.0	4.4
17-Oct	96	8.56	9.15	10.01	426.7	433.3	436.6	8.48	8.55	8.62	0.7	1.5	3.3
18-Oct	96	8.77	9.52	10.62	425.0	433.4	437.7	8.50	8.57	8.63	1.1	1.9	6.5
19-Oct	96	9.49	10.06	10.59	428.7	432.1	434.8	8.52	8.58	8.63	1.1	2.4	14.5
20-Oct	96	9.09	9.66	10.27	430.1	433.1	436.1	8.47	8.54	8.60	2.7	7.1	11.3
21-Oct	96	8.04	8.64	9.11	430.5	435.8	439.3	8.48	8.53	8.59	5.8	8.5	11.1
22-Oct	96	6.17	7.19	7.99	437.2	438.8	441.1	8.50	8.56	8.61	3.1	6.2	54.1
23-Oct	96	4.89	5.30	6.22	430.2	435.8	440.2	8.54	8.60	8.65	2.6	4.2	5.6
24-Oct	96	4.45	4.83	5.08	431.4	435.2	436.9	8.56	8.60	8.63	3.2	5.0	6.2
25-Oct	96	3.82	4.10	4.46	435.0	459.4	472.8	8.54	8.57	8.60	5.2	10.0	34.4
26-Oct	96	2.72	3.46	3.80	460.7	468.3	474.5	8.54	8.57	8.60	8.7	14.4	19.4
27-Oct	96	3.63	4.27	4.85	457.3	459.1	461.7	8.52	8.56	8.59	13.0	19.2	25.2
28-Oct	96	4.20	4.66	4.92	454.0	457.0	459.6	8.53	8.56	8.59	18.2	26.3	39.7
29-Oct	96	4.16	4.39	4.73	443.8	448.5	454.2	8.51	8.53	8.56	29.1	41.3	58.2
30-Oct	96	4.13	4.38	4.60	438.9	441.7	444.3	8.50	8.55	8.59	22.2	32.5	52.1
31-Oct	95	3.09	3.77	4.28	436.0	438.3	439.7	8.55	8.57	8.59	16.4	25.7	349.0
01-Nov	96	0.35	1.94	3.34	439.1	443.6	452.9	8.55	8.59	8.63	14.4	18.7	26.8
02-Nov	94	0.08	0.35	1.06	450.1	461.8	472.1	8.56	8.60	8.62	12.9	19.7	26.4
03-Nov	96	-0.33	0.62	0.93	0.1	461.1	477.1	6.64	8.53	8.58	0.0	12.9	25.9
04-Nov	96	0.74	1.15	1.91	452.3	463.1	470.7	8.53	8.55	8.57	0.4	2.8	7.7
05-Nov	96	0.83	1.21	1.50	456.1	458.9	463.6	8.53	8.56	8.57	0.8	2.6	6.3
06-Nov	96	0.37	0.64	1.35	456.9	463.6	468.0	8.54	8.56	8.58	2.1	4.7	8.2
07-Nov	96	0.28	0.35	0.46	467.1	473.9	478.4	8.49	8.54	8.57	2.8	6.1	10.4
08-Nov	96	0.10	0.17	0.36	473.0	475.1	478.8	8.48	8.50	8.51	1.9	3.9	68.6
09-Nov	96	0.04	0.08	0.13	473.4	475.2	479.4	8.45	8.48	8.51	0.6	2.3	8.1
10-Nov	96	0.07	0.09	0.12	470.4	473.3	475.3	8.46	8.47	8.49	2.1	3.5	6.3
11-Nov	96	0.02	0.10	0.17	463.6	466.4	471.6	8.46	8.48	8.50	0.3	3.1	8.9
12-Nov	96	0.02	0.13	0.99	460.2	466.7	470.6	8.46	8.49	8.50	0.0	0.9	2.7
13-Nov	96	0.10	0.19	0.38	457.7	463.0	469.1	8.48	8.50	8.52	0.0	0.7	2.0
14-Nov	96	0.22	0.29	0.40	454.9	457.8	461.7	8.49	8.52	8.54	0.0	0.3	1.2
15-Nov	96	0.29	0.35	0.49	451.9	454.3	457.3	8.49	8.51	8.53	0.0	0.1	1.4
16-Nov	96	0.32	0.37	0.59	447.5	452.5	459.0	8.49	8.52	8.54	0.0	0.1	0.8
17-Nov	96	0.10	0.26	1.53	457.7	461.9	468.2	8.51	8.56	8.58	0.0	1.6	5.2
18-Nov	96	0.06	0.13	1.12	456.7	470.7	475.5	8.53	8.55	8.56	0.3	1.7	5.5
19-Nov	96	0.04	0.07	0.28	473.5	477.8	482.2	8.51	8.53	8.55	0.0	0.9	2.2
20-Nov	96	0.08	0.11	0.33	470.5	474.1	477.8	8.51	8.53	8.54	0.0	0.5	1.5
21-Nov	96	0.13	0.15	0.26	470.6	472.3	474.1	8.50	8.52	8.54	0.0	0.3	1.2
22-Nov	96	0.15	0.19	0.42	459.3	471.2	473.0	8.46	8.49	8.52	0.0	0.5	11.5
23-Nov	96	0.17	0.20	0.43	447.8	473.6	475.9	8.46	8.48	8.50	0.0	0.0	0.6
24-Nov	96	0.19	0.28	0.50	451.5	470.0	476.3	8.46	8.48	8.50	0.0	0.5	5.6
25-Nov	96	0.15	0.20	0.27	473.0	477.9	482.7	8.45	8.48	8.49	0.0	0.0	0.0
26-Nov	96	0.15	0.21	0.53	459.8	480.9	485.1	8.46	8.49	8.51	0.0	0.1	2.2
27-Nov	96	0.12	0.23	1.52	479.5	486.6	495.5	8.46	8.49	8.52	0.0	0.4	5.0
28-Nov	96	0.05	0.09	0.21	491.0	499.6	507.2	8.46	8.49	8.50	0.0	0.1	3.4
29-Nov	96	-0.02	0.01	0.16	505.2	514.9	526.3	8.43	8.47	8.49	0.0	0.1	3.8
30-Nov	96	-0.03	-0.02	0.07	521.5	528.7	540.4	8.38	8.41	8.44	0.0	1.2	11.2
01-Dec	96	-0.04	-0.03	0.05	535.6	541.8	553.1	8.32	8.36	8.39	0.0	0.4	28.4
02-Dec	96	-0.05	-0.04	-0.01	547.6	553.4	562.8	8.23	8.29	8.34	0.0	0.3	6.4
03-Dec	96	-0.06	-0.04	-0.01	536.1	560.7	611.6	8.16	8.21	8.25	0.0	0.7	7.9
04-Dec	96	-0.04	-0.03	0.01	558.1	560.6	566.9	8.13	8.15	8.20	0.0	1.0	8.8
05-Dec	96	-0.03	-0.03	0.00	562.7	567.1	581.4	8.10	8.12	8.16	0.0	1.0	12.3
06-Dec	96	-0.04	-0.04	-0.03	467.1	569.3	582.2	8.08	8.10	8.16	0.0	0.3	10.1
07-Dec	96	-0.05	-0.04	-0.03	431.4	573.7	594.3	8.08	8.10	8.14	0.0	2.0	54.3
08-Dec	96	-0.04	-0.04	-0.03	584.8	587.9	614.4	8.07	8.09	8.11	0.0	0.2	7.0
09-Dec	96	-0.04	-0.03	0.02	582.5	592.3	598.5	8.07	8.09	8.11	0.0	4.5	304.5
10-Dec	96	-0.06	-0.04	0.01	596.2	602.3	612.6	8.03	8.06	8.10	0.0	0.9	19.4
11-Dec	96	-0.07	-0.05	-0.04	192.0	659.0	1063.2	8.00	8.04	8.06	0.0	1.0	16.5
12-Dec	96	-0.09	-0.06	-0.04	1.2	8.3	96.8	8.00	8.01	8.05	0.0	8.2	68.0
13-Dec	96	-0.08	-0.06	-0.04	0.4	0.9	1.8	7.99	8.00	8.02	0.0	3.0	63.6
14-Dec	96	-0.07	-0.05	-0.04	0.5	1.0	1.4	7.98	8.00	8.01	2.1	2.6	14.1
15-Dec	96	-0.09	-0.06	-0.04	0.1	0.7	1.3	7.96	7.98	8.00	2.3	280.7	26125.0
16-Dec	95	-0.08	-0.05	-0.04	0.1	0.5	1.0	7.94	7.96	7.97	2.8	40.3	103.6
17-Dec	96	-0.23	-0.09	-0.05	0.1	0.1	0.4	7.92	7.95	8.11	21.8	253.4	671.3
18-Dec	96	-0.58	-0.24	-0.04	0.1	0.1	0.1	7.60	7.85	9.67	534.4	626.2	715.4
19-Dec	96	-0.05	-0.04	-0.04	0.1	0.3	0.8	7.75	7.83	7.93	525.1	540.4	575.3
20-Dec	96	-0.19	-0.05	-0.04	0.1	99.4	243.8	7.88	7.92	8.63	0.0	480.0	1829.0
21-Dec	96	-0.07	-0.05	-0.04	5.4	47.4	176.5	7.85	7.87	7.99	0.0	55.8	574.6
22-Dec	96	-0.12	-0.08	-0.05	0.1	1.7	5.4	7.85	7.87	7.90	4.5	403.0	864.2
23-Dec	96	-2.02	-0.12	-0.04	0.0	0.1	0.1	7.36	7.81	7.92	379.7	489.6	593.7
24-Dec	96	-0.07	-0.05	-0.04	0.1	310.4	662.3	7.78	7.82	7.91	0.0	303.3	595.8
25-Dec	96	-0.05	-0.04	-0.03	634.8	686.0	714.4	7.80	7.81	7.82	0.0	4.5	61.4
26-Dec	96	-0.04	-0.04	0.01	700.0	710.3	719.2	7.80	7.81	7.81	0.0	5.4	55.5
27-Dec	96	-0.04	-0.03	0.01	713.4	716.0	726.2	7.80	7.81	7.82	0.0	2.7	19.2
28-Dec	96	-0.04	-0.03	-0.02	715.0	717.3	722.0	7.79	7.81	7.82	0.0	3.0	16.8
29-Dec	96	-0.04	-0.03	-0.02	674.1	721.2	730.6	7.78	7.80	7.81	0.0	2.0	16.6
30-Dec	96	-0.04	-0.03	-0.02	684.0	724.6	727.6	7.76	7.78	7.79	0.0	1.1	12.1
31-Dec	96	-0.05	-0.03	-0.01	725.7	728.9	733.3	7.77	7.78	7.81	0.0	0.0	0.0

*Based on temperature readings

RSEM-R5A-Pond A													
Day	**Number of measurements***	**Temperature (°C)**			**Specific Conductivity (µS/cm)**			**pH**			**Turbidity (NTU)**		
		Minimum	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**
21-Mar	172	0.48	1.52	8.68	354.5	536.4	642.8	7.83	8.09	8.43	35.06	82.61	189.98
22-Mar	288	0.17	1.22	2.11	603.4	664.9	759.3	7.78	7.82	7.86	14.03	46.96	128.18
23-Mar	288	0.48	1.57	2.66	708.2	853.9	945.4				8.56	59.48	110.26
24-Mar	288	0.36	1.86	3.22	839.9	908.8	963.8				33.38	158.31	690.54
25-Mar	118	0.37	1.27	2.12	744.0	809.4	886.1				70.49	124.94	251.09
10-May	41	8.8	9.97	10.94	2071.5	2122.24	2252.5	7.83	7.92	8.02	0	29.01	122.3
11-May	96	7.15	10.93	14.67	2080.8	2112.74	2139.3	8.02	8.12	8.23	8.73	17.55	52.15
12-May	96	10.12	13.03	15.14	2091.8	2123.85	2147.5	8.12	8.19	8.26	5.02	7.44	22.9
13-May	96	11.27	13.36	16.38	2121.1	2144.30	2174.5	8.12	8.19	8.24	3.98	4.63	5.42
14-May	96	10.64	13.75	16.66	1994.8	2120.41	2177.6	8.12	8.23	8.31	0	4.81	19.84
15-May	96	10.76	14.28	17.7	2010.8	2134.33	2199.9	8.23	8.30	8.45	0	1.63	19.09
16-May	96	13.07	14.68	16.43	2009.6	2150.40	2194.9	8.22	8.34	8.5			
17-May	96	11.38	13.62	16.08	1946.5	2142.71	2171.7	8.14	8.27	8.58			
18-May	96	11.56	13.28	14.98	2127.6	2152.17	2168.5	8.23	8.28	8.31			
19-May	96	10.3	11.51	13.04	1892.5	2044.92	2172.1	8.09	8.20	8.32			
20-May	96	10.0	12.98	16.34	1796.3	1845.51	1910.1	7.98	8.05	8.16	0	24.08	49.98
21-May	96	11.63	14.95	18.61	1807.7	1837.19	1912.1	7.91	7.99	8.18	29.7	91.85	450.33
22-May	43	6.87	15.91	25.58	0	846.46	1941.2	0	7.01	9.31	0	39.23	151.95
02-Jun	37	20.52	21.90	22.54	1519.3	1720.49	1894.2	7.69	7.88	7.93	12.54	85.51	323.64
03-Jun	96	17.53	20.25	22.48	1465.5	1641.58	1843.1	7.83	7.91	8.06	10.84	35.11	120.66
04-Jun	96	18.48	20.14	21.52	1555.1	1666.72	1775.1	7.88	8.43	8.6	21.18	35.27	106.29
05-Jun	96	16.18	18.17	20.19	1477	1540.86	1576.5	8.51	8.59	8.69	30.95	54.23	121.01
06-Jun	96	14.47	15.22	16.12	1284.8	1364.75	1471.6	8.59	8.66	8.72	35.57	73.64	169.38
07-Jun	96	14.49	18.83	24.24	1192.1	1288.63	1378.6	8.5	8.57	8.63	12.16	35.34	156.73
08-Jun	96	17.79	19.46	20.8	1265.7	1299.25	1338.3	8.51	8.55	8.59	7.72	14.39	41.48
09-Jun	96	17.1	20.60	23.93	1300.1	1317.91	1357.1	8.41	8.54	8.57	8.55	21.56	136.18
10-Jun	96	19.57	21.52	23.94	1291	1309.87	1330.3	8.41	8.58	8.66	15.03	25.91	286.36
11-Jun	96	18.03	20.25	22.32	1312.4	1337.40	1367	8.62	8.70	8.78	12.4	18.13	52.73
12-Jun	96	16.74	19.98	23.24	1313.4	1353.03	1383.2	8.71	8.77	8.8	10.6	35.85	157.34
13-Jun	96	16.53	19.85	23.13	1229	1342.15	1449.4	8.68	8.78	8.82	8.7	48.71	599.16
14-Jun	96	17.02	18.83	20.27	1107.3	1215.56	1326.5	8.62	8.69	8.78	28.15	66.95	506.93
15-Jun	96	17.09	18.66	20.64	1139.7	1187.81	1229.8	8.6	8.64	8.67	34.9	72.80	175.1
16-Jun	96	18.32	19.64	22.18	1161.9	1232.54	1367.7	8.52	8.60	8.65	42.88	74.07	165.56
17-Jun	96	15.71	16.38	18.33	1212.7	1344.64	1531.9	8.5	8.57	8.63	45.39	168.00	357.08
18-Jun	96	15.21	16.28	17.57	1446.6	1581.78	1758.8	8.49	8.54	8.61	39.54	112.06	380.61
19-Jun	96	16.02	18.53	21.17	1530.3	1654.1	1985.4	8.54	8.59	8.61	64.86	99.90	214.12
20-Jun	96	18.12	21.58	24.50	1431.8	1586.3	1765.9	8.51	8.56	8.62	35.70	79.45	168.93
21-Jun	96	19.42	20.87	23.33	1390.6	1443.1	1758.6	8.53	8.58	8.64	74.13	141.49	240.25
22-Jun	96	17.39	20.01	22.49	1351.3	1437.7	1610.9	8.54	8.64	8.7	33.78	68.55	145.08
23-Jun	96	16.56	17.63	19.61	1523.7	1562.4	1607.6	8.51	8.58	8.63	51.96	68.94	98.89
24-Jun	96	15.44	19.71	24.96	1547.5	1615.86	1830	8.39	8.48	8.56	52.09	246.78	801.15
25-Jun	96	17.42	22.24	27.52	1438.1	1677.57	1864.4	8.32	8.43	8.49	50.25	464.18	1390.6
26-Jun	96	20.29	22.46	24.56	1018.6	1202.58	1477.4	8.05	8.43	8.56	48.6	105.93	377.01
27-Jun	96	19.57	21.15	22.79	1098.6	1149.44	1259.7	7.9	7.96	8.06	65.31	114.00	304.53
28-Jun	96	19.46	21.38	23.26	1073.4	1140.42	1202.5	7.45	8.04	8.28	58.29	189.18	941.51
29-Jun	63	11.51	21.49	32.8	0	232.91	1264.2	5.95	7.48	8.68	0.35	20.85	114.15
09-Jul	46	20.05	21.34	22.21	999.5	1012.0	1063.9	8.55	8.61	8.63	69.67	106.51	152.82
10-Jul	96	18.48	20.72	22.99	1016.2	1030.6	1041.3	8.48	8.54	8.6	105.39	127.35	169.78
11-Jul	96	19.71	22.32	25.77	1014.4	1039.4	1050.9	8.50	8.56	8.62	49.72	74.71	128.94
12-Jul	96	12.52	20.13	24.29	0	776.2	1066.2	7.71	8.52	9.15	0.27	41.47	93.13
13-Jul	96	9.19	19.03	24.69	0	613.1	1090.8	3.88	8.33	10.4	0	101.77	366.66
14-Jul	96	18.53	20.50	22.13	1037.1	1045.5	1051.6	8.53	8.56	8.58	58.47	76.67	99.23
15-Jul	96	19.46	21.27	22.80	1048.3	1052.9	1060.9	8.50	8.55	8.57	46.64	60.21	73.52
16-Jul	96	19.90	22.28	25.18	1007.1	1030.3	1050.9	8.51	8.57	8.63	43.48	132.36	218.60
17-Jul	95	20.73	24.09	27.93	1004.2	1017.4	1030.5	8.55	8.65	8.72	67.98	93.14	240.26
18-Jul	96	20.96	24.02	27.56	1009.7	1031.9	1045.4	8.61	8.67	8.72	64.35	87.92	361.21
19-Jul	96	20.20	22.38	25.15	1035.2	1044.7	1056.2	8.62	8.68	8.72	63.64	81.15	150.83
20-Jul	96	18.71	22.01	25.29	1048.4	1059.6	1071.1	8.63	8.70	8.78	66.18	81.46	107.14
21-Jul	96	18.26	21.18	26.36	0	790.2	1079.0	7.31	8.76	9.67	0	67.44	291.07
22-Jul	96	17.11	22.33	27.96	1047.5	1081.2	1094.3	8.68	8.80	8.87	73.12	150.18	1289.30
23-Jul	96	18.31	22.98	28.00	1089.4	1099.8	1111.1	8.70	8.83	8.89	70.59	93.13	603.60
24-Jul	58	19.07	21.52	25.44	1107.2	1114.7	1125.7	8.70	8.81	8.88	67.16	82.19	178.39
03-Aug	48	21.22	22.76	23.46	1262.9	1275.5	1295.9	8.47	8.65	8.70	18.23	23.57	37.54
04-Aug	96	16.67	18.39	22.18	1187.6	1247.1	1286.8	8.61	8.63	8.69	17.89	54.03	148.89
05-Aug	96	15.81	19.49	23.44	1172.6	1181.3	1192.1	8.51	8.58	8.62	26.11	44.97	297.35
06-Aug	96	16.19	20.24	25.12	0	865.7	1175.4	7.60	8.49	8.68	3.23	28.63	86.45
07-Aug	48	15.64	21.87	31.83	0	0	0	7.11	8.29	11.4	3.32	4.71	5.84
17-Sep	29	11.57	12.14	13.02	1383.8	1430.6	1477.4	9.81	11.31	12.00	38.71	74.65	218.15
18-Sep	96	10.30	11.34	12.10	1383.9	1555.3	1759.1	7.08	9.70	12.30	0	19.76	80.80
19-Sep	96	6.12	11.47	14.37	0.1	1270.8	1718.4	6.57	7.30	8.25			
20-Sep	41	3.98	5.34	8.33	0.1	0.8	10.5	7.66	8.21	8.46			
29-Sep	27	15.99	16.90	20.09	1257.4	1263.1	1269.3	7.26	7.51	7.78	0.01	75.26	97.26
30-Sep	96	13.80	14.99	15.93	1207.7	1249.8	1266.3	7.29	7.77	8.11	69.08	101.27	142.02
01-Oct	96	13.94	15.46	16.78	0.1	1138.4	1294.1	6.99	7.56	8.74	0	69.00	167.89
02-Oct	46	11.55	16.51	21.90	0.1	0.1	0.1	3.86	7.38	10.30	0	0.06	1.88
14-Oct	38	11.16	11.99	12.80	1152.0	1155.7	1162.7	7.61	7.92	8.56	105.76	121.10	138.30
15-Oct	96	7.71	8.81	11.11	1149.3	1167.5	1269.4	7.42	7.91	8.16	118.54	234.34	358.12
16-Oct	96	6.54	7.71	9.01	1172.2	1181.7	1195.9	7.02	7.32	7.83	77.77	120.70	204.79
17-Oct	96	5.56	7.07	8.40	1183.9	1186.0	1191.4	7.03	7.34	7.88	34.86	58.34	79.88
18-Oct	96	6.76	8.02	9.11	1182.8	1193.1	1224.3	6.89	7.47	8.08	24.71	31.68	38.39
19-Oct	96	7.73	15.34	21.06	0.1	390.0	1258.4	1.35	7.03	9.12	0	3.97	35.04
20-Oct	42	20.17	20.47	20.96				6.34	7.79	9.45	0	0.21	2.10
28-Oct	60	2.76	3.72	4.12	1018.4	1086.8	1110.3	8.00	8.12	8.24	121.20	159.64	200.20
29-Oct	96	2.38	2.81	3.76	982.0	996.8	1022.3	8.11	8.33	8.50	56.17	96.25	161.76
30-Oct	96	2.24	4.28	14.88	0.1	910.2	1030.4	4.60	8.25	9.04	0.00	115.92	597.16
31-Oct	96	1.66	2.17	2.96	951.3	967.5	976.4	8.18	8.50	8.70	40.36	88.90	214.87
01-Nov	96	1.69	2.14	2.76	975.8	1007.0	1057.7	7.87	8.10	8.40	24.19	34.88	109.99
02-Nov	63	1.83	2.14	2.52	1054.4	1086.2	1118.9	7.82	7.85	7.88	15.50	27.94	79.28

*Based on temperature readings

RSEM-R5A-Pond B													
Day	**Number of measurements***	**Temperature (°C)**			**Specific Conductivity (µS/cm)**			**pH**			**Turbidity (NTU)**		
		Minimum	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**
20-Mar	241	0.09	0.64	12.52	384.5	532.0	563.7	7.62	7.83	8.42	12.12	130.60	423.51
21-Mar	288	-0.07	0.95	2.45	489.2	584.2	662.1	7.62	7.74	7.91	15.10	77.31	380.39
22-Mar	121	0.22	2.51	7.79	445.4	490.3	520.8	7.70	7.81	7.89	2.34	45.00	712.57

*Based on temperature readings

RSEM-R5A-Pond C												
Day	**Number of measurements***	**Temperature (°C)**			**Specific Conductivity (µS/cm)**			**pH**			**Turbidity (NTU)**		
		Minimum	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**
09-May	51	5.93	6.10	6.27	1925.7	2067.68	2128.4	7.97	8.05	8.10	9.27	22.50	35.78
10-May	96	5.66	7.90	11.65	2023.9	2072.10	2122.5	7.97	8.03	8.08	5.01	11.85	43.56
11-May	96	7.18	9.65	12.69	2024	2075.31	2151	7.92	7.96	8.00	1.92	6.26	11.42
12-May	96	10.25	11.97	13.59	2032.6	2111.31	2182.8	7.87	7.91	7.96	1.52	3.05	5.5
13-May	96	11.37	12.56	15.72	2065.9	2120.24	2183.5	7.82	7.86	7.9	1.49	2.91	7.82
14-May	96	11.37	12.51	13.7	2063.7	2118.47	2171.8	7.77	7.81	7.85	1.15	2.45	3.76
15-May	95	11.68	13.65	17	2076	2132.30	2203.3	7.75	7.79	7.84	0.96	9.05	52.79
16-May	96	13.15	14.10	15.56	2080.6	2134.30	2185.8	7.73	7.76	7.79	1.46	9.32	63.88
17-May	96	12.5	13.79	15.14	2075.1	2129.12	2176.5	7.76	7.79	7.87	2.81	6.83	15.05
18-May	96	12.6	13.89	15.55	2084.1	2139.57	2208.5	7.84	7.87	7.89	2.02	5.88	21.48
19-May	96	11.64	12.49	13.69	2090.4	2144.55	2207.6	7.86	8.00	8.06	3.1	20.47	67.11
20-May	54	5.48	13.83	21.36	0	743.55	2190.7	0	6.95	10.7	0.61	16.25	48.83

*Based on temperature readings

RSEM-R5A-Pond D												
Day	**Number of measurements***	**Temperature (°C)**			**Specific Conductivity (µS/cm)**			**pH**			**Turbidity (NTU)**		
		Minimum	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**
10-May	35	7.79	8.41	9.07	2503.4	2521.30	2531	7.65	7.76	7.79	2.65	4.07	5.7
11-May	96	7.17	9.44	12.02	2532.2	2549.61	2566.6	7.73	7.78	7.81	2.61	5.62	16.69
12-May	96	9.76	11.67	13.45	2440.9	2506.27	2543.4	7.75	7.78	7.85	3.63	13.89	40.84
13-May	96	11.25	12.34	13.88	2489.1	2512.17	2548.4	7.75	7.81	7.84	5.77	31.61	62.29
14-May	96	11.26	12.86	14.45	2542.5	2556.68	2570.7	7.83	7.86	7.9	4.73	13.62	35.65
15-May	95	11.61	13.15	14.59	2565	2578.56	2596.4	7.78	7.85	7.89	4.97	7.15	15.23
16-May	96	13.14	13.93	15.08	2569.8	2584.83	2596.6	7.81	7.86	8	3.5	10.76	23.07
17-May	96	12.38	14.06	15.99	2576.9	2589.74	2601.1	7.84	7.88	7.93	9.39	17.65	31.55
18-May	96	12.59	13.70	15	2591.9	2600.57	2609.4	7.86	7.89	7.99	8.29	14.18	25.97
19-May	96	11.68	12.23	13.34	2601.5	2606.72	2609.5	7.92	7.99	8.03	17.24	31.68	56.13
20-May	96	10.56	13.14	15.52	2604.3	2618.98	2632.6	7.76	7.91	8	10.1	21.71	47.26
21-May	96	11.82	14.94	18.82	2614.9	2643.56	2675.8	7.69	7.84	7.93	8.19	22.14	46.5
22-May	43	13.21	14.06	15.19	7.47	2597.32	2674.3	7.77	7.85	7.92	0.3	24.18	46.99

*Based on temperature readings

RSEM-L5W													
Day	**Number of measurements***	**Temperature (°C)**			**Specific Conductivity (µS/cm)**			**pH**			**Turbidity (NTU)**		
		Minimum	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**
20-Mar	26	0.13	0.36	1.85	508.78	555.8	589.67	8.1	9.10	9.39	29.04	38.00	48.53
21-Mar	37	-0.02	0.19	1.41	486.05	542.3	569.44	9.02	9.28	9.38	18.44	25.60	31.31
22-Mar	29	0.32	0.93	4.41	371.63	427.2	470.41	8.04	8.23	8.29	21.04	26.56	33.75
23-Mar	95	0.05	0.41	1.11	359.64	463.1	560.48	7.88	8.00	8.20	9.64	18.94	28.14
24-Mar	95	0	0.64	1.53	415.61	477.4	502.96	7.83	7.87	7.90	10.03	13.05	17.43
25-Mar	96	0.1	0.60	1.19	419.44	474.1	499.33	7.8	7.86	7.89	8.75	11.30	14.67
26-Mar	96	0.03	0.47	1.1	474.88	511.4	657.21	7.78	7.86	7.90	7.21	9.58	30.35
27-Mar	96	0.08	0.36	0.86	476.32	507.9	573.85	7.84	7.88	7.98	4.57	7.03	11.35
28-Mar	96	0.08	0.53	1.52	431.64	486.0	510.92	7.86	7.89	7.93	3.91	8.18	18.65
29-Mar	96	0.05	0.60	1.56	407.6	456.6	497.69	7.82	7.89	7.93	3.61	5.87	10.7
30-Mar	96	0.04	0.42	1.17	390.12	426.8	453.48	7.88	7.90	7.93	2.7	5.94	15.96
31-Mar	96	-0.03	0.60	2.52	294.29	415.6	455.39	7.85	7.92	8.03	4.02	6.54	10.19
01-Apr	96	-0.03	0.48	1.4	407.27	451.0	463.11	7.84	7.92	7.96	4.61	7.45	9.89
02-Apr	96	0	0.69	1.99	389.54	437.4	462.99	7.83	7.92	7.99	1.96	6.94	9.58
03-Apr	96	0.1	1.04	1.89	364.31	404.6	440.79	7.87	7.94	7.99	2.63	6.01	8.5
04-Apr	96	0.31	1.29	2.38	368.14	402.6	420.68	7.80	7.94	8.06	4.0	5.48	7.02
05-Apr	67	0.39	1.53	3.8	348.88	397.9	421.48	7.84	7.92	7.98	3.04	4.99	7.79
06-Apr	84	0.32	2.91	5	321.73	416.4	555.68	7.70	7.93	8.00	2.69	7.08	11.48
07-Apr	96	1.63	3.59	6.22	478.29	541.8	718.75	7.92	8.00	8.11	7.1	11.43	18.39
08-Apr	96	1.44	3.45	4.5	536.7	565.4	612.13	8.00	8.06	8.11	12.04	18.40	47.95
09-Apr	96	1.07	2.95	4.29	576.93	613.5	647.27	8.01	8.06	8.12	13.64	19.70	25.72
10-Apr	96	1.27	3.38	4.95	635.73	657.6	678.72	8.04	8.07	8.14	10.33	15.78	21.72
11-Apr	96	1.38	2.73	3.66	671.07	688.3	705.24	8.05	8.08	8.11	11.64	14.21	16.19
12-Apr	96	-0.12	0.77	1.37	702.78	711.5	724.1	8.07	8.09	8.11	10.32	12.11	13.84
13-Apr	96	-0.3	1.02	2.18	0.0	555.3	1180	8.05	8.09	8.17	7.85	11.82	29.85
14-Apr	96	1.4	2.47	3.75	727.33	734.0	745.73	8.09	8.11	8.15	5.17	7.79	9.74
15-Apr	96	0.06	2.89	5.32	164.69	690.5	752.52	7.87	8.13	8.18	0.77	5.68	11.07
16-Apr	42	1.15	1.88	2.96	593.64	711.7	737.2	8.10	8.14	8.16	1.2	3.94	6.39

*Based on temperature readings

RSEM-L5E													
Day	**Number of measurements***	**Temperature (°C)**			**Specific Conductivity (µS/cm)**			**pH**			**Turbidity (NTU)**		
		Minimum	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**	**Minimum**	**Mean**	**Maximum**
23-Jan	30	-0.01	0.05	0.64	402.4	405.9	409.5	8.41	8.50	8.61	248.09	287.91	327.52
24-Jan	96	-0.08	0.17	0.86	0.7	422.3	449.0	8.12	8.24	8.45	5.84	147.50	259.02
25-Jan	23	-0.36	1.25	2.84	0.0	0.6	2.1	7.22	7.65	8.13	0	3.85	12.02
11-Feb	72	-0.04	0.10	2.25	698.4	711.5	748.1	8.13	8.22	8.45	17.39	36.61	47.1
12-Feb	96	-0.05	0.05	0.40	703.4	716.1	764.5	8.07	8.12	8.18	17.5	35.12	56.2
13-Feb	96	-0.85	-0.05	1.15	0.9	431.2	813.6	7.81	8.12	8.68	12.75	132.43	8247.9
14-Feb	37	-0.46	-0.13	-0.07	3.8	505.2	798.7	8.1	8.15	8.30	0	12.51	18.1
20-Mar	27	0.34	0.88	2.88	621.5	656.5	667.1	7.99	8.10	8.17	37.4	52.02	68.42
21-Mar	96	0.07	0.64	1.81	620.8	656.8	669.2	7.88	7.96	8.11	33.79	53.76	98.67
22-Mar	96	0.06	0.50	1.35	621.3	655.7	675.7	7.85	7.92	7.99	28.68	45.79	110.67
23-Mar	96	0.15	0.47	1.41	634.0	664.9	690.4	7.83	7.91	7.99	30.75	49.12	67.32
24-Mar	96	0.00	0.42	1.01	662.6	677.5	693.3	7.84	7.91	7.99	29.66	43.41	62.06
25-Mar	96	0.03	0.36	0.87	656.2	664.8	671.0	7.85	7.91	7.98	27.16	35.70	45.53
26-Mar	96	0.02	0.31	0.79	647.5	662.8	667.9	7.83	7.90	7.96	23.21	30.10	39.06
27-Mar	96	0.05	0.36	1.00	639.0	659.7	665.9	7.83	7.89	7.97	21.64	27.63	48.42
28-Mar	96	0.03	0.45	1.06	595.8	643.3	660.6	7.83	7.91	7.97	17.15	22.83	31.42
29-Mar	96	0.17	0.81	1.65	526.2	565.5	598.0	7.84	7.91	7.98	16.23	19.76	22.31
30-Mar	96	0.40	1.03	2.83	333.4	501.4	654.2	7.82	7.93	8.04	17.37	21.64	30.2
31-Mar	96	0.42	1.12	3.07	466.4	537.5	648.0	7.82	7.92	8.01	16.82	21.50	31.88
01-Apr	96	0.25	0.87	1.76	578.87	602.7	619.18	7.84	7.90	7.96	15.72	19.41	25.17
02-Apr	96	0.32	1.17	2.42	528.4	583.5	616.99	7.84	7.90	7.98	13.2	18.56	26.06
03-Apr	96	0.58	1.34	2.96	468.49	535.8	589.31	7.88	7.94	8.00	12.51	17.79	25.5
04-Apr	96	0.62	1.63	3.04	497.89	525.6	556.19	7.88	7.94	7.99	14.21	17.60	22.32
05-Apr	67	0.95	1.75	4.13	453.4	524.3	567.12	7.86	7.94	7.98	13.94	17.72	31.72
06-Apr	84	0.65	2.32	4.5	489.0	540.0	561.09	7.91	7.96	8.05	20.14	27.59	43.23
07-Apr	96	1.13	2.38	4.27	477.84	527.8	545.46	7.92	7.99	8.06	25.11	33.92	52.59
08-Apr	96	1.18	2.46	3.79	446.15	562.5	647.77	7.84	7.98	8.11	32.37	46.12	80.31
09-Apr	96	1.86	2.86	3.4	591.92	605.1	624.25	7.93	8.02	8.14	39.1	56.57	76.29
10-Apr	96	1.75	3.26	4.28	602.34	626.8	636.3	8.01	8.08	8.15	19.45	32.44	58.99
11-Apr	96	1.94	2.91	3.82	631.28	639.0	645.67	8.08	8.16	8.23	20.77	25.26	32.5
12-Apr	96	0.32	1.21	1.93	643.4	654.3	676.4	8.21	8.27	8.33	17.24	21.24	44.21
13-Apr	39	-1.38	-0.22	0.29	0.88	563.4	695.8	7.58	8.21	8.39	4.49	14.44	27.76
08-May	34	7.06	7.47	8.54	1161.9	1189.6	1193.8	8.53	8.60	8.63	9.64	10.81	15.8
09-May	95	5.85	6.26	7.04	1193.1	1205.5	1212.4	8.54	8.56	8.59	7.72	9.36	11.71
10-May	96	5.48	7.35	10.18	1200.3	1207.5	1216.7	8.44	8.51	8.55	7.38	8.21	10.55
11-May	96	7.02	9.62	12.37	1189.1	1203.9	1208.4	8.44	8.49	8.54	6.72	8.02	11.79
12-May	96	9.61	11.33	12.78	1203.0	1214.7	1297.9	8.45	8.49	8.53	6.25	7.46	21.46
13-May	96	10.63	11.72	14.82	1209.0	1220.9	1232.9	8.43	8.51	8.59	6.1	8.26	36.44
14-May	96	10.39	11.80	13.32	1224.2	1229.8	1237.4	8.51	8.54	8.56	6.48	7.96	16.35
15-May	96	11.06	12.81	15.10	1227.5	1235.5	1251.0	8.48	8.53	8.56	6.74	11.04	35.56
16-May	96	12.46	13.26	14.53	1237.5	1250.4	1263.1	8.48	8.53	8.55	5.87	8.96	15.82
17-May	96	11.90	13.30	14.97	1255.6	1271.7	1360.3	8.50	8.53	8.61	7.24	9.71	34.13
18-May	96	12.10	13.19	14.25	1267.2	1275.1	1281.2	8.53	8.56	8.61	7.19	9.77	16.64
19-May	96	11.61	12.16	12.96	1276.5	1280.5	1282.8	8.56	8.60	8.66	7.13	9.13	13.4
20-May	96	10.77	12.63	14.81	1265.9	1275.2	1279.9	8.55	8.59	8.63	6.7	8.23	17.18
21-May	96	11.85	14.04	16.59	1260.0	1272.5	1279.9	8.55	8.59	8.70	5.39	8.03	18.8
22-May	96	12.93	14.70	16.14	1239.6	1258.5	1283.0	8.57	8.61	8.67	6.1	8.02	11.11
23-May	96	13.92	15.18	16.72	1236.2	1245.0	1264.4	8.57	8.64	8.82	5.53	10.15	113.62
24-May	96	14.36	15.67	17.13	1247.6	1261.1	1272.3	8.62	8.70	8.85	5.64	7.54	16.1
25-May	96	14.65	15.59	16.86	1257.2	1266.0	1272.1	8.71	8.75	8.88	4.97	9.37	218.83
26-May	96	14.46	15.61	16.96	1229.1	1248.3	1265.4	8.75	8.79	8.86	5.18	6.67	10.73
27-May	96	14.70	15.38	16.52	1226.1	1243.3	1341.5	8.79	8.87	8.99	4.79	8.65	32.79
28-May	96	12.31	13.67	14.95	1226.4	1269.4	1433.1	7.71	8.55	8.94	6.95	26.44	163.9
29-May	96	11.15	12.44	14.20	1311.7	1536.7	1626.4	7.01	7.34	8.08	8.97	13.46	19.48
30-May	96	11.31	13.94	16.39	1564.5	1607.6	1634.6	7.00	7.24	7.38	6.18	9.26	18.31
31-May	96	13.72	16.01	19.13	1601.5	1622.7	1635.3	7.28	7.43	7.75	4.17	6.84	22.97
01-Jun	95	13.89	16.78	20.34	1575.8	1617.3	1736.6	7.32	7.51	7.99	4.34	7.03	33.45
02-Jun	96	15.78	18.29	21.11	1585.5	1613.3	1632.8	7.56	7.81	8.05	3.98	7.89	179.77
03-Jun	96	16.84	18.59	20.24	1608.4	1625.5	1726.1	7.85	8.08	8.26	3.51	4.59	9.61
04-Jun	96	17.96	19.21	21.22	1629.2	1634.9	1645.0	8.19	8.29	8.71	3.64	4.98	78.17
05-Jun	96	16.84	18.05	19.11	1638.1	1652.7	1673.1	8.37	8.48	8.59	3.35	4.38	13.59
06-Jun	96	16.39	16.62	16.90	1651.8	1674.7	1682.9	8.53	8.57	8.62	2.86	3.78	17.98
07-Jun	96	15.99	18.93	22.75	1658.9	1673.7	1685.7	8.51	8.59	8.66	2.7	6.34	37.87
08-Jun	96	17.89	18.82	20.29	1649.2	1673.4	1715.5	8.65	8.71	8.81	3.08	4.54	8.46
09-Jun	96	17.55	20.22	23.14	1659.8	1669.8	1689.0	8.71	8.75	8.81	4.46	6.95	33.05
10-Jun	96	19.18	20.04	20.86	1654.3	1667.8	1679.4	8.74	8.79	8.88	4.04	5.28	15.68
11-Jun	96	18.59	19.75	21.08	1661.3	1666.8	1674.7	8.76	8.80	8.83	3.84	4.99	10.65
12-Jun	96	18.35	19.79	21.28	1647.7	1657.8	1682.6	8.76	8.81	8.84	3.13	4.24	6.63
13-Jun	96	18.14	20.08	22.44	1637.8	1647.3	1655.9	8.72	8.81	8.85	3.12	4.02	10.45
14-Jun	96	18.25	19.29	20.76	1636.7	1642.8	1652.4	8.77	8.86	8.91	2.9	3.93	8.21
15-Jun	96	18.33	19.48	21.26	1638.5	1645.2	1659.6	8.76	8.84	8.89	2.52	3.25	7.18
16-Jun	96	19.06	20.01	22.02	1636.1	1646.8	1673.0	8.77	8.85	8.92	2.41	3.11	5.52
17-Jun	96	17.90	18.45	19.36	1650.4	1659.0	1673.5	8.71	8.80	8.89	2.2	4.84	11.72
18-Jun	96	17.45	17.92	19.01	1638.7	1653.6	1661.7	8.63	8.68	8.77	1.26	2.57	10.25
19-Jun	96	17.35	18.61	19.92	1646.9	1653.7	1676.2	8.57	8.64	8.69	0.5	1.00	3.23
20-Jun	96	18.16	20.81	24.15	1642.9	1657.4	1676.0	8.58	8.66	8.72	0.11	2.33	126.15
21-Jun	96	19.00	20.15	21.01	1587.1	1669.3	1695.4	8.66	8.74	8.86	0	1.76	39.86
22-Jun	96	18.63	19.90	21.31	1672.7	1723.8	1819.4	8.68	8.72	8.75	0	1.72	32.45
23-Jun	96	17.80	18.52	19.66	1725.4	1762.6	1796.2	8.65	8.69	8.73	0	0.09	3.02
24-Jun	96	17.17	19.60	22.81	1735.8	1756.3	1779.8	8.52	8.63	8.79	0	0.85	29.42
25-Jun	96	18.65	21.51	25.53	1742.5	1771.5	1807.8	8.51	8.61	8.67	0	1.85	18.42
26-Jun	96	19.87	21.31	23.26	1768.2	1797.7	1850.6	8.53	8.60	8.65	0	6.99	259.8
27-Jun	96	20.38	21.13	22.32	1804.3	1830.5	1847.6	8.50	8.54	8.59	0	3.40	129.13
28-Jun	96	19.75	20.85	21.98	1829.6	1845.3	1877.8	8.43	8.47	8.51	0	0.05	2.28
29-Jun	65	19.66	20.71	23.31	1845.0	1863.8	1884.9	8.32	8.40	8.47	0	0.04	2.63
30-Jun	56	21.14	23.40	25.58	1841.1	1877.0	1915.8	8.28	8.38	8.50	0	1.96	38.28
01-Jul	96	20.68	21.60	22.53	1869.6	1888.5	1907.5	8.32	8.36	8.40	0	0.13	7.83
02-Jul	96	19.52	21.54	24.00	1864.8	1886.2	1926.5	8.22	8.30	8.36	0	0.07	1.1
03-Jul	96	19.95	21.96	24.18	1869.3	1888.9	1913.7	8.20	8.31	8.36	0	0.18	1.94
04-Jul	96	20.60	21.99	24.27	1861.6	1887.2	1926.7	8.21	8.30	8.38	0	0.62	8.51
05-Jul	49	16.98	19.92	26.77	0	173.4	1892.4	7.98	8.28	8.45	0	0.78	13.73

*Based on temperature readings

Appendix 3-B: 2022 In Situ Field Measurement Water Quality Data

PEACE RIVER
HYDRO PARTNERS

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
85-EOP	24-Mar-22	5.5	7.7	514	36	36	36
85-EOP	30-Mar-22	3.9	7.4	505	25.6	25.7	25.6
85-EOP	4-May-22	10	8.7	667	32	32.1	32
85-EOP	7-May-22	7.4	8.4	736	33.9	34.4	33.9
85-EOP	12-May-22	11.4	8.2	749	7.6	7.7	7.6
85-EOP	19-May-22	8.8	7.8	896	15.1	15	15.1
85-EOP	29-May-22	13.2	8.4	874	22	22	22
85-EP	27-Mar-22	1.8	7.7	520	23.3	23.5	23.3
85-EP	3-Apr-22	3.4	7.7	468	20.3	20.2	20.3
85-IDZ	24-Mar-22	3.3	7.8	326	76	76	76
85-IDZ	30-Mar-22	3.8	7.6	494	48	48	48
85-IDZ	4-May-22	11.4	8.4	545	26.9	27	26.9
85-IDZ	7-May-22	6.5	8.4	572	39.1	39.4	39.1
85-IDZ	12-May-22	16.1	8.5	787	9.7	9.8	9.7
85-IDZ	19-May-22	9.1	8.1	1012	18.1	18.1	18.1
85-IDZ	29-May-22	14.4	8.4	956	652	656	652
85-WP	3-Apr-22	5.2	7.8	424	28.4	28.3	28.4
A25_EOP	10-Feb-22	4.1	7.3	245	93.8	93.9	93.8
A25_EOP	12-Feb-22	2.2	8.1	242	81.7	80.4	81.7
A25_EOP	17-Mar-22	4.5	7	266	1249	1249	1249
A25_EOP	20-Mar-22	2.8	8.2	297	57	57	57
A25_EOP	26-Mar-22	1.8	8.2	287	38.6	37.7	38.6
A25_EOP	29-Apr-22	8.8	8.8	349	29.1	29.1	29.1
A25-SP	2-Apr-22	6.2	7.8	151	12	11.7	12
A25-SP	3-May-22	9.3	8.7	272	12	11.7	12
AC-E-Sump	9-Feb-22	5.5	8.8	487	2483	2491	2483
AK_Pond	12-Jun-22	22.8	8.6	1811	14.6	14.7	14.6
AK_Pond	13-Jun-22	24.6	8.6	1660	18.7	18.4	18.7
AK_Pond	15-Jun-22	20.4	8.5	1826	38.5	38.8	38.5
AK_Pond	17-Jun-22	16	8.6	1375	104.4	104.4	104.4
AK_Pond	18-Jun-22	16	8.4	1492	42.9	43.6	42.9
AK_Pond	10-Jul-22	20	8.3	1754	34.6	34.6	34.6
AK_Pond	11-Jul-22	20.5	8.4	1643	34.3	34.2	34.3
AK_Pond	12-Jul-22	21.2	8.4	1595	20	20.1	20
AK_Pond	13-Jul-22	19.6	8.4	1579	19.3	19.3	19.3
AK_Pond	14-Jul-22	18.8	8.4	1570	18.6	18.6	18.6
AK_Pond	15-Jul-22	20	8.6	1530	17.9	17.9	17.9
AK_Pond	16-Jul-22	19.9	8.6	1471	15.2	14.9	15.2
AK_Pond	17-Jul-22	20.7	8.6	1417	16.8	16.9	16.8
AK_Pond	27-Jul-22	23.5	8.5	1343	19.2	18.9	19.2
AK_Pond	28-Jul-22	24	8.4	1371	17.7	17.4	17.7
AK_Pond	29-Jul-22	23.4	8.5	1406	15.1	15.1	15.1
AK_Pond	30-Jul-22	21.5	8.7	1410	13.1	13	13.1
AK_Pond	31-Jul-22	20.5	8.4	1318	12.6	12.7	12.6
AK_Pond	1-Aug-22	21.1	8.8	1126	25.4	25.3	25.4
AK_Pond	2-Aug-22	19.9	8.7	957	39.3	39.3	39.3
AK_Pond	3-Aug-22	18.8	8.6	976	33.7	33.8	33.7
AK_Pond	4-Aug-22	17.7	8.9	1034	18.8	18.7	18.8
AK_Pond	5-Aug-22	17.4	8.6	1204	63.5	63.2	63.5
AK_Pond	6-Aug-22	18.3	8.7	1190	30.8	30.8	30.8
AK_Pond	7-Aug-22	19.7	8.7	1157	35.4	35.3	35.4
AK_Pond	17-Aug-22	23	8.4	1227	16.6	16.6	16.6
AK_Pond	18-Aug-22	23.7	8.5	1238	17.7	17.7	17.7
AK_Pond	19-Aug-22	23.6	8.4	1235	16.4	16.4	16.4
AK_Pond	20-Aug-22	21.5	8.4	1245	19.2	19.2	19.2
AK_Pond	21-Aug-22	24.3	8.4	1286	23.8	23.7	23.8
AK_Pond	22-Aug-22	27.6	8.4	1256	22.7	22.7	22.7
AK_Pond	23-Aug-22	26.1	8.4	1217	20.2	20.1	20.2
AK_Pond	24-Aug-22	22.6	8.5	1139	6.7	6.7	6.7
AK_Pond	30-Aug-22	22.1	8.7	1131	25	25	25
AK_Pond	31-Aug-22	21.5	8.8	1126	24.4	24.2	24.4
AK_Pond	1-Sep-22	20.5	8.9	1120	20.5	20.5	20.5
AK_Pond	2-Sep-22	23.6	8.7	1162	22.2	22.2	22.2
AK_Pond	3-Sep-22	20.8	8.7	1113	23.6	23.6	23.6
AK_Pond	4-Sep-22	18.8	8.7	1135	27.1	27.1	27.1
AK_Pond	5-Sep-22	18	8.7	1157	27.4	24.7	27.4
AK_Pond	7-Sep-22	15.7	8.4	1286	20.5	20.4	20.5
AK_Pond	8-Sep-22	17	8.3	1444	29.9	29.9	29.9
AK_Pond	9-Sep-22	14.3	8.3	1653	19	18.7	19
AK_Pond	10-Sep-22	15.9	8.4	1821	17.7	17.9	17.7
AK_Pond	11-Sep-22	18.3	8.8	1876	29.3	29.3	29.3
AK_Pond	12-Sep-22	14.2	8.7	1757	31.4	31.4	31.4
AK_Pond	16-Sep-22	13.5	8.7	1191	36.9	36.5	36.9
AK_Pond	17-Sep-22	13	8.5	1084	50.7	51	50.7
AK_Pond	18-Sep-22	12.6	8.7	1126	26.7	26.6	26.7
AK_Pond	19-Sep-22	11.8	9.1	1343	15.2	14.9	15.2
AK_Pond	20-Sep-22	15.2	9	1163	10.7	10.4	10.7
AK_Pond	21-Sep-22	15.1	8.7	1215	19.1	19	19.1
AK_Pond	22-Sep-22	15.2	8.7	1174	11.7	11.8	11.7
AK_Pond	23-Sep-22	13.6	8.4	1061	15.4	15.4	15.4
AK_Pond	24-Sep-22	10.6	9.2	967	8.9	9.1	8.9
AK_Pond	28-Sep-22	14.8	8.9	1059	19.1	19.2	19.1
AK_Pond	29-Sep-22	14	8.7	1068	10.3	10.3	10.3
AK_Pond	30-Sep-22	13.2	8.9	1046	16.9	16.7	16.9
AK_Pond	1-Oct-22	12	8.8	1069	65	65	65
AK_Pond	5-Oct-22	11	8.5	1199	9.1	9	9.1
Area_23_BT	9-Feb-22	6.7	7.9	822	49.5	50	49.5
Area_23_BT	11-Feb-22	8.5	7.8	758	10.7	10.7	10.7
Area_23_BT	13-Feb-22	11.2	7.9	751	6.1	6.1	6.1
Area_23_BT	16-Feb-22	9.1	8.2	782	5.7	5.6	5.7
Area_23_BT	17-Feb-22	10.3	8.1	721	11.5	11.5	11.5
Area_23_BT	5-Oct-22						
Area_24_East	1-Aug-22	11.5	7.5	844	6.8	6.7	6.8
Area_24_East	2-Aug-22	15	7.5	747	7.6	7.6	7.6
Area_24_East	3-Aug-22	11.4	7.4	857	6.8	6.9	6.8
Area_24_East	4-Aug-22	15.2	7.5	725	12.3	12	12.3
Area_24_East	5-Aug-22	14.7	7.5	736	8.9	9	8.9
Area_24_East	6-Aug-22	14.6	7.6	751	9.6	9.5	9.6
Area_24_East	7-Aug-22	14.7	7.5	757	6.9	6.8	6.9

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
Area_24_East	8-Aug-22	18.9	7.5	807	7	7	7
Area_24_East	9-Aug-22	18.9	7.4	807	7	7	7
Area_24_East	10-Aug-22	18.9	7.3	767	13.8	13.8	13.8
Area_24_East	11-Aug-22	18.9	7.7	679	9.2	9.2	9.2
Area_24_East	9-Sep-22	17.2	7.9	596	9.5	9.5	9.5
Area_24_East	10-Sep-22	17	8	603	7.1	7.1	7.1
Area_24_East	11-Sep-22	18	8.4	573	7.2	7.2	7.2
Area_24_East	12-Sep-22	17.1	8	601	6.9	6.9	6.9
Area_24_East	13-Sep-22	17.1	8.4	579	6.9	6.9	6.9
Area_24_East	14-Sep-22	15.2	8.6	571	4.9	4.9	4.9
Area_24_East	15-Sep-22	17.8	8.5	532	4.6	4.6	4.6
Area_24_East	16-Sep-22	14.4	8.7	633	6.5	6.5	6.5
Area_24_East	17-Sep-22	14	8.7	576	7.6	7.7	7.6
Area_24_East	18-Sep-22	14.2	8.7	627	8.2	8.2	8.2
Area_24_East	19-Sep-22	13.5	8.7	627	5.4	5.5	5.4
Area_24_East	20-Sep-22	15.6	8.4	500	5.6	5.6	5.6
Area_24_East	21-Sep-22	16.5	8.4	501	4.2	4.2	4.2
Area_24_East	22-Sep-22	15.5	8.4	506	5.4	5.4	5.4
Area_24_East	23-Sep-22	13.8	8.4	503	12.2	12.4	12.2
Area_24_East	24-Sep-22	12.1	8.5	506	13.2	13.2	13.2
Area_24_East	25-Sep-22	15.1	8.5	514	13.3	13.4	13.3
Area_24_East	26-Sep-22	12.9	8.4	504	27.4	27.3	27.4
Area_24_East	27-Sep-22	16.3	8.6	549	48.6	48.6	48.6
Area_24_East	28-Sep-22	16.9	8.4	535	10.8	10.9	10.8
Area_24_East	29-Sep-22	17.2	8.3	501	12	11.7	12
Area_24_East	30-Sep-22	16.8	8.5	491	12.6	12.4	12.6
Area_24_East	1-Oct-22	15.6	8.6	541	13.6	13.2	13.6
Area_24_East	2-Oct-22	15.8	8.4	533	8.3	8.2	8.3
Area_24_East	3-Oct-22	16	8.4	539	13.4	13.8	13.4
Area_24_East	4-Oct-22	14.4	8.4	534	7.6	7.7	7.6
Area_24_East	5-Oct-22	14.5	8.3	580	6.6	6.7	6.6
Area_24_East	6-Oct-22	13.6	8.5	546	9.7	9.7	9.7
Area_24_East	7-Oct-22	13.3	8.5	581	7.2	7.2	7.2
Area_24_East	8-Oct-22	12.4	8.2	545	4.9	5	4.9
Area_24_East	9-Oct-22	12.7	8.3	584	11.2	11.1	11.2
Area_24_East	10-Oct-22	12.1	8.3	549	4.1	4.1	4.1
Area_24_East	11-Oct-22	12.1	8.7	508	6.8	6.8	6.8
Area_24_East	12-Oct-22	10.9	8.5	496	8.1	8.1	8.1
Area_24_East	13-Oct-22	12.2	8.6	507	5.2	5.2	5.2
Area_24_East	14-Oct-22	13.2	8.5	507	5.5	5.5	5.5
Area_24_East	15-Oct-22	11.2	8.5	509	5.6	5.6	5.6
Area_24_East	16-Oct-22	11.4	8.6	501	3.9	3.9	3.9
Area_24_East	17-Oct-22	8.9	8.5	498	6.8	6.8	6.8
Area_24_East	18-Oct-22	12.8	8.4	583	5	5.1	5
Area_24_East	19-Oct-22	11.8	8.6	594	6.6	6.6	6.6
Area_24_East	20-Oct-22	10.5	8.6	587	18.9	19.2	18.9
Area_24_East	21-Oct-22	10.4	8.6	590	13.3	13.2	13.3
Area_24_East	22-Oct-22	7.9	8.6	611	9	9	9
Area_24_East	23-Oct-22	8.1	8.5	599	13	13	13
Area_24_East	24-Oct-22	6.6	8.5	603	8	8	8
Area_24_East	25-Oct-22	6.1	8.4	607	6.1	6.1	6.1
Area_24_East	26-Oct-22	5.3	8.4	595	6.1	6	6.1
Area_24_East	27-Oct-22	6.1	8.3	593	8.1	8.2	8.1
Area_24_East	28-Oct-22	5.6	8.6	611	14.6	14.8	14.6
Area_24_East	29-Oct-22	4.9	8.6	601	12.9	13	12.9
Area_24_East	30-Oct-22	4.6	8.5	611	20.8	20.6	20.8
Area_24_East	31-Oct-22	4	8.6	610	23.3	23.3	23.3
Area_24_East	1-Nov-22	3.3	8.7	497	13.8	13.9	13.8
Area_24_East	2-Nov-22	1.8	8.6	525	13.2	13.1	13.2
Area_24_East	3-Nov-22	2.5	8.5	520	12.9	12.9	12.9
Area_24_East	4-Nov-22	3.5	8.5	519	8.8	8.8	8.8
Area_24_East	5-Nov-22	2.9	8.4	556	11.7	11.7	11.7
Area_24_East	6-Nov-22	2.3	8.4	546	10.4	10.4	10.4
Area_24_East	7-Nov-22	0.3	8.4	560	7.6	7.5	7.6
Area_24_East	8-Nov-22	3	8.7	695	11.3	11.5	11.3
Area_24_East	9-Nov-22	1.1	8.2	692	7.2	7.2	7.2
Area_24_East	11-Nov-22	2.1	8.4	720	9.6	9.6	9.6
Area_24_East	12-Nov-22	2.3	8.3	722	7.1	7.1	7.1
Area_24_East	13-Nov-22	2.3	8.3	740	4.2	4.2	4.2
Area_24_East	14-Nov-22	2.6	8.2	713	2.3	2.3	2.3
Area_24_East	15-Nov-22	2.5	8.4	719	1.6	1.6	1.6
Area_24_East	16-Nov-22	1.7	8.4	725	1.3	1.3	1.3
Area_24_East	17-Nov-22	1.3	8.4	734	1.6	1.6	1.6
Area_24_East	18-Nov-22	1.5	8.3	768	1.4	1.4	1.4
Area_24_East	19-Nov-22	1.9	8.3	763	1.7	1.7	1.7
Area_24_East	20-Nov-22	2.7	8	764	1.6	1.6	1.6
Area_24_East	22-Nov-22	2.1	8	618	0.8	0.9	0.8
Area_24_East	23-Nov-22	2.3	8.3	620	1.1	1.1	1.1
Area_24_East	24-Nov-22	2.5	8	605	1	1	1
Area_24_East	25-Nov-22	2.9	8	596	3.2	3.2	3.2
Area_24_East	26-Nov-22	2.9	8	609	1.2	1.2	1.2
Area_24_East	27-Nov-22	1.7	8.2	592	2.5	2.5	2.5
Area_24_East	28-Nov-22	-0.3	8.2	606	1.5	1.5	1.5
Area_24_East	29-Nov-22	1.9	8.1	736	1.3	1.3	1.3
Area_24_East	30-Nov-22	0.6	7.9	752	1	1	1
Area_24_East	1-Dec-22	0.8	8.1	783	1.6	1.7	1.6
Area_24_East	2-Dec-22	5.1	8.2	747	1.6	1.7	1.6
Area_24_W_Sump	9-Jul-22	16.4	8	565	11.2	11.2	11.2
Area_24_W_Sump	10-Jul-22	14	7.7	664	19.4	19	19.4
Area_24_W_Sump	11-Jul-22	12.6	7.4	718	6.4	6.4	6.4
Area_24_W_Sump	12-Jul-22	8.8	7.8	621	9.2	9.2	9.2
Area_24_W_Sump	13-Jul-22	8.3	7.4	731	8.8	8.8	8.8
Area_24_W_Sump	14-Jul-22	9.6	7.7	620	7.1	7.2	7.1
Area_24_W_Sump	15-Jul-22	8.6	7.6	737	6.7	6.7	6.7
Area_24_W_Sump	16-Jul-22	19.3	7.9	600	8.7	8.8	8.7
Area_24_W_Sump	17-Jul-22	9.7	7.9	598	11	11	11
Area_24_W_Sump	18-Jul-22	24	8.3	640	14.8	15.1	14.8
Area_24_W_Sump	19-Jul-22	22.7	8.2	627	12.1	12.2	12.1
Area_24_W_Sump	20-Jul-22	14.1	7.7	592	8.1	8.1	8.1

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
Area_24_W_Sump	21-Jul-22	11.9	7.7	578	7.8	7.8	7.8
Area_24_W_Sump	22-Jul-22	22.6	7.5	648	8.2	8.2	8.2
Area_24_W_Sump	23-Jul-22	16.9	7.8	634	9.4	9.4	9.4
Area_24_W_Sump	24-Jul-22	16.1	7.5	636	10	10	10
Area_24_W_Sump	25-Jul-22	21.4	7.7	647	8.6	8.8	8.6
Area_24_W_Sump	26-Jul-22	24.4	8.1	675	39.4	39.4	39.4
Area_24_W_Sump	27-Jul-22	13.7	7.7	665	11.3	11.3	11.3
Area_24_W_Sump	28-Jul-22	13	7.7	658	6	6	6
Area_24_W_Sump	29-Jul-22	12.6	7.5	634	5.8	5.8	5.8
Area_24_W_Sump	30-Jul-22	14.5	7.7	642	5	5	5
Area_24_W_Sump	31-Jul-22	11	7.8	656	5	5	5
Area_30_EOP	25-Jan-22	2.1	8.2	185	15.2	15.1	15.2
Area_30_EOP	9-Feb-22	6.6	8.3	148	26.5	26.6	26.5
Area_30_EOP	10-Feb-22	5.7	7.9	279	54.8	55	54.8
Area_30_EOP	20-Mar-22	6.3	7.9	863	4.7	4.8	4.7
Area_30_EOP	22-Mar-22	3.2	7.9	838	5.9	6	5.9
Area_30_EOP	26-Mar-22	3.8	7.8	1169	13.6	13.3	13.6
Area_30_EOP	29-Mar-22	2.5	8	1224	8	7.9	8
Area_30_EOP	18-Apr-22	3.8	7.7	2250	5.3	5.3	5.3
Area_30_EOP	23-Apr-22	9.2	7.7	1486	4	4	4
Area_30_EOP	27-Apr-22	8.8	8.1	1586	11.1	11.1	11.1
Area_30_EOP	1-May-22	10.6	8.2	615	12.7	12.8	12.7
Area_30_EOP	4-May-22	14.2	8.4	790	16.4	16.4	16.4
Area_30_EOP	7-May-22	8	8.1	716	15.6	15.6	15.6
Area_30_EOP	10-May-22	11.5	8.2	759	6.5	6.4	6.5
Area_30_EOP	14-May-22	13.9	8.1	916	4.2	4.3	4.2
Area_30_EOP	24-May-22	16.3	8.4	1267	3.7	3.7	3.7
Area_30_EOP	30-May-22	17.5	8	1146	7.4	7.4	7.4
Area_30_EOP	16-Jun-22	21.1	8	1748	20.3	20.3	20.3
Area_30_EOP	17-Jun-22	14.1	8.1	1188	12.3	12.6	12.3
Area_30_EOP	20-Jun-22	21.2	8.2	1320	10.2	10.2	10.2
Area_30_EOP	3-Jul-22	23	8.4	2010	7	7	7
Area_30_EOP	11-Jul-22	21.9	8.1	2410	4.9	4.9	4.9
Area_30_EOP	5-Aug-22	19.5	8.2	1937	11.5	11.3	11.5
Area_30_EOP	17-Sep-22	13.1	8.1	2660	4.7	4.8	4.7
Area_30_SP	30-Jul-22	22.4	8	3370	6.2	6.2	6.2
Area_30_SP	9-Sep-22	16.2	7.7	2740	32.7	32.1	32.7
Area_30_SP	1-Oct-22	15.9	7.6	3630	4	4	4
Area_30_SP	6-Oct-22	12.1	8	3610	4.5	4.5	4.5
Area_30_SP	22-Oct-22	6.7	7.9	2860	2.1	2.1	2.1
Area_A_N_Ditch	22-Jan-22	1.6	8.6	540	62.4	62.4	62.4
Area_A_N_Ditch	25-Jan-22	5.3	7.9	294	18.9	18.9	18.9
Area_A_N_Ditch	27-Jan-22	4.5	8	403	5.6	5.6	5.6
Area_A_N_Ditch	8-Feb-22	2.4	8	285	45.7	45.7	45.7
Area_A_N_Ditch	9-Feb-22	3.6	8.1	314	50.9	51	50.9
Area_A_N_Ditch	10-Feb-22	3.5	8.2	359	83.3	83.2	83.3
Area_A_N_Ditch	13-Feb-22	3.8	8.1	393	59.6	59.7	59.6
Area_A_N_Ditch	15-Feb-22	1.5	8.3	478	10.9	10.9	10.9
Area_A_N_Ditch	17-Feb-22	3.3	8	455	10.5	10.5	10.5
Area_A_N_Ditch	19-Mar-22	2.5	7.8	378	134	137	134
Area_A_N_Ditch	21-Mar-22	7.9	7.6	378	61.1	61.2	61.1
Area_A_N_Ditch	23-Mar-22	4.3	7.8	489	13.8	13.8	13.8
Area_A_N_Ditch	26-Mar-22	2.7	7.5	504	6	6	6
Area_A_N_Ditch	28-Mar-22	7.4	7.4	570	5	5	5
Area_A_N_Ditch	3-Apr-22	2.5	7.9	472	4.3	4.2	4.3
Area_A_N_Ditch	5-Apr-22	8.3	7.8	514	4.1	4.1	4.1
Area_A_N_Ditch	15-Apr-22	4.5	7.9	444	4.1	4.3	4.1
Area_A_N_Ditch	21-Apr-22	4.9	7.9	467	3.1	3.1	3.1
Area_A_N_Ditch	23-Apr-22	9.1	8	506	4.8	4.8	4.8
Area_A_N_Ditch	26-Apr-22	9.9	8	449	5	5	5
Area_A_N_Ditch	30-Apr-22	8	7.9	340	4.4	4.4	4.4
Area_A_N_Ditch	3-May-22	9.5	8	343	5.5	5.5	5.5
Area_A_N_Ditch	6-May-22	7.4	8.5	389	36.9	37.3	36.9
Area_A_N_Ditch	8-May-22	6.3	8.2	382	15.8	15.8	15.8
Area_A_N_Ditch	11-May-22	8.8	8	358	3	3	3
Area_A_N_Ditch	15-May-22	11.8	8.3	325	3.3	3.3	3.3
Area_A_N_Ditch	20-May-22	12	7.9	360	5.2	5.2	5.2
Area_A_N_Ditch	24-May-22	10.8	8.3	411	2.9	2.9	2.9
Area_A_N_Ditch	26-May-22	9.6	7.9	397	2.9	2.9	2.9
Area_A_N_Ditch	30-May-22	16	8	403	5.6	5.5	5.6
Area_A_N_Ditch	1-Jun-22	15.9	8.1	417	4	3.9	4
Area_A_N_Ditch	3-Jun-22	15.4	8.1	404	16	16.2	16
Area_A_N_Ditch	4-Jun-22	13.8	8.2	386	11.5	11.7	11.5
Area_A_N_Ditch	5-Jun-22	14.4	8.2	375	15.1	15	15.1
Area_A_N_Ditch	15-Jun-22	11.7	8	467	9.9	10	9.9
Area_A_N_Ditch	17-Jun-22	9.7	7.9	471	11.4	11.3	11.4
Area_A_N_Ditch	2-Jul-22	16.7	7.8	410	7.2	7.2	7.2
Area_A_N_Ditch	5-Jul-22	14.4	8.1	426	7.3	7.3	7.3
Area_A_N_Ditch	24-Jul-22	22.3	8.2	633	12.4	12.4	12.4
Area_A_N_Ditch	10-Sep-22	16.7	7.7	482	6.9	7	6.9
Area_A_N_Ditch	27-Sep-22	15.8	7.8	462	7.6	7.6	7.6
Area_A_N_Ditch	7-Dec-22	1.2	8.3	591	1	0.9	1
Area_A_N_Ditch	15-Dec-22	0.6	8	450	1.5	1.5	1.5
Area_A_NE_Sump	9-Mar-22	4.4	7.7	1000	3	3	3
Area_A_NE_Sump	11-May-22	12.3	8	418	15	15.2	15
Area_A_NE_Sump	12-May-22	10.5	8.2	403	11	11	11
Area_A_NE_Sump	13-May-22	13	8.2	415	17.1	17.2	17.1
Area_A_NE_Sump	14-May-22	12.5	8.1	496	22.5	21.7	22.5
Area_A_NE_Sump	15-May-22	15.7	8.1	414	20.7	20.6	20.7
Area_A_NE_Sump	16-May-22	11.2	7.9	501	27.1	26.7	27.1
Area_A_NE_Sump	17-May-22	14	8.3	593	63.3	63.1	63.3
Area_A_NE_Sump	18-May-22	11	7.8	571	11.7	11.5	11.7
Area_A_NE_Sump	19-May-22	9.3	8	772	52	51	52
Area_A_NE_Sump	22-May-22	18.8	8.2	638	11.1	11.1	11.1
Area_A_NE_Sump	25-May-22	14.9	8.5	697	21.9	21.9	21.9
Area_A_NE_Sump	26-May-22	0.5	8	772	12.4	12	12.4
Area_A_NE_Sump	27-May-22	16.7	8.2	840	22.3	22	22.3
Area_A_NE_Sump	30-May-22	17.2	8.1	709	7.7	7.7	7.7
Area_A_NE_Sump	4-Jun-22	19.6	8.5	666	23.2	22.9	23.2

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
Area_A_NE_Sump	5-Jun-22	18.9	8.5	649	15.6	15.6	15.6
Area_A_NE_Sump	6-Jun-22	16.6	8.6	715	12.8	12.7	12.8
Area_A_NE_Sump	7-Jun-22	21	8.2	718	12.6	12.6	12.6
Area_A_NE_Sump	8-Jun-22	17.6	8.3	785	18.4	18.3	18.4
Area_A_NE_Sump	9-Jun-22	13.9	8	810	90	90	90
Area_A_NE_Sump	10-Jun-22	17.6	8.1	781	22.3	22.1	22.3
Area_A_NE_Sump	11-Jun-22	12.5	8	827	20.4	20.2	20.4
Area_A_NE_Sump	12-Jun-22	14.2	8	830	15.5	15.6	15.5
Area_A_NE_Sump	13-Jun-22	15.1	7.9	849	13	12.9	13
Area_A_NE_Sump	14-Jun-22	11.1	7.9	826	8.5	8.5	8.5
Area_A_NE_Sump	15-Jun-22	17.3	7.7	676	17.6	17	17.6
Area_A_NE_Sump	16-Jun-22	12.1	7.8	884	10.5	10.5	10.5
Area_A_NE_Sump	17-Jun-22	9.9	7.8	796	39.4	38.5	39.4
Area_A_NE_Sump	18-Jun-22	9.9	8	871	14.8	14.4	14.8
Area_A_NE_Sump	21-Jun-22	14.9	8.3	855	12.8	11.8	12.8
Area_A_NE_Sump	22-Jun-22	11.9	8	892	30.4	29.5	30.4
Area_A_NE_Sump	24-Jun-22	23.1	8.2	792	37.8	37.6	37.8
Area_A_NE_Sump	25-Jun-22	14.2	7.9	883	16.5	15.9	16.5
Area_A_NE_Sump	26-Jun-22	14.5	8.1	848	12.2	12.2	12.2
Area_A_NE_Sump	27-Jun-22	13.5	8.1	821	9.2	9.2	9.2
Area_A_NE_Sump	28-Jun-22	20.5	8.1	795	29.3	29	29.3
Area_A_NE_Sump	29-Jun-22	22.2	8.1	794	11.9	12.1	11.9
Area_A_NE_Sump	30-Jun-22	23.6	8	796	14.5	14.4	14.5
Area_A_NE_Sump	1-Jul-22	18.3	8.2	548	33.1	33.2	33.1
Area_A_NE_Sump	2-Jul-22	20.5	8.2	564	25	25	25
Area_A_NE_Sump	3-Jul-22	24.3	8.2	559	10.8	10.8	10.8
Area_A_NE_Sump	4-Jul-22	19.3	8.1	551	12.6	12.6	12.6
Area_A_NE_Sump	5-Jul-22	15.3	8.1	558	16.8	17	16.8
Area_A_NE_Sump	6-Jul-22	14.1	8.1	571	14.2	14.2	14.2
Area_A_NE_Sump	7-Jul-22	15.3	8	563	13.1	12.8	13.1
Area_A_NE_Sump	8-Jul-22	17.8	8	605	36.3	35.5	36.3
Area_A_NE_Sump	9-Jul-22	15.9	8.1	574	12.4	12.4	12.4
Area_A_NE_Sump	10-Jul-22	20.2	8.1	556	22	22	22
Area_A_NE_Sump	11-Jul-22	19.1	8.2	622	14.5	14.5	14.5
Area_A_NE_Sump	12-Jul-22	16.7	8	659	24.9	25.2	24.9
Area_A_NE_Sump	13-Jul-22	16.2	8.3	640	17.3	17	17.3
Area_A_NE_Sump	14-Jul-22	17.1	8	664	20.2	19.7	20.2
Area_A_NE_Sump	15-Jul-22	16.4	8.1	637	10.3	10.2	10.3
Area_A_NE_Sump	16-Jul-22	21.2	8	645	11.4	11.3	11.4
Area_A_NE_Sump	17-Jul-22	18.3	8.1	660	9.3	9.1	9.3
Area_A_NE_Sump	18-Jul-22	22.5	8.2	628	16	16	16
Area_A_NE_Sump	19-Jul-22	20.4	7.1	615	9.5	9.5	9.5
Area_A_NE_Sump	20-Jul-22	21.8	8	638	10.5	10.5	10.5
Area_A_NE_Sump	21-Jul-22	19.7	8.1	630	23.5	23.4	23.5
Area_A_NE_Sump	22-Jul-22	19.1	8.1	635	14.4	14.4	14.4
Area_A_NE_Sump	23-Jul-22	22.5	8.2	636	11.1	11.1	11.1
Area_A_NE_Sump	24-Jul-22	22.3	8.2	633	12.4	12.4	12.4
Area_A_NE_Sump	25-Jul-22	24.4	8	647	10.2	10.3	10.2
Area_A_NE_Sump	31-Jul-22	18.5	8.1	873	11.4	11.3	11.4
Area_A_NE_Sump	1-Aug-22	13.2	8.2	916	6.6	6.6	6.6
Area_A_NE_Sump	2-Aug-22	17.5	7.8	724	19.2	19.3	19.2
Area_A_NE_Sump	3-Aug-22	12.6	8.3	921	11	11	11
Area_A_NE_Sump	4-Aug-22	12.9	7.8	647	50.8	51.8	50.8
Area_A_NE_Sump	5-Aug-22	13.6	8.2	885	11.6	11.6	11.6
Area_A_NE_Sump	6-Aug-22	13	8.2	878	13.7	13.8	13.7
Area_A_NE_Sump	7-Aug-22	14.3	8.1	911	11	11	11
Area_A_NE_Sump	8-Aug-22	20.6	7.8	743	13.5	13.6	13.5
Area_A_NE_Sump	9-Aug-22	20.5	7.8	731	11.1	11.1	11.1
Area_A_NE_Sump	10-Aug-22	24.9	7.9	728	11	11	11
Area_A_NE_Sump	11-Aug-22	21.3	7.8	647	8.7	8.7	8.7
Area_A_NE_Sump	12-Aug-22	22.3	7.6	666	19	18.9	19
Area_A_NE_Sump	13-Aug-22	21.4	7.6	668	23.4	23.4	23.4
Area_A_NE_Sump	14-Aug-22	16.5	7.8	678	64	65.2	64
Area_A_NE_Sump	15-Aug-22	21.5	7.9	686	54.6	54.8	54.6
Area_A_NE_Sump	16-Aug-22	21.6	7.4	679	43.2	43.1	43.2
Area_A_NE_Sump	17-Aug-22	20.1	7.7	721	43.1	43.2	43.1
Area_A_NE_Sump	18-Aug-22	21.1	7.7	715	28.8	28.8	28.8
Area_A_NE_Sump	19-Aug-22	23.2	7.6	749	32.8	32.3	32.8
Area_A_NE_Sump	20-Aug-22	24	7.8	694	17.6	17.5	17.6
Area_A_NE_Sump	21-Aug-22	21.3	7.7	688	19.2	19.2	19.2
Area_A_NE_Sump	22-Aug-22	22.1	7.8	681	31	30.8	31
Area_A_NE_Sump	23-Aug-22	22.7	7.8	682	26.6	26.6	26.6
Area_A_NE_Sump	24-Aug-22	23.2	7.8	689	39.5	39.4	39.5
Area_A_NE_Sump	25-Aug-22	21.5	7.8	703	41.1	42.7	41.1
Area_A_NE_Sump	26-Aug-22	22.1	8	683	22.9	23.1	22.9
Area_A_NE_Sump	27-Aug-22	19	8.1	664	30.9	30.9	30.9
Area_A_NE_Sump	28-Aug-22	18.5	8.3	685	85	85	85
Area_A_NE_Sump	29-Aug-22	18.1	8	665	OR		
Area_A_NE_Sump	30-Aug-22	19.4	8.2	662	48	49	48
Area_A_NE_Sump	31-Aug-22	19.7	8.1	648	35.8	35.4	35.8
Area_A_NE_Sump	1-Sep-22	18.9	8.4	648	26.2	26	26.2
Area_A_NE_Sump	2-Sep-22	20.4	8.2	632	21.9	21.7	21.9
Area_A_NE_Sump	3-Sep-22	19.9	8.2	625	21.3	21.4	21.3
Area_A_NE_Sump	4-Sep-22	17.5	8.2	616	23.2	23.1	23.2
Area_A_NE_Sump	5-Sep-22	16.6	8.2	612	27.6	27.5	27.6
Area_A_NE_Sump	7-Sep-22	16.6	7.9	546	15.6	15.6	15.6
Area_A_NE_Sump	8-Sep-22	14.7	7.9	588	20.2	19.7	20.2
Area_A_NE_Sump	9-Sep-22	16.5	7.9	584	14.1	13.9	14.1
Area_A_NE_Sump	10-Sep-22	15.7	8	597	14.7	14.6	14.7
Area_A_NE_Sump	11-Sep-22	15.7	7.6	691	13.2	13.2	13.2
Area_A_NE_Sump	13-Sep-22	15.3	8.2	548	24.9	24.7	24.9
Area_A_NE_Sump	14-Sep-22	14	8.3	598	12.6	12.6	12.6
Area_A_NE_Sump	15-Sep-22	16.1	8.2	613	9.4	9.4	9.4
Area_A_NE_Sump	18-Sep-22	14.9	7.9	685	12.1	12.5	12.1
Area_A_NE_Sump	20-Sep-22	15	7.9	539	8.6	8.3	8.6
Area_A_NE_Sump	21-Sep-22	15.3	7.8	556	11.8	11.8	11.8
Area_A_NE_Sump	22-Sep-22	14.5	7.9	517	26.8	26.3	26.8
Area_A_NE_Sump	23-Sep-22	13	7.9	526	28.4	28.3	28.4
Area_A_NE_Sump	24-Sep-22	10.7	8.2	549	26.8	26.6	26.8

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
Area_A_NE_Sump	25-Sep-22	14.4	8.1	550	45.6	45	45.6
Area_A_NE_Sump	26-Sep-22	12.3	8	531	26.8	26.7	26.8
Area_A_NE_Sump	2-Oct-22	15.4	8.2	545	21	21.4	21
Area_A_NE_Sump	12-Oct-22	9.4	8.3	506	11.4	11.4	11.4
DC-discharge-R6-WP	17-Mar-22	4.2	7.6	580	91	92	91
Earthfill_Dam_DS_OUT	1-Jan-22	7.5	8.1	447	2.1	2.2	2.1
Earthfill_Dam_DS_OUT	2-Jan-22	6	7.3	305	1.5	1.5	1.5
Earthfill_Dam_DS_OUT	3-Jan-22	4.9	7.1	292	2	2	2
Earthfill_Dam_DS_OUT	4-Jan-22	4.2	8.4	353	2	2	2
Earthfill_Dam_DS_OUT	5-Jan-22	6.2	7.7	425	1.7	1.7	1.7
Earthfill_Dam_DS_OUT	6-Jan-22	6.3	8	344	2.1	2.1	2.1
Earthfill_Dam_DS_OUT	7-Jan-22	6.4	8.4	424	1.4	1.4	1.4
Earthfill_Dam_DS_OUT	8-Jan-22	8.7	7.8	417	1.6	1.5	1.6
Earthfill_Dam_DS_OUT	9-Jan-22	8.7	7.8	417	1.6	1.5	1.6
Earthfill_Dam_DS_OUT	10-Jan-22	7.6	8.1	441	1.7	1.7	1.7
Earthfill_Dam_DS_OUT	11-Jan-22	8.4	8.1	404	1.7	1.7	1.7
Earthfill_Dam_DS_OUT	12-Jan-22	8.1	8.1	405	1.7	1.7	1.7
Earthfill_Dam_DS_OUT	13-Jan-22	6.8	8.1	290	1.7	1.7	1.7
Earthfill_Dam_DS_OUT	14-Jan-22	7.1	8.1	398	3.3	3.3	3.3
Earthfill_Dam_DS_OUT	15-Jan-22	7.7	8.3	197	2	2	2
Earthfill_Dam_DS_OUT	16-Jan-22	6.6	8.2	314	2.4	2.4	2.4
Earthfill_Dam_DS_OUT	17-Jan-22	5.2	8.2	423	2.4	2.4	2.4
Earthfill_Dam_DS_OUT	18-Jan-22	6.1	8	390	1.5	1.4	1.5
Earthfill_Dam_DS_OUT	20-Jan-22	4.5	8.2	260	2.1	2.1	2.1
Earthfill_Dam_DS_OUT	21-Jan-22	7	8.1	418	1.3	1.3	1.3
Earthfill_Dam_DS_OUT	22-Jan-22	7.8	8.1	400	1.4	1.4	1.4
Earthfill_Dam_DS_OUT	23-Jan-22	4.8	8.4	227	2.1	2.2	2.1
Earthfill_Dam_DS_OUT	24-Jan-22	6.1	8.2	257	2.8	2.7	2.8
Earthfill_Dam_DS_OUT	25-Jan-22	7.4	8.2	447	1.7	1.7	1.7
Earthfill_Dam_DS_OUT	26-Jan-22	6.7	8.3	321	1.7	1.6	1.7
Earthfill_Dam_DS_OUT	27-Jan-22	3.9	8.4	224	2.3	2.3	2.3
Earthfill_Dam_DS_OUT	28-Jan-22	8.5	8.3	422	1.7	1.8	1.7
Earthfill_Dam_DS_OUT	29-Jan-22	7.7	8.2	456	2.6	2.6	2.6
Earthfill_Dam_DS_OUT	30-Jan-22	6.8	8.2	407	1.4	1.4	1.4
Earthfill_Dam_DS_OUT	31-Jan-22	8.1	8.2	413	1.5	1.5	1.5
Earthfill_Dam_DS_OUT	1-Feb-22	4.3	8.3	206	6	6	6
Earthfill_Dam_DS_OUT	2-Feb-22	4.1	8.3	218	3.2	3.2	3.2
Earthfill_Dam_DS_OUT	3-Feb-22	2.7	8	364	1.9	1.9	1.9
Earthfill_Dam_DS_OUT	4-Feb-22	5.5	8	461	1.4	1.4	1.4
Earthfill_Dam_DS_OUT	5-Feb-22	3	8.2	439	1.5	1.5	1.5
Earthfill_Dam_DS_OUT	6-Feb-22	6.9	8.1	339	2	2	2
Earthfill_Dam_DS_OUT	7-Feb-22	6.9	7.8	407	1.6	1.6	1.6
Earthfill_Dam_DS_OUT	8-Feb-22	8.4	7.9	431	1.6	1.6	1.6
Earthfill_Dam_DS_OUT	9-Feb-22	8.3	7.9	425	3	3	3
Earthfill_Dam_DS_OUT	10-Feb-22	3.7	8.2	307	4.2	4.2	4.2
Earthfill_Dam_DS_OUT	11-Feb-22	4.1	8	329	12.5	12.6	12.5
Earthfill_Dam_DS_OUT	12-Feb-22	6.2	7.7	430	2.8	2.7	2.8
Earthfill_Dam_DS_OUT	13-Feb-22	6.7	7.9	450	3.1	3	3.1
Earthfill_Dam_DS_OUT	14-Feb-22	6.4	8	436	1.8	1.8	1.8
Earthfill_Dam_DS_OUT	15-Feb-22	6.3	8	448	3.2	3.2	3.2
Earthfill_Dam_DS_OUT	16-Feb-22	4.9	8.1	370	2	2	2
Earthfill_Dam_DS_OUT	17-Feb-22	6.8	8.3	414	2.5	2.5	2.5
Earthfill_Dam_DS_OUT	18-Feb-22	7.2	8	452	1.8	1.8	1.8
Earthfill_Dam_DS_OUT	19-Feb-22	5.9	8.4	446	2.1	2	2.1
Earthfill_Dam_DS_OUT	20-Feb-22	4.5	7.8	415	2.9	2.9	2.9
Earthfill_Dam_DS_OUT	21-Feb-22	4.1	7.6	458	1.9	1.9	1.9
Earthfill_Dam_DS_OUT	22-Feb-22	7.8	7.8	423	3	3	3
Earthfill_Dam_DS_OUT	23-Feb-22	3.1	7.8	248	3.2	3.2	3.2
Earthfill_Dam_DS_OUT	24-Feb-22	9.2	7.7	423	1.7	1.7	1.7
Earthfill_Dam_DS_OUT	25-Feb-22	9.7	7.9	390	1.7	1.7	1.7
Earthfill_Dam_DS_OUT	26-Feb-22	4.3	8.1	278	2.6	2.6	2.6
Earthfill_Dam_DS_OUT	27-Feb-22	4.6	7.7	487	3	3	3
Earthfill_Dam_DS_OUT	28-Feb-22	4.4	7.9	482	2.3	2.3	2.3
Earthfill_Dam_DS_OUT	1-Mar-22	6.8	7.9	537	2.1	2.1	2.1
Earthfill_Dam_DS_OUT	2-Mar-22	8.5	7.5	490	2.4	2.4	2.4
Earthfill_Dam_DS_OUT	3-Mar-22	7.4	7.8	501	1.8	1.8	1.8
Earthfill_Dam_DS_OUT	4-Mar-22	5.8	8	416	1.8	1.8	1.8
Earthfill_Dam_DS_OUT	5-Mar-22	7.1	7.7	527	2.1	2.1	2.1
Earthfill_Dam_DS_OUT	6-Mar-22	6.3	7.8	529	1.8	1.8	1.8
Earthfill_Dam_DS_OUT	7-Mar-22	6.3	7.7	440	1.8	1.8	1.8
Earthfill_Dam_DS_OUT	8-Mar-22	5.5	7.8	530	1.9	1.9	1.9
Earthfill_Dam_DS_OUT	9-Mar-22	5.2	8	284	1.5	1.5	1.5
Earthfill_Dam_DS_OUT	10-Mar-22	5.4	8	465	1.6	1.6	1.6
Earthfill_Dam_DS_OUT	11-Mar-22	6.5	7.8	525	1.7	1.8	1.7
Earthfill_Dam_DS_OUT	12-Mar-22	3.3	8	328	2.2	2.3	2.2
Earthfill_Dam_DS_OUT	13-Mar-22	1.8	8.1	311	2.4	2.1	2.4
Earthfill_Dam_DS_OUT	14-Mar-22	4.4	8.1	442	1.9	1.9	1.9
Earthfill_Dam_DS_OUT	15-Mar-22	7.5	8.1	478	2.2	2.2	2.2
Earthfill_Dam_DS_OUT	16-Mar-22	4	8.2	249	5.7	5.7	5.7
Earthfill_Dam_DS_OUT	17-Mar-22	8	7.4	245	17.6	17.7	17.6
Earthfill_Dam_DS_OUT	18-Mar-22	3.4	7.7	311	6.9	6.9	6.9
Earthfill_Dam_DS_OUT	19-Mar-22	6.7	7.9	525	2.7	2.7	2.7
Earthfill_Dam_DS_OUT	20-Mar-22	6.4	7.8	520	2.4	2.4	2.4
Earthfill_Dam_DS_OUT	21-Mar-22	6.8	7.9	462	3.2	3.2	3.2
Earthfill_Dam_E_BT	22-Mar-22	8.5	7.7	505	3.1	3.1	3.1
Earthfill_Dam_E_BT	23-Mar-22	10.5	7.6	503	2.6	2.6	2.6
Earthfill_Dam_E_BT	24-Mar-22	7.4	7.6	565	2.4	2.5	2.4
Earthfill_Dam_E_BT	25-Mar-22	7.6	7.8	548	2.7	2.7	2.7
Earthfill_Dam_E_BT	27-Mar-22	7.6	7.5	538	3.6	3.6	3.6
Earthfill_Dam_E_BT	28-Mar-22	8.7	7.6	545	4.9	4.8	4.9
Earthfill_Dam_E_BT	29-Mar-22	6.8	7.6	603	7.2	7.2	7.2
Earthfill_Dam_E_BT	30-Mar-22	8.5	7.7	608	4	4	4
Earthfill_Dam_E_BT	31-Mar-22	7.5	7.7	634	5.7	5.6	5.7
Earthfill_Dam_E_BT	1-Apr-22	8.5	7.7	572	6.6	6.5	6.6
Earthfill_Dam_E_BT	2-Apr-22	8.2	7.8	584	4.4	4.4	4.4
Earthfill_Dam_E_BT	3-Apr-22	8.1	7.4	576	4	3.9	4
Earthfill_Dam_E_BT	4-Apr-22	7.6	7.4	570	3.3	3.3	3.3
Earthfill_Dam_E_BT	5-Apr-22	7.6	7.5	574	3.7	3.7	3.7
Earthfill_Dam_E_BT	6-Apr-22	8.2	8.1	535	3.4	3.4	3.4

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
Earthfill_Dam_E_BT	7-Apr-22	9.8	8.1	538	4.2	4.2	4.2
Earthfill_Dam_E_BT	8-Apr-22	7.5	8.1	548	4.3	4.3	4.3
Earthfill_Dam_E_BT	9-Apr-22	6.7	8	500	3.8	3.8	3.8
Earthfill_Dam_E_BT	10-Apr-22	6.2	8.1	471	7.5	7.5	7.5
Earthfill_Dam_E_BT	11-Apr-22	4.1	8.1	313	5.5	5.5	5.5
Earthfill_Dam_E_BT	12-Apr-22	7.8	8	504	5.8	5.8	5.8
Earthfill_Dam_E_BT	13-Apr-22	7.3	7.8	533	4.6	4.6	4.6
Earthfill_Dam_E_BT	14-Apr-22	8.1	8	530	3.4	3.4	3.4
Earthfill_Dam_E_BT	15-Apr-22	7.8	7.8	545	1.6	1.6	1.6
Earthfill_Dam_E_BT	16-Apr-22	8.2	7.8	536	1.6	1.6	1.6
Earthfill_Dam_E_BT	17-Apr-22	6.1	7.9	468	2.5	2.5	2.5
Earthfill_Dam_E_BT	18-Apr-22	6.3	7.9	473	1.8	1.8	1.8
Earthfill_Dam_E_BT	19-Apr-22	8	7.8	547	2.8	2.8	2.8
Earthfill_Dam_E_BT	20-Apr-22	8.6	8.5	527	2.2	2.2	2.2
Earthfill_Dam_E_BT	21-Apr-22	7.7	8	613	2.5	2.5	2.5
Earthfill_Dam_E_BT	22-Apr-22	8.6	8.1	528	2.6	2.6	2.6
Earthfill_Dam_E_BT	23-Apr-22	8.3	8.2	604	2.2	2.1	2.2
Earthfill_Dam_E_BT	24-Apr-22	8.3	8	614	1.8	1.8	1.8
Earthfill_Dam_E_BT	25-Apr-22	8.4	8	589	1.8	1.8	1.8
Earthfill_Dam_E_BT	26-Apr-22	8.8	8.1	591	2.7	2.7	2.7
Earthfill_Dam_E_BT	27-Apr-22	6.6	8.1	601	1.6	1.6	1.6
Earthfill_Dam_E_BT	28-Apr-22	7	8.1	432	3.1	3.1	3.1
Earthfill_Dam_E_BT	29-Apr-22	9.5	8.1	442	3.5	3.5	3.5
Earthfill_Dam_E_BT	30-Apr-22	8.7	8	431	12.8	12.8	12.8
Earthfill_Dam_E_BT	1-May-22	7.4	8.1	434	2.7	2.7	2.7
Earthfill_Dam_E_BT	2-May-22						
Earthfill_Dam_E_BT	3-May-22	8.3	8	420	5.3	5.4	5.3
Earthfill_Dam_E_BT	4-May-22	9.9	8	466	2.4	2.5	2.4
Earthfill_Dam_E_BT	5-May-22	8.3	8.4	473	2.4	2.5	2.4
Earthfill_Dam_E_BT	6-May-22	8.8	8.4	462	3.7	3.7	3.7
Earthfill_Dam_E_BT	7-May-22	6.1	8.2	505	2.1	2	2.1
Earthfill_Dam_E_BT	8-May-22	7.4	8.1	479	1.9	1.9	1.9
Earthfill_Dam_E_BT	9-May-22	5.6	8.1	512	2.6	2.5	2.6
Earthfill_Dam_E_BT	10-May-22	6.3	8.4	522	1.8	1.8	1.8
Earthfill_Dam_E_BT	11-May-22	11.4	7.9	494	2	1.8	2
Earthfill_Dam_E_BT	12-May-22	6.4	8.2	545	1.9	1.9	1.9
Earthfill_Dam_E_BT	13-May-22	7.1	8.1	542	8.4	8.3	8.4
Earthfill_Dam_E_BT	14-May-22	7.5	8.2	586	2.6	2.6	2.6
Earthfill_Dam_E_BT	15-May-22	7.3	8	595	2.5	2.6	2.5
Earthfill_Dam_W_Sump	19-Jan-22	3	8.1	405	2	2	2
GC-Debris-US	23-Jan-22	1	8	1208	95.7	95.7	95.7
GC-Debris-US	25-Jan-22	2.8	8.4	440	37.4	37.4	37.4
GC-Debris-US	9-Feb-22	4	8.3	295	OR		
GC-Debris-US	10-Feb-22	0.9	8.4	342	OR		
GC-Debris-US	12-Feb-22	0.7	8.3	387	129	129	129
GC-Debris-US	15-Feb-22	0.7	8.2	949	68.3	68.5	68.3
GC-Debris-US	17-Mar-22	3.1	8.1	378	OR		
GC-Debris-US	19-Mar-22	4.1	8	301	OR		
GC-Debris-US	21-Mar-22	3.7	8	218	54.3	54.3	54.3
GC-Debris-US	22-Mar-22	1.7	8.4	330	OR		
GC-Debris-US	26-Mar-22	0.6	7.8	413	2497	2493	2497
GC-Debris-US	31-Mar-22	3.4	8	414	OR		
GC-Debris-US	9-Apr-22	2.4	8.2	370	OR		
GC-Debris-US	15-Apr-22	1.7	8.2	1191	37.7	38	37.7
GC-Debris-US	30-Apr-22	3.1	8	430	OR		
GC-Debris-US	4-May-22	9.3	8.3	583	OR		
GC-Debris-US	10-May-22	5.3	8.5	637	OR		
GC-Debris-US	21-May-22	14.4	8.7	1958	2372	2369	2372
GC-Debris-US	27-May-22	13.5	8.5	2020	OR		
GC-Debris-US	28-May-22	7.1	7.2	1309	OR		
GC-Debris-US	1-Jun-22	19.7	8.3	926	OR		
GC-Debris-US	11-Jun-22	15	8.2	2540	918	918	918
GC-Debris-US	17-Jun-22	15.4	8.1	2550	3990	3988	3990
GC-Debris-US	23-Jun-22	15.2	8	2050	3862	3825	3862
GC-Debris-US	3-Jul-22	16	8.1	2760	20	20	20
GC-Debris-US	6-Jul-22	24.8	8.1	2600	779	777	779
GC-Debris-US	24-Jul-22	17.4	8.2	2670	8.1	8.1	8.1
GC-Debris-US	31-Jul-22	25.9	8.4	2140	58.6	58.8	58.6
GC-Debris-US	4-Aug-22	16.1	7.2	1436	1954	1955	1954
GC-Debris-US	14-Aug-22	16.2	8.4	1871	8	8	8
L3-DC-DS	10-Feb-22	0.7	8.3	255	81.5	82.8	81.5
L3-DC-DS	17-Mar-22	0.5	8.3	190	43	42	43
L3-DC-DS	19-Mar-22	1.6	7.8	306	56.3	55.6	56.3
L3-DC-DS	22-Mar-22	3.2	7.9	308	27	30	27
L3-DC-DS	24-Mar-22	3.7	7.6	321	24.3	24.2	24.3
L3-DC-DS	29-Mar-22	3.1	7.9	401	23.9	23.9	23.9
L3-DC-DS	9-Apr-22	1.7	8.1	319	18.4	18.4	18.4
L3-DC-DS	23-Apr-22	5.2	8	424	20.3	19.6	20.3
L3-DC-DS	27-Apr-22	0.7	8.3	479	26.1	26.1	26.1
L3-DC-DS	5-May-22	6.9	8.5	481	9.1	9.1	9.1
L3-DC-DS	8-May-22	5.1	8.2	429	15.9	15.2	15.9
L3-DC-DS	12-May-22	8.2	8.5	451	12.4	12.4	12.4
L3-DC-DS	21-May-22	12.2	8.5	1424	7.5	7.5	7.5
L3-DC-DS	28-May-22	9.1	8.2	844	1317	1323	1317
L3-DC-DS	11-Jun-22	16.4	8.2	1121	7.9	8	7.9
L3-DC-US	10-Feb-22	1.4	8.6	267	80.7	80.6	80.7
L3-DC-US	17-Mar-22	0.6	8.3	189	43	42	43
L3-DC-US	19-Mar-22	2	7.7	304	61.2	61.1	61.2
L3-DC-US	22-Mar-22	5.1	7.7	323	48	49	48
L3-DC-US	24-Mar-22	5	7.8	332	25	25	25
L3-DC-US	29-Mar-22	3.8	7.6	393	28.9	29.1	28.9
L3-DC-US	9-Apr-22	1.7	8.1	325	18.1	18.1	18.1
L3-DC-US	23-Apr-22	6.3	8.2	415	21.2	21.4	21.2
L3-DC-US	27-Apr-22	0.9	8.4	477	25.1	25	25.1
L3-DC-US	5-May-22	7.7	8.8	482	11	11.1	11
L3-DC-US	8-May-22	5.6	8.5	431	17.7	17.7	17.7
L3-DC-US	12-May-22	9.6	8.1	416	16.5	16.5	16.5
L3-DC-US	21-May-22	11.5	8.5	1492	9.1	9.1	9.1
L3-DC-US	28-May-22	9.5	8.1	834	1399	1406	1399

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
L3-DC-US	11-Jun-22	16.2	8.2	1125	7.9	7.9	7.9
L3-DC-West-EOP	9-Feb-22	1.1	8.5	419	62	63	62
L3-DC-West-EOP	12-Feb-22	1.6	8.4	350	27.7	27.7	27.7
L3-DC-West-EOP	17-Mar-22	1.6	8.2	421	61	61	61
L3-DC-West-EOP	19-Mar-22	1	7.5	463	602	603	602
L3-DC-West-EOP	22-Mar-22	4.5	7.9	499	1342	1349	1342
L3-DC-West-EOP	24-Mar-22	4.5	7.7	587	60.3	60.9	60.3
L3-DC-West-EOP	29-Mar-22	2.3	7.8	538	17	18	17
L3-DC-West-EOP	9-Apr-22	4.7	7.9	500	12.1	12.1	12.1
L3-DC-West-EOP	16-Apr-22	3	8.4	374	11.9	11.9	11.9
L3-DC-West-EOP	22-Apr-22	4.4	7.5	636	606	605	606
L3-DC-West-EOP	23-Apr-22	6.2	7.9	343	23.6	23.7	23.6
L3-DC-West-EOP	24-Apr-22	6.2	8.1	337	19.6	19.5	19.6
L3-DC-West-EOP	27-Apr-22	3.2	8	710	67.2	67.3	67.2
L3-DC-West-EOP	5-May-22	13.1	8.4	696	15.3	15	15.3
L3-DC-West-EOP	8-May-22	7.6	8.2	340	24.3	24.3	24.3
L3-DC-West-EOP	12-May-22	11.4	8	369	16.1	16.2	16.1
L3-DC-West-EOP	21-May-22	16.9	8.5	1030	25.1	25.1	25.1
L3-DC-West-EOP	28-May-22	10.4	8.2	1019	890	890	890
L3-DC-West-EOP	17-Jun-22	16.9	8.3	515	31.1	30.4	31.1
L3-DC-West-Sump	11-Jun-22	21.2	8	1058	20.4	20.5	20.4
L3-DC-West-Sump	3-Jul-22	25	7.5	1256	12.2	12.2	12.2
L5-P2-EEOP	23-Jan-22	5.7	8.2	305	72	72.1	72
L5-P2-EEOP	11-Feb-22	2.4	8	692	11.9	11.8	11.9
L5-P2-EEOP	20-Mar-22	4.1	7.9	679	22.3	22.3	22.3
L5-P2-EEOP	23-Mar-22	5.9	7.5	701	17.2	17.4	17.2
L5-P2-EEOP	24-Mar-22	6.4	7.4	575	13.5	13.5	13.5
L5-P2-EEOP	25-Mar-22	5.2	7.6	562	9.4	9.4	9.4
L5-P2-EEOP	12-Apr-22	3.5	8.2	657	9.5	9.6	9.5
L5-P2-EEOP	13-Apr-22	2.4	8.4	683	14.5	14.4	14.5
L5-P2-EEOP	14-Apr-22	1.2	8.2	721	5.2	5.2	5.2
L5-P2-EEOP	15-Apr-22	6.8	8.4	677	4.9	4.9	4.9
L5-P2-EEOP	16-Apr-22	6.8	8.4	691	4	4	4
L5-P2-EEOP	20-Apr-22	6.1	8.4	760	7.1	7	7.1
L5-P2-EEOP	28-May-22	12.7	8.7	1289	7.8	7.8	7.8
L5-P2-EEOP	29-May-22	15.3	8.2	1310	7	6.8	7
L5-P2-EEOP	30-May-22	16	8.3	1894	6.5	6.5	6.5
L5-P2-EP	24-Jan-22	1.6	8.1	484	48.7	49.1	48.7
L5-P2-EP	26-Jan-22	2.2	8.1	650	22.4	22.3	22.4
L5-P2-EP	27-Jan-22	1.2	7.9	728	31.3	31.2	31.3
L5-P2-EP	28-Jan-22	3.4	8	804	13.2	13.2	13.2
L5-P2-EP	30-Jan-22	1.4	8.1	797	10.5	10.6	10.5
L5-P2-EP	6-Feb-22	3	7.3	799	5	5	5
L5-P2-EP	7-Feb-22	2.8	7.4	805	11.5	11.5	11.5
L5-P2-EP	8-Feb-22	0.6	7.6	785	15.6	15.6	15.6
L5-P2-EP	10-Feb-22	5.1	7.8	659	30.8	31.8	30.8
L5-P2-EP	12-Feb-22	3.1	8.3	747	7.7	7.7	7.7
L5-P2-EP	13-Feb-22	1.2	8.2	782	10.3	10.3	10.3
L5-P2-EP	14-Feb-22	1.4	8	756	17	17.1	17
L5-P2-EP	17-Mar-22	5.4	7.6	729	23.5	23.6	23.5
L5-P2-EP	18-Mar-22	1	7.8	631	31.8	31.6	31.8
L5-P2-EP	19-Mar-22	5.3	7.8	605	24.6	24.7	24.6
L5-P2-EP	21-Mar-22	4.6	7.8	683	18.7	18.4	18.7
L5-P2-EP	22-Mar-22	6.7	7.7	701	15.4	15.4	15.4
L5-P2-EP	26-Mar-22	6	7.9	689	13.9	13.9	13.9
L5-P2-EP	27-Mar-22	6.5	7.3	693	9.6	9.6	9.6
L5-P2-EP	28-Mar-22	6.5	7.9	700	7.2	7.2	7.2
L5-P2-EP	29-Mar-22	5.6	7.6	569	6.1	6.1	6.1
L5-P2-EP	30-Mar-22	7.6	7.6	563	5.8	5.7	5.8
L5-P2-EP	31-Mar-22	6.1	7.5	653	7.8	7.8	7.8
L5-P2-EP	1-Apr-22	6.4	8.1	637	6.6	6.5	6.6
L5-P2-EP	2-Apr-22	7.4	7.6	652	5.8	5.9	5.8
L5-P2-EP	3-Apr-22	6.8	7.8	585	5.6	5.6	5.6
L5-P2-EP	4-Apr-22	5.3	7.7	523	6.2	6.2	6.2
L5-P2-EP	5-Apr-22	3.4	7.9	541	7.4	7.4	7.4
L5-P2-EP	6-Apr-22	7.3	8.1	527	9.1	9.1	9.1
L5-P2-EP	8-Apr-22	4.6	8.1	573	11.8	11.8	11.8
L5-P2-EP	9-Apr-22	3.1	8	607	17	17	17
L5-P2-EP	10-Apr-22	3.1	8	609	13.6	13.6	13.6
L5-P2-EP	11-Apr-22	1.2	8.1	639	11.8	11.8	11.8
L5-P2-EP	17-Apr-22	3.3	8.1	807	6.5	6.5	6.5
L5-P2-EP	19-Apr-22	5	8	715	3.1	3	3.1
L5-P2-EP	21-Apr-22	7.3	8.2	877	5.5	5.6	5.5
L5-P2-EP	24-Apr-22	10.8	8.4	1143	7.3	7.3	7.3
L5-P2-EP	28-Apr-22	7.5	8.6	868	16.5	16.5	16.5
L5-P2-EP	1-May-22	9.3	8.3	1064	15.5	15.5	15.5
L5-P2-EP	3-May-22	9.2	8.2	1028	6.2	6.3	6.2
L5-P2-EP	5-May-22	14.1	8.6	963	5.2	5	5.2
L5-P2-EP	6-May-22	10.4	8.6	989	6.2	6.3	6.2
L5-P2-EP	7-May-22	8.7	8.5	1107	5.8	5.8	5.8
L5-P2-EP	8-May-22	8.9	8.4	1118	5.7	5.8	5.7
L5-P2-EP	9-May-22	7.9	8.5	1065	5.4	5.4	5.4
L5-P2-EP	10-May-22	8.7	8.6	1135	4.6	4.6	4.6
L5-P2-EP	11-May-22	12.8	8.3	1132	3.5	3.6	3.5
L5-P2-EP	12-May-22	13.5	8.2	1027	4.5	4.6	4.5
L5-P2-EP	13-May-22	14.5	8.4	1130	4.3	4.2	4.3
L5-P2-EP	14-May-22	12.1	8.3	1161	4.3	4.2	4.3
L5-P2-EP	15-May-22	11.7	8.5	1154	4.4	4.5	4.4
L5-P2-EP	20-May-22	15.3	8.6	1295	6.5	6.5	6.5
L5-P2-EP	22-May-22	19.5	8.7	1305	6.2	6.2	6.2
L5-P2-EP	24-May-22	17.1	8.9	1397	3.9	3.9	3.9
L5-P2-EP	25-May-22	16.9	8.8	1312	3.7	3.8	3.7
L5-P2-EP	26-May-22	16.8	8.8	1385	3.5	3.5	3.5
L5-P2-EP	27-May-22	16.2	8.9	1307	5.3	5.3	5.3
L5-P2-EP	31-May-22	23.2	7.7	1680	5	4.9	5
L5-P2-EP	1-Jun-22	19.6	7.8	1807	5	4.9	5
L5-P2-EP	2-Jun-22	20.3	8	1694	6.3	6.2	6.3
L5-P2-EP	3-Jun-22	18.7	8.2	1840	5	5	5
L5-P2-EP	4-Jun-22	20.8	8.6	1708	4.5	4.6	4.5

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
L5-P2-EP	5-Jun-22	17.9	8.6	1726	4.3	4.3	4.3
L5-P2-EP	8-Jun-22	18.9	8.9	1730	7	7	7
L5-P2-EP	11-Jun-22	19.1	8.7	1735	11.4	11.3	11.4
L5-P2-EP	15-Jun-22	21	8.7	1868	7.4	7.4	7.4
L5-P2-EP	16-Jun-22	20.6	8.6	1870	7.6	7.5	7.6
L5-P2-EP	17-Jun-22	17.9	8.6	1846	20.1	20.1	20.1
L5-P2-EP	18-Jun-22	18.9	8.6	1854	6	6	6
L5-P2-EP	20-Jun-22	23.1	8.7	1699	6.8	6.8	6.8
L5-P2-EP	21-Jun-22	20.9	8.8	1862	10.4	10.3	10.4
L5-P2-EP	22-Jun-22	20.3	8.8	1811	6.8	6.8	6.8
L5-P2-EP	23-Jun-22	18.1	8.7	1989	13.6	13.1	13.6
L5-P2-EP	24-Jun-22	22.2	8.7	2000	7.8	7.8	7.8
L5-P2-EP	25-Jun-22	21.8	8.7	2030	7.3	7.3	7.3
L5-P2-EP	26-Jun-22	21.4	8.6	2080	6	6.1	6
L5-P2-EP	1-Jul-22	21.7	8.4	2010	5.3	5.3	5.3
L5-P2-EP	3-Jul-22	27.7	8.2	2030	8.1	8.1	8.1
L5-P2-EP	5-Jul-22	21.9	8.2	2130	7.4	7.5	7.4
L5-P2-EP	6-Jul-22	23.4	8.3	2190	8.3	8.4	8.3
L5-P2-EP	7-Jul-22	23	8.3	2240	7.9	7.9	7.9
L5-P2-EP	9-Jul-22	21.1	8.3	2450	8.5	8.2	8.5
L5-P2-EP	11-Jul-22	23.2	8.3	2530	9.5	9.5	9.5
L5-P2-EP	12-Jul-22	22.4	8.4	2430	9.1	9.1	9.1
L5-P2-EP	14-Jul-22	21.2	8.4	2820	5.2	5.2	5.2
L5-P2-EP	16-Jul-22	23.3	8.5	2900	8.5	8.4	8.5
L5-P2-EP	24-Jul-22	23.2	8.7	2520	9.1	9.1	9.1
L5-P2-EP	31-Jul-22	24.8	8.9	2780	5.7	5.7	5.7
L5-P2-EP	4-Aug-22	20.2	8.4	2540	10.1	10	10.1
L5-P2-EP	6-Aug-22	22.5	8.5	2580	7	7	7
L5-P2-EP	27-Aug-22	20.5	8.4	2500	12	12	12
L5-P2-EP	8-Sep-22	17.9	7.9	2540	7.2	7.1	7.2
L5-P2-EP	10-Sep-22	18.1	8.1	2530	6.6	6.6	6.6
L5-P2-EP	14-Sep-22	17.1	8.6	2490	4.4	4.4	4.4
L5-P2-EP	17-Sep-22	12.9	8.4	2470	10.3	10.3	10.3
L5-P2-WEOP	25-Mar-22	6.4	7.5	460	8.8	8.8	8.8
L5-P2-WEOP	26-Mar-22	4.5	7.6	480	7.2	7.2	7.2
L5-P2-WEOP	29-May-22	16	8.3	1896	8	8	8
L5-P2-WEOP	30-May-22	15.6	8.4	1930	5	5	5
L5-P2-WP	24-Jan-22	1.4	8.1	528	53.6	53.8	53.6
L5-P2-WP	26-Jan-22	2	7.9	544	33.4	33.5	33.4
L5-P2-WP	27-Jan-22	0.5	8.1	557	32.7	32.8	32.7
L5-P2-WP	28-Jan-22	2.4	8	477	20	20	20
L5-P2-WP	30-Jan-22	0.4	8.1	573	21.6	21.6	21.6
L5-P2-WP	6-Feb-22	2.8	7.9	674	2.8	2.8	2.8
L5-P2-WP	7-Feb-22	3	7.5	696	8.3	8.3	8.3
L5-P2-WP	8-Feb-22	1.1	8.1	740	14.2	13.9	14.2
L5-P2-WP	10-Feb-22	5	8.2	371	80.1	80.1	80.1
L5-P2-WP	11-Feb-22	0.1	8.1	542	34.3	34.4	34.3
L5-P2-WP	12-Feb-22	0.4	8.2	573	14.5	14.4	14.5
L5-P2-WP	13-Feb-22	0.9	8.4	566	11.2	11.1	11.2
L5-P2-WP	14-Feb-22	1.1	8.1	555	13.9	13.9	13.9
L5-P2-WP	18-Mar-22	0.8	7.8	641	23.2	23.1	23.2
L5-P2-WP	19-Mar-22	5.5	7.9	623	19.9	20	19.9
L5-P2-WP	20-Mar-22	4.5	8	541	14.1	14	14.1
L5-P2-WP	21-Mar-22	4.6	7.7	528	13.6	13.5	13.6
L5-P2-WP	22-Mar-22	6.2	7.6	456	14.1	14.1	14.1
L5-P2-WP	23-Mar-22	5.4	7.8	496	9.3	9.3	9.3
L5-P2-WP	24-Mar-22	4.4	7.8	471	8.8	8.8	8.8
L5-P2-WP	27-Mar-22	5.2	7.6	505	5.7	5.6	5.7
L5-P2-WP	28-Mar-22	4.8	7.8	458	6.7	6.7	6.7
L5-P2-WP	29-Mar-22	5.4	7.8	439	5.5	5.6	5.5
L5-P2-WP	30-Mar-22	6	7.8	439	4.8	4.8	4.8
L5-P2-WP	31-Mar-22	6.5	7.8	343	5.5	5.4	5.5
L5-P2-WP	1-Apr-22	5.3	7.6	426	6.1	6.1	6.1
L5-P2-WP	2-Apr-22	6.2	7.5	446	6	6	6
L5-P2-WP	3-Apr-22	5.7	8	420	5.6	5.6	5.6
L5-P2-WP	4-Apr-22	3.8	7.8	406	5.3	5.4	5.3
L5-P2-WP	5-Apr-22	5.2	8.3	438	6.4	6.4	6.4
L5-P2-WP	6-Apr-22	6.3	8.2	505	6.6	6.6	6.6
L5-P2-WP	8-Apr-22	6.2	8.4	536	7.8	7.8	7.8
L5-P2-WP	9-Apr-22	4.3	8.1	560	11.5	11.5	11.5
L5-P2-WP	10-Apr-22	4.5	8.4	602	9.3	9.3	9.3
L5-P2-WP	11-Apr-22	2.8	8.3	664	9.2	9.2	9.2
L5-P2-WP	12-Apr-22	2.9	8	661	9.9	9.9	9.9
L5-P2-WP	13-Apr-22	0.6	8.2	755	7.8	7.7	7.8
L5-P2-WP	17-Apr-22	2.7	8.4	759	6.2	6.4	6.2
L5-P2-WP	19-Apr-22	0.5	7.8	805	4	4.1	4
L5-P2-WP	21-Apr-22	3.2	8.4	975	4	4	4
L5-P2-WP	24-Apr-22	9.7	8.6	981	5.2	5.2	5.2
L5-P2-WP	28-Apr-22	6.6	8.6	745	11.2	11.1	11.2
L5-P2-WP	1-May-22	10.6	8.4	917	10.5	10.5	10.5
L5-P2-WP	3-May-22	9.1	8.5	1062	4.3	4.3	4.3
L5-P2-WP	5-May-22	13	8.8	1020	4.4	4.3	4.4
L5-P2-WP	6-May-22	10	8.8	1115	6.8	6.8	6.8
L5-P2-WP	7-May-22	8.3	8.3	1201	6.3	6.3	6.3
L5-P2-WP	8-May-22	8.1	8.7	1246	7.8	7.8	7.8
L5-P2-WP	9-May-22	7.2	8.5	1169	6.1	6	6.1
L5-P2-WP	10-May-22	8.5	8.5	1269	4.4	4.4	4.4
L5-P2-WP	11-May-22	11.4	8	1264	3.2	3.3	3.2
L5-P2-WP	12-May-22	12.6	8.4	1175	4	4	4
L5-P2-WP	13-May-22	12.9	8.4	1280	3.6	3.7	3.6
L5-P2-WP	14-May-22	11.5	8.5	1296	4.4	4.4	4.4
L5-P2-WP	15-May-22	11.3	8.3	1352	3.8	3.8	3.8
L5-P2-WP	20-May-22	15.9	8.5	1879	7.5	7.5	7.5
L5-P2-WP	22-May-22	20.9	8.5	2010	6.4	6.4	6.4
L5-P2-WP	24-May-22	16.5	8.7	2140	3.9	4.1	3.9
L5-P2-WP	25-May-22	17	8.5	2030	3.6	3.6	3.6
L5-P2-WP	26-May-22	16.3	8.5	2270	3.6	3.6	3.6
L5-P2-WP	28-May-22	13.2	8.6	1978	5.7	5.7	5.7
L5-P2-WP	31-May-22	20	8.1	2200	7.2	7.2	7.2

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
L5-P2-WP	1-Jun-22	18.5	8	2060	4.4	4.4	4.4
L5-P2-WP	2-Jun-22	20	8.2	1946	4	4	4
L5-P2-WP	3-Jun-22	18.8	8.3	2160	3.4	3.4	3.4
L5-P2-WP	4-Jun-22	20	8.4	2100	3.4	3.5	3.4
L5-P2-WP	5-Jun-22	18.5	8.4	2330	3.3	3.4	3.3
L5-P2-WP	8-Jun-22	19.5	8.5	2350	7.4	7.4	7.4
L5-P2-WP	11-Jun-22	20.1	8.4	2460	7	7	7
L5-P2-WP	15-Jun-22	21.5	8.3	2790	5.2	5.1	5.2
L5-P2-WP	16-Jun-22	20.4	8.3	2840	5.1	5	5.1
L5-P2-WP	17-Jun-22	18.1	8.4	2810	6.9	7.1	6.9
L5-P2-WP	18-Jun-22	18.8	8.5	2850	5.3	5.2	5.3
L5-P2-WP	20-Jun-22	21.1	8.6	2940	7	7	7
L5-P2-WP	21-Jun-22	20.6	8.6	2940	8.6	8.6	8.6
L5-P2-WP	22-Jun-22	20.1	8.6	2790	6.8	6.8	6.8
L5-P2-WP	23-Jun-22	18.2	8.6	2900	9.8	9.8	9.8
L5-P2-WP	24-Jun-22	21.9	8.6	3060	7.3	7.3	7.3
L5-P2-WP	25-Jun-22	21.1	8.6	3060	17.5	17.4	17.5
L5-P2-WP	26-Jun-22	21.8	8.5	3060	5.8	5.8	5.8
L5-P2-WP	1-Jul-22	22	8.3	3010	7.5	7.5	7.5
L5-P2-WP	3-Jul-22	24.7	8.4	3070	10.3	10.3	10.3
L5-P2-WP	5-Jul-22	21.9	8.4	3350	7	7	7
L5-P2-WP	6-Jul-22	22.8	8.5	3400	7.6	7.4	7.6
L5-P2-WP	7-Jul-22	22.8	8.4	3400	7.4	7.4	7.4
L5-P2-WP	9-Jul-22	21	8.4	3500	8.6	8.6	8.6
L5-P2-WP	11-Jul-22	23.1	8.4	3560	11.4	11.4	11.4
L5-P2-WP	12-Jul-22	22.6	8.4	3330	10.1	10	10.1
L5-P2-WP	14-Jul-22	21.3	8.5	3660	8.9	8.8	8.9
L5-P2-WP	16-Jul-22	23.4	8.6	3720	8.4	8.4	8.4
L5-P2-WP	24-Jul-22	23.6	8.7	3650	11.2	11.2	11.2
L5-P2-WP	31-Jul-22	25.9	8.8	3950	9.5	9.5	9.5
L5-P2-WP	4-Aug-22	19.8	8.8	3650	11.3	11.4	11.3
L5-P2-WP	6-Aug-22	22.4	9.1	3820	8.2	8.3	8.2
L5-P2-WP	27-Aug-22	21.5	9	4110	10.3	10.3	10.3
L5-P2-WP	8-Sep-22	18.3	8.2	4320	5.6	5.6	5.6
L5-P2-WP	10-Sep-22	18.5	8.3	4770	7.9	7.9	7.9
L5-P2-WP	14-Sep-22	17.7	8.4	4250	7.2	7.3	7.2
L5-WP	27-May-22	16.3	8.5	6590	6.5	6.5	6.5
L6-EOP	24-Apr-22	12.8	8.5	568	3.5	3.5	3.5
L6-EOP	17-May-22	14.2	8.3	568	4.8	4.8	4.8
L6-EOP	18-May-22	14.1	8.5	569	4.8	4.8	4.8
L6-EOP	5-Jun-22	18.8	8.8	593	4.1	4	4.1
L6-SP	23-Jan-22	2.5	8.7	124	43	43	43
L6-SP	25-Jan-22	0.4	8.3	990	34.4	34.3	34.4
L6-SP	26-Jan-22	2.2	8.5	200	57.7	57.5	57.7
L6-SP	8-Feb-22	1.8	8.3	347	84	83	84
L6-SP	9-Feb-22	2.9	8.6	332	71.8	71	71.8
L6-SP	10-Feb-22	2.2	8.4	328	153	153	153
L6-SP	11-Feb-22	1.3	8.6	348	93.1	93.1	93.1
L6-SP	19-Mar-22	5.7	7.9	446	23.9	23.6	23.9
L6-SP	20-Mar-22	2.2	8.6	481	32.7	32.7	32.7
L6-SP	21-Mar-22	6.5	7.6	436	20.9	20.7	20.9
L6-SP	26-Mar-22	1.6	8.2	531	12.1	12.1	12.1
L6-SP	29-Mar-22	1.9	8.1	399	7	7	7
L6-SP	31-Mar-22	4.4	8.2	457	7	7	7
L6-SP	3-Apr-22	5.3	7.6	452	6.7	6.6	6.7
L6-SP	5-Apr-22	6.2	7.6	415	7	7	7
L6-SP	12-Apr-22	1.2	8.4	545	7.3	7.3	7.3
L6-SP	15-Apr-22	5.3	8.5	472	5.2	5.2	5.2
L6-SP	19-Apr-22	5.8	7.8	459	3.4	3.3	3.4
L6-SP	21-Apr-22	6.4	8.5	552	4	4	4
L6-SP	23-Apr-22	10.6	8.2	553	3.4	3.4	3.4
L6-SP	25-Apr-22	9.1	8.6	616	4.1	4.2	4.1
L6-SP	26-Apr-22	11.9	8.6	593	4.8	4.8	4.8
L6-SP	3-May-22	9.9	8.4	600	7.3	7.2	7.3
L6-SP	5-May-22	11.7	8.6	598	5.7	5.7	5.7
L6-SP	7-May-22	9.7	8.4	661	8.9	9	8.9
L6-SP	9-May-22	6.9	8.5	617	6.5	6.4	6.5
L6-SP	10-May-22	6.9	8.4	622	6	6	6
L6-SP	13-May-22	12.8	8.2	621	4.8	4.8	4.8
L6-SP	28-May-22	11.3	8.3	614	51.6	50.9	51.6
L6-SP	31-May-22	17.8	8.5	612	8.3	8.3	8.3
L6-SP	2-Jun-22	18.8	8.6	645	8.1	8.1	8.1
L6-SP	4-Jun-22	19.2	8.8	663	3.8	3.8	3.8
L6-SP	6-Jun-22	15.9	8.7	662	8.4	8.4	8.4
L6-SP	17-Jun-22	16.5	8.1	714	21.9	21.5	21.9
L6-SP	19-Jun-22	18.9	8.2	753	10.8	10.7	10.8
L6-SP	22-Jun-22	22	8.3	799	14.2	14.4	14.2
L6-SP	25-Jun-22	22.2	8.5	817	11.5	11.3	11.5
L6-SP	6-Jul-22	20.7	8.6	842	7.3	7.2	7.3
L6-SP	8-Jul-22	24	8.5	841	12.2	11.9	12.2
L6-SP	16-Jul-22	20.6	8.6	895	10.7	11	10.7
L6-SP	7-Oct-22	10.8	8.5	1041	4.8	4.7	4.8
L6-SP	19-Oct-22	11.9	8.5	1250	5.9	6	5.9
L6-SP	22-Oct-22	7.1	8.6	1223	8.5	8.5	8.5
LBCD-SEC	21-Aug-22				4.3	4.2	4.3
LBCD-SEC	25-Aug-22				2.9	2.7	2.9
LBEX_B1	6-Feb-22	2.1	7.4	168.5	51	51	51
LBEX_B1	17-Mar-22	1.3	7.6	789	OR		
LBEX_B1	9-Apr-22	4.1	7.9	1067	22.5	22.8	22.5
LBEX_B1_Sump	22-Jan-22	4.6	8.1	408	804	803	804
LBEX_B1_Sump	24-Jan-22	3.9	7.9	642	97	96.7	97
LBEX_B1_Sump	25-Jan-22	2.1	7.9	1101	22.3	22.4	22.3
LBEX_B1_Sump	27-Jan-22	0.9	7.9	1102	61.5	61.5	61.5
LBEX_B1_Sump	8-Feb-22	1.9	7.9	782	83.9	83.8	83.9
LBEX_B1_Sump	10-Feb-22	2.1	7.3	1537	OR		
LBEX_PAG_Sump	10-Feb-22	2.3	7.5	1233	OR		
LBEX_PAG_Sump	20-Mar-22	5.1	7.5	1622	21.1	21.1	21.1
LBEX_PAG_Sump	22-Mar-22	9.5	7.6	1578	16.2	16.2	16.2
LBEX_PAG_Sump	28-May-22	9.9	4.7	2030	OR		

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
LBEX-B0	22-Jan-22	3	7.2	464	27.5	26.8	27.5
LBEX-B0	10-Feb-22	2.3	5.6	1415	OR		
LBEX-B0	19-Mar-22	4.9	6.6	1937	48.6	48.9	48.6
LBGC-OUT	23-Jan-22	1.5	7.9	696	41.2	41.4	41.2
LBGC-OUT	25-Jan-22	4.9	8	635	25.2	25.1	25.2
LBGC-OUT	9-Feb-22	2.1	8.5	348	OR		
LBGC-OUT	10-Feb-22	2.5	8	353	OR		
LBGC-OUT	12-Feb-22	0.5	8.1	382	643	645	643
LBGC-OUT	17-Mar-22	2.7	8	374	OR		
LBGC-OUT	19-Mar-22	2.2	8.3	297	792	790	792
LBGC-OUT	21-Mar-22	1.2	8	257	47.1	47.2	47.1
LBGC-OUT	22-Mar-22	1.8	8.5	284	3294	3312	3294
LBGC-OUT	26-Mar-22	3.7	7.7	286	39.2	39.2	39.2
LBGC-OUT	31-Mar-22	1.2	7.6	391	OR		
LBGC-OUT	9-Apr-22	2.1	8.2	366	OR		
LBGC-OUT	15-Apr-22	1.9	8.3	1015	57.1	57.1	57.1
LBGC-OUT	21-Apr-22	4.2	8.3	1052	57.3	57.1	57.3
LBGC-OUT	30-Apr-22	3.3	8	425	OR		
LBGC-OUT	4-May-22	9.7	8.7	631	OR		
LBGC-OUT	10-May-22	5.4	8.2	651	OR		
LBGC-OUT	21-May-22	14.2	8.7	1956	2379	2379	2379
LBGC-OUT	27-May-22	9.7	8.6	2030	OR		
LBGC-OUT	28-May-22	7.3	8	1291	OR		
LBGC-OUT	1-Jun-22	18.4	8.5	937	OR		
LBGC-OUT	11-Jun-22	14.2	8.2	2520	916	915	916
LBGC-OUT	17-Jun-22	14.3	8.2	2580	3254	3233	3254
LBGC-OUT	23-Jun-22	13.1	8.4	1372	3955	3931	3955
LBGC-OUT	3-Jul-22	15.6	8.1	2750	19	20	19
LBGC-OUT	6-Jul-22	14.1	8.3	2760	39.3	39.3	39.3
LBGC-OUT	24-Jul-22	17.2	8.2	2680	8.1	8.2	8.1
LBGC-OUT	31-Jul-22	16	8.1	2660	5.6	5.6	5.6
LBGC-OUT	4-Aug-22	16.2	8.4	1086	OR		
LBGC-OUT	14-Aug-22	16	8.4	1875	7.9	7.9	7.9
LBGC-OUT	25-Oct-22	4.2	8.3	2030	20.4	20.4	20.4
MWTF-SLP-R6	11-Jan-22	3.9	6.9	687	5.6	5.6	5.6
MWTF-SLP-R6	15-Jan-22	4.1	8.4	735	11.7	11.7	11.7
MWTF-SLP-R6	18-Jan-22	0.4	7.7	836	11.3	11.4	11.3
MWTF-SLP-R6	19-Jan-22	-0.1	7.2	824	11.1	11	11.1
MWTF-SLP-R6	20-Jan-22	0.5	7.1	826	9.8	9.7	9.8
MWTF-SLP-R6	21-Jan-22	0.7	7.3	826	12.9	12.8	12.9
MWTF-SLP-R6	22-Jan-22	1.9	8.6	813	14.7	14.8	14.7
MWTF-SLP-R6	23-Jan-22	1.6	7.4	778	18.4	18.5	18.4
MWTF-SLP-R6	24-Jan-22	1.5	7	751	18.4	18.3	18.4
MWTF-SLP-R6	25-Jan-22	1.5	7.2	738	10.8	10.8	10.8
MWTF-SLP-R6	26-Jan-22	2	7.3	740	17.2	17.2	17.2
MWTF-SLP-R6	27-Jan-22	1.6	7.9	752	13.8	13.8	13.8
MWTF-SLP-R6	28-Jan-22	1.6	8	777	8.9	8.9	8.9
MWTF-SLP-R6	29-Jan-22	3.1	8	728	7.2	7.1	7.2
MWTF-SLP-R6	30-Jan-22	2	7.5	755	5.9	5.8	5.9
MWTF-SLP-R6	31-Jan-22	0.5	7.3	768	5.5	5.5	5.5
MWTF-SLP-R6	4-Feb-22	0	6.6	799	4.3	4.3	4.3
MWTF-SLP-R6	8-Feb-22	1.5	6.8	750	8.9	8.9	8.9
MWTF-SLP-R6	9-Feb-22	2.2	7.2	763	4.8	4.9	4.8
MWTF-SLP-R6	10-Feb-22	1.5	6.8	710	12.2	12.1	12.2
MWTF-SLP-R6	11-Feb-22	2.2	7.3	544	8.9	8.8	8.9
MWTF-SLP-R6	12-Feb-22	0.6	6.8	572	7.4	7.4	7.4
MWTF-SLP-R6	13-Feb-22	1.1	6.6	533	6	5.9	6
MWTF-SLP-R6	15-Feb-22	0.6	7.8	550	6.5	6.4	6.5
MWTF-SLP-R6	16-Feb-22	1.7	8	509	6.2	6.2	6.2
MWTF-SLP-R6	17-Feb-22	1.2	7.8	557	5.5	5.5	5.5
MWTF-SLP-R6	18-Feb-22	1.3	7.9	555	6	6.1	6
MWTF-SLP-R6	19-Feb-22	0.1	7.6	549	6.7	6.6	6.7
MWTF-SLP-R6	20-Feb-22	-0.1	7.3	514	6.3	6.2	6.3
MWTF-SLP-R6	21-Feb-22	-0.3	7.2	557	6.5	6.6	6.5
MWTF-SLP-R6	22-Feb-22	1.6	6.8	423	6.9	6.9	6.9
MWTF-SLP-R6	27-Feb-22	0.3	6.5	549	4	4	4
MWTF-SLP-R6	1-Mar-22	1.2	8.4	609	6.1	6.1	6.1
MWTF-SLP-R6	2-Mar-22	1.2	6.9	616	3.6	3.6	3.6
MWTF-SLP-R6	3-Mar-22	1.2	6.8	582	2.7	2.8	2.7
MWTF-SLP-R6	4-Mar-22	1.2	7	604	3.1	3.1	3.1
MWTF-SLP-R6	5-Mar-22	3.2	7	548	5.8	5.8	5.8
MWTF-SLP-R6	7-Mar-22	2.5	8.9	546	12	12	12
MWTF-SLP-R6	10-Mar-22	0.4	7.1	603	8.1	8.1	8.1
MWTF-SLP-R6	11-Mar-22	0.8	7.4	604	7.8	7.7	7.8
MWTF-SLP-R6	12-Mar-22	1.8	7.4	540	6.8	6.7	6.8
MWTF-SLP-R6	13-Mar-22	0.1	7.4	603	6.5	6.4	6.5
MWTF-SLP-R6	14-Mar-22	0.4	7.6	617	5.8	5.7	5.8
MWTF-SLP-R6	19-Mar-22	2.5	7.4	547	17.8	17.7	17.8
MWTF-SLP-R6	20-Mar-22	3.4	7.5	528	19	18.9	19
MWTF-SLP-R6	21-Mar-22	2.7	7.2	571	18.2	18.2	18.2
MWTF-SLP-R6	22-Mar-22	3.2	7	579	17.8	17.7	17.8
MWTF-SLP-R6	23-Mar-22	4.2	7.2	533	15.8	15.9	15.8
MWTF-SLP-R6	24-Mar-22	4.1	7.1	608	13.3	13.3	13.3
MWTF-SLP-R6	26-Mar-22	2.4	7.4	689	8.8	8.8	8.8
MWTF-SLP-R6	27-Mar-22	2.9	7.6	703	9.5	9.4	9.5
MWTF-SLP-R6	1-Apr-22	3	7.2	700	9.3	9.3	9.3
MWTF-SLP-R6	3-Apr-22	3.2	6.5	685	8.9	8.8	8.9
MWTF-SLP-R6	12-Apr-22	4	7.1	736	13.1	13	13.1
MWTF-SLP-R6	13-Apr-22	3.5	7.1	789	14	13.9	14
MWTF-SLP-R6	17-Apr-22	4	7	741	11.7	11.7	11.7
MWTF-SLP-R6	18-Apr-22	3.3	7	682	11.1	11	11.1
MWTF-SLP-R6	19-Apr-22	3.5	7.1	747	13.4	13.2	13.4
MWTF-SLP-R6	20-Apr-22	3.3	7.4	747	13.2	13.1	13.2
MWTF-SLP-R6	21-Apr-22	5.1	7.1	882	9.2	9.2	9.2
MWTF-SLP-R6	23-Apr-22	9	7.7	785	7.7	7.8	7.7
MWTF-SLP-R6	24-Apr-22	7.9	7.2	763	5.4	5.3	5.4
MWTF-SLP-R6	3-May-22	9.4	7.3	1090	5.8	5.8	5.8
MWTF-SLP-R6	4-May-22	10	8	1120	5	4.9	5
MWTF-SLP-R6	6-May-22	11.1	7.9	1003	18.2	17.9	18.2

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
MWTF-SLP-R6	8-May-22	8.5	7.5	1128	11.3	11.4	11.3
MWTF-SLP-R6	9-May-22	7.3	7.6	1170	9.6	9.6	9.6
MWTF-SLP-R6	10-May-22	8.4	7.9	1188	7.1	7.2	7.1
MWTF-SLP-R6	11-May-22	10.5	7.6	1177	5.5	5.6	5.5
MWTF-SLP-R6	13-May-22	11.1	7.3	1179	5.2	5.1	5.2
MWTF-SLP-R6	14-May-22	13.9	7.2	1153	3.6	3.6	3.6
MWTF-SLP-R6	15-May-22	12.1	7.3	1143	3.5	3.5	3.5
MWTF-SLP-R6	24-May-22	14.6	7.8	1371	2.8	2.8	2.8
MWTF-SLP-R6	25-May-22	5.7	7.6	1406	4	3.9	4
MWTF-SLP-R6	26-May-22	15.9	7.6	1426	3.2	3.1	3.2
MWTF-SLP-R6	27-May-22	15.8	7.2	1456	3.2	3.3	3.2
MWTF-SLP-R6	28-May-22	13.3	7.8	1389	32	31.9	32
MWTF-SLP-R6	29-May-22	15.6	7.4	1440	11.4	11.4	11.4
MWTF-SLP-R6	30-May-22	16.8	7.5	1498	12.3	12.2	12.3
MWTF-SLP-R6	31-May-22	16.2	7.4	1583	5.6	5.6	5.6
MWTF-SLP-R6	1-Jun-22	16.7	7.2	1641	4.1	4	4.1
MWTF-SLP-R6	2-Jun-22	18.3	7.4	1648	4	4	4
MWTF-SLP-R6	3-Jun-22	19.5	7.4	1646	3.5	3.5	3.5
MWTF-SLP-R6	4-Jun-22	17.6	7.6	1653	3.2	3	3.2
MWTF-SLP-R6	13-Jun-22	21.3	7.8	1445	8.2	8.2	8.2
MWTF-SLP-R6	16-Jun-22	21	6.7	1665	9.3	9.3	9.3
MWTF-SLP-R6	18-Jun-22	17.5	7.2	1492	17.7	17.3	17.7
MWTF-SLP-R6	19-Jun-22	17.4	6.7	1550	8.3	8.2	8.3
MWTF-SLP-R6	20-Jun-22	20.1	7.7	1407	10.5	10.5	10.5
MWTF-SLP-R6	21-Jun-22	19.7	7.8	1461	7.3	7.3	7.3
MWTF-SLP-R6	22-Jun-22	20.3	7.6	1397	7.7	7.8	7.7
MWTF-SLP-R6	23-Jun-22	17.9	7.5	1373	7.1	7.1	7.1
MWTF-SLP-R6	24-Jun-22	18.5	7.8	1296	9.6	9.5	9.6
MWTF-SLP-R6	25-Jun-22	19.6	7.6	1207	11.5	11.4	11.5
MWTF-SLP-R6	1-Jul-22	21	7.1	1081	5.9	5.9	5.9
MWTF-SLP-R6	5-Jul-22	21	7.7	1253	7	6.9	7
MWTF-SLP-R6	6-Jul-22	21.8	8	1327	8.1	8	8.1
MWTF-SLP-R6	10-Jul-22	22	7.7	1393	8.4	8.3	8.4
MWTF-SLP-R6	11-Jul-22	21.2	7.4	1413	4.9	4.8	4.9
MWTF-SLP-R6	12-Jul-22	21.1	7.6	1494	5.6	5.5	5.6
MWTF-SLP-R6	13-Jul-22	20.6	7.6	1517	5.4	5.3	5.4
MWTF-SLP-R6	14-Jul-22	19.7	7.4	1519	6.5	6.5	6.5
MWTF-SLP-R6	15-Jul-22	21.4	7.7	1485	7	7.1	7
MWTF-SLP-R6	16-Jul-22	20.8	8.4	1458	6.8	6.8	6.8
MWTF-SLP-R6	17-Jul-22	21.7	7.6	1336	7.6	7.5	7.6
MWTF-SLP-R6	18-Jul-22	24.8	7.9	1245	8.1	8.1	8.1
MWTF-SLP-R6	19-Jul-22	21.7	7.1	1224	7.6	7.6	7.6
MWTF-SLP-R6	20-Jul-22	25.3	7.9	1115	10.8	10.8	10.8
MWTF-SLP-R6	21-Jul-22	23.2	7.6	837	8	8	8
MWTF-SLP-R6	23-Jul-22	23.7	7.6	818	10.9	10.9	10.9
MWTF-SLP-R6	24-Jul-22	24.6	7.4	1034	9.2	9.2	9.2
MWTF-SLP-R6	27-Jul-22	26	7	1127	6.5	6.6	6.5
MWTF-SLP-R6	28-Jul-22	27.7	7.4	1045	10	10.1	10
MWTF-SLP-R6	29-Jul-22	24.2	7.7	1054	7.4	7.3	7.4
MWTF-SLP-R6	30-Jul-22	22.8	7.9	1085	6.3	6.3	6.3
MWTF-SLP-R6	31-Jul-22	22.9	7.9	1187	5.5	5.4	5.5
MWTF-SLP-R6	31-Jul-22	24	7.9	1190	6.3	6.3	6.3
MWTF-SLP-R6	1-Aug-22	23.1	7.9	1200	6.4	6.4	6.4
MWTF-SLP-R6	2-Aug-22	21.8	7.7	1164	13.4	13.5	13.4
MWTF-SLP-R6	3-Aug-22	21.8	7.9	963	9.9	9.9	9.9
MWTF-SLP-R6	4-Aug-22	19.6	7.9	943	9.9	9.8	9.9
MWTF-SLP-R6	5-Aug-22	19.2	7.6	889	16	16	16
MWTF-SLP-R6	6-Aug-22	19.4	7.7	900	9.6	9.5	9.6
MWTF-SLP-R6	7-Aug-22	20.6	7.7	999	9.4	9.4	9.4
MWTF-SLP-R6	9-Aug-22	23.4	6.7	942	5.6	5.6	5.6
MWTF-SLP-R6	18-Aug-22	24.2	7.5	984	8.2	8.2	8.2
MWTF-SLP-R6	19-Aug-22	22.8	7.5	1007	7.8	7.8	7.8
MWTF-SLP-R6	20-Aug-22	21.1	8.5	1024	9.6	9.6	9.6
MWTF-SLP-R6	21-Aug-22	24.6	8.1	1051	9	9	9
MWTF-SLP-R6	22-Aug-22	24.4	7.5	1060	11.7	11.7	11.7
MWTF-SLP-R6	23-Aug-22	25.1	7.5	1077	9.2	9.2	9.2
MWTF-SLP-R6	24-Aug-22	22.1	7.5	1060	8.6	7.6	8.6
MWTF-SLP-R6	25-Aug-22	25.6	7.6	105.8	8	8	8
MWTF-SLP-R6	26-Aug-22	25	6.9	1082	8.4	8.3	8.4
MWTF-SLP-R6	2-Sep-22	22.7	8.8	1109	14.5	14.4	14.5
MWTF-SLP-R6	3-Sep-22	27.3	8.4	1059	12.9	12.9	12.9
MWTF-SLP-R6	4-Sep-22	19.5	8.8	1026	15.2	15.1	15.2
MWTF-SLP-R6	5-Sep-22	17.6	8.6	1005	17.5	17.4	17.5
MWTF-SLP-R6	6-Sep-22	17.2	8.2	1085	9.2	9.2	9.2
MWTF-SLP-R6	7-Sep-22	16.5	9.2	1004	8.7	8.7	8.7
MWTF-SLP-R6	8-Sep-22	17.7	8.2	947	8.7	8.7	8.7
MWTF-SLP-R6	9-Sep-22	15	8	1107	8.8	8.8	8.8
MWTF-SLP-R6	10-Sep-22	16.8	7.8	1324	8.7	8.6	8.7
MWTF-SLP-R6	11-Sep-22	17.6	7.9	1661	8.2	8.2	8.2
MWTF-SLP-R6	12-Sep-22	15.3	8.1	1541	7.3	7.2	7.3
MWTF-SLP-R6	13-Sep-22	16.3	7.1	1446	7.4	7.4	7.4
MWTF-SLP-R6	16-Sep-22	14.7	7.3	1428	4.3	4.4	4.3
MWTF-SLP-R6	17-Sep-22	13.2	7.3	1492	4.7	4.7	4.7
MWTF-SLP-R6	18-Sep-22	14.4	7.2	1499	5	5	5
MWTF-SLP-R6	19-Sep-22	11.9	7.4	1417	5.6	5.6	5.6
MWTF-SLP-R6	20-Sep-22	16.4	7.2	1098	4.5	4.4	4.5
MWTF-SLP-R6	21-Sep-22	14.2	6.9	1075	5.8	5.9	5.8
MWTF-SLP-R6	22-Sep-22	15.5	7.5	1100	3.5	3.5	3.5
MWTF-SLP-R6	23-Sep-22	13.4	7.2	1096	4.6	4.5	4.6
MWTF-SLP-R6	24-Sep-22	12.5	7.4	1070	4.8	4.9	4.8
MWTF-SLP-R6	25-Sep-22	15.4	6.7	1056	6.5	6.5	6.5
MWTF-SLP-R6	26-Sep-22	14.2	6.7	1062	5.4	5.4	5.4
MWTF-SLP-R6	28-Sep-22	14.5	6.3	1140	5.2	5.4	5.2
MWTF-SLP-R6	29-Sep-22	14.4	7	1098	3.3	3.3	3.3
MWTF-SLP-R6	30-Sep-22	14	7.9	943	7.8	7.8	7.8
MWTF-SLP-R6	1-Oct-22	13.9	7.4	978	5.3	5.3	5.3
MWTF-SLP-R6	2-Oct-22	14.6	7.2	962	3.8	3.8	3.8
MWTF-SLP-R6	3-Oct-22	13.3	7.4	885	5.2	5.1	5.2
MWTF-SLP-R6	4-Oct-22	11.7	7.8	1004	9	9	9

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
MWTF-SLP-R6	5-Oct-22	12.3	8.4	1118	20.3	20	20.3
MWTF-SLP-R6	6-Oct-22	12	8.1	953	11.2	11.1	11.2
MWTF-SLP-R6	7-Oct-22	11	7.6	1125	16.6	16.3	16.6
MWTF-SLP-R6	8-Oct-22	10.4	8.1	968	13	13.5	13
MWTF-SLP-R6	9-Oct-22	12.4	7.6	1125	9.2	9.2	9.2
MWTF-SLP-R6	10-Oct-22	12.9	7.8	1243	24.6	24.4	24.6
MWTF-SLP-R6	11-Oct-22	11.3	7.6	1200	19.5	19.4	19.5
MWTF-SLP-R6	12-Oct-22	10.8	7.6	1175	16.4	16.4	16.4
MWTF-SLP-R6	13-Oct-22	12.1	7.6	1186	10.4	10.4	10.4
MWTF-SLP-R6	14-Oct-22	12	7.3	1230	21	20.9	21
MWTF-SLP-R6	15-Oct-22	10.9	7.3	1242	13	13	13
MWTF-SLP-R6	16-Oct-22	11.9	6.9	1238	12.6	12.6	12.6
MWTF-SLP-R6	17-Oct-22	9.3	7.1	1201	14	14	14
MWTF-SLP-R6	18-Oct-22	10.5	7.2	1230	9.6	9.6	9.6
MWTF-SLP-R6	19-Oct-22	14.4	7.8	1039	29.1	29.4	29.1
MWTF-SLP-R6	20-Oct-22	10.1	8	998	16.1	15.1	16.1
MWTF-SLP-R6	21-Oct-22	9.1	8.1	983	11.9	11.9	11.9
MWTF-SLP-R6	22-Oct-22	8.2	7.9	924	20.7	20.6	20.7
MWTF-SLP-R6	23-Oct-22	7.4	8.2	895	6.5	6.5	6.5
MWTF-SLP-R6	24-Oct-22	7.3	8.2	884	6	6	6
MWTF-SLP-R6	25-Oct-22	6.6	8.2	869	23.9	24.1	23.9
MWTF-SLP-R6	26-Oct-22	6.7	8.4	817	8	8	8
MWTF-SLP-R6	27-Oct-22	7.8	8.1	798	6.6	6.8	6.6
MWTF-SLP-R6	28-Oct-22	7.6	8.4	733	21.7	21	21.7
MWTF-SLP-R6	29-Oct-22	7.5	8.5	756	22.5	22.2	22.5
MWTF-SLP-R6	30-Oct-22	7.5	8.6	742	17.4	17.5	17.4
MWTF-SLP-R6	31-Oct-22	6.6	8.5	767	6.9	7	6.9
MWTF-SLP-R6	1-Nov-22	5.1	7.5	601	4.4	4.4	4.4
MWTF-SLP-R6	2-Nov-22	4.9	7.4	590	8.1	8.1	8.1
MWTF-SLP-R6	3-Nov-22	6.9	7.6	539	12.2	12.3	12.2
MWTF-SLP-R6	4-Nov-22	6.7	7.4	514	25.2	25.1	25.2
MWTF-SLP-R6	5-Nov-22	5.9	7.3	562	8.3	8.2	8.3
MWTF-SLP-R6	6-Nov-22	6.3	7.2	505	9.6	9.6	9.6
MWTF-SLP-R6	7-Nov-22	3.4	7.8	507	7.5	7.5	7.5
MWTF-SLP-R6	8-Nov-22	3.3	8	552	26	25.8	26
MWTF-SLP-R6	9-Nov-22	2.6	8.1	533	11.2	11.2	11.2
MWTF-SLP-R6	10-Nov-22	4.5	8.1	535	23.9	23.9	23.9
MWTF-SLP-R6	11-Nov-22	4.7	8	562	12.3	12.2	12.3
MWTF-SLP-R6	12-Nov-22	5.8	8	551	9.5	9.5	9.5
MWTF-SLP-R6	13-Nov-22	6.5	8	547	10.8	10.8	10.8
MWTF-SLP-R6	14-Nov-22	6	8	554	14.7	14.9	14.7
MWTF-SLP-R6	15-Nov-22	6	8.1	559	5.8	5.8	5.8
MWTF-SLP-R6	16-Nov-22	6.3	8.5	552	12.4	12.2	12.4
MWTF-SLP-R6	17-Nov-22	4.5	8.4	548	11.4	11.6	11.4
MWTF-SLP-R6	18-Nov-22	3.8	8.4	531	4.5	4.4	4.5
MWTF-SLP-R6	19-Nov-22	5.1	8.5	482	5.1	5	5.1
MWTF-SLP-R6	20-Nov-22	6	8.1	519	11.4	11.5	11.4
MWTF-SLP-R6	21-Nov-22	6.7	8.2	573	14.4	14.3	14.4
MWTF-SLP-R6	22-Nov-22	7.7	7.4	482	4.8	4.8	4.8
MWTF-SLP-R6	23-Nov-22	6.9	8.1	434	6.3	6.3	6.3
MWTF-SLP-R6	24-Nov-22	8	7.6	446	7	7	7
MWTF-SLP-R6	25-Nov-22	6.8	7.8	437	7.9	8	7.9
MWTF-SLP-R6	26-Nov-22	7.1	7.3	448	6.2	6.1	6.2
MWTF-SLP-R6	27-Nov-22	5.1	7.8	456	12.1	12	12.1
MWTF-SLP-R6	28-Nov-22	4.3	7.7	452	6.3	6.3	6.3
MWTF-SLP-R6	29-Nov-22	3.2	8.1	539	5.1	5.1	5.1
MWTF-SLP-R6	30-Nov-22	2.3	8.2	521	4.7	4.6	4.7
MWTF-SLP-R6	1-Dec-22	1.3	8.2	525	4.4	4.4	4.4
MWTF-SLP-R6	2-Dec-22	1.4	8.7	495	3.5	3.5	3.5
MWTF-SLP-R6	3-Dec-22	3.2	8.6	524	4.4	4.5	4.4
MWTF-SLP-R6	4-Dec-22	4.6	8.3	535	4.4	4.5	4.4
MWTF-SLP-R6	5-Dec-22	4.7	8.3	536	8.1	8.1	8.1
MWTF-SLP-R6	6-Dec-22	1.3	8.6	561	5.5	5.4	5.5
MWTF-SLP-R6	7-Dec-22	3.3	8.6	564	6.2	6.2	6.2
MWTF-SLP-R6	8-Dec-22	5	8	554	6.8	6.9	6.8
MWTF-SLP-R6	9-Dec-22	5.9	7.9	558	11.4	11.3	11.4
MWTF-SLP-R6	10-Dec-22	4.7	8.1	549	13.4	13.4	13.4
MWTF-SLP-R6	11-Dec-22	4.1	8.1	554	7.8	7.8	7.8
MWTF-SLP-R6	12-Dec-22	3	8	560	66.1	67.1	66.1
MWTF-SLP-R6	13-Dec-22	6.2	8.2	454	17.3	17.4	17.3
MWTF-SLP-R6	14-Dec-22	6	7.9	459	9.4	9.4	9.4
MWTF-SLP-R6	15-Dec-22	4.9	7.7	464	6.2	6.2	6.2
MWTF-SLP-R6	16-Dec-22	4.1	7.9	477	13	13	13
MWTF-SLP-R6	17-Dec-22	5.1	7.6	549	1.4	1.4	1.4
MWTF-SLP-R6	18-Dec-22	3.7	8.1	523	6.5	6.5	6.5
MWTF-SLP-R6	19-Dec-22	3.4	7.8	545	7.9	7.9	7.9
MWTF-SLP-R6	20-Dec-22	1.2	8.4	543	5.8	5.9	5.8
MWTF-SLP-R6	21-Dec-22	1.2	8.2	591	5	5	5
MWTF-SLP-R6	22-Dec-22	2	8.4	600	5.7	5.7	5.7
MWTF-SLP-R6	23-Dec-22	2.2	7.7	603	5.6	5.6	5.6
MWTF-SLP-R6	24-Dec-22	3.1	8	612	5.7	5.7	5.7
MWTF-SLP-R6	25-Dec-22	2.9	8	610	4.2	4.2	4.2
MWTF-SLP-R6	26-Dec-22	3.1	8	609	3.4	3.5	3.4
MWTF-SLP-R6	27-Dec-22	2.9	7.4	626	2.3	2.3	2.3
MWTF-SLP-R6	28-Dec-22	4.9	7.7	617	2.1	2.1	2.1
MWTF-SLP-R6	29-Dec-22	4.6	7.8	621	2.2	2.2	2.2
MWTF-SLP-R6	30-Dec-22	4.3	7.9	625	1.8	1.8	1.8
MWTF-SLP-R6	31-Dec-22	5.4	7.7	614	3.8	3.7	3.8
PR_US_R5a	1-Jan-22	2.6	8.2	265	4.6	4.6	4.6
PR_US_R5a	12-Jan-22	4.1	8.5	182	2.3	2.3	2.3
PR_US_R5a	13-Jan-22	3.1	8.3	180	2.6	2.6	2.6
PR_US_R5a	25-Jan-22	5	8.3	184	5.5	5.6	5.5
PR_US_R5a	26-Jan-22	3.9	8.5	183	3	3	3
PR_US_R5a	30-Jan-22	1.3	8.7	215	8	8.1	8
PR_US_R5a	16-Feb-22	3.5	8.6	254	3.8	3.8	3.8
PR_US_R5a	24-Feb-22	1.8	8.3	246	2.7	2.7	2.7
PR_US_R5a	10-Mar-22	4.4	8.2	246	2.8	2.9	2.8
PR_US_R5a	17-Mar-22	4.1	7.8	243	7	7	7
PR_US_R5a	23-Mar-22	6.2	7.9	250	5.5	5.5	5.5

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
PR_US_R5a	7-Apr-22	10	8.5	184	3.9	3.9	3.9
PR_US_R5a	22-Apr-22	7.2	8.3	196	3	2.9	3
PR_US_R5a	23-Apr-22	14.7	8.1	192	2.6	2.5	2.6
PR_US_R5a	27-Apr-22	4	8.1	161	49.5	49.5	49.5
PR_US_R5a	28-Apr-22	7.2	8.3	168	11.5	11.4	11.5
PR_US_R5a	29-Apr-22	6.6	7.8	164	14.3	14.2	14.3
PR_US_R5a	30-Apr-22	6.7	8.5	168	2.4	2.4	2.4
PR_US_R5a	4-May-22	9.3	8.2	175	17.8	17.7	17.8
PR_US_R5a	19-May-22	11.5	8.1	267	36	35.9	36
PR_US_R5a	17-Jul-22	15.8	8.6	284	13.9	13.7	13.9
PR_US_R5a	18-Jul-22	21.7	8.6	1289	11.6	11.7	11.6
PR_US_R5a	18-Jul-22	21.9	8.6	291	11.7	11.8	11.7
PR_US_R5a	30-Oct-22				3.4	3	3.4
PR_US_R5a	31-Oct-22				5.5	5.3	5.5
PR_US_R5a	31-Oct-22				4.3	4.1	4.3
PR-IDZ	1-Jan-22	2.3	8.4	232	2.7	2.7	2.7
PR-IDZ	2-Jan-22	1.8	7.8	247	3.7	3.7	3.7
PR-IDZ	3-Jan-22	1	8.2	252	3.2	3.2	3.2
PR-IDZ	4-Jan-22	1.6	8.3	768	11.3	11.3	11.3
PR-IDZ	5-Jan-22	0.5	8.4	228	2.9	2.9	2.9
PR-IDZ	6-Jan-22	0.3	8.4	225	2.8	2.8	2.8
PR-IDZ	7-Jan-22	-0.3	8.2	166	4.1	4	4.1
PR-IDZ	8-Jan-22	0.1	8.3	197	3.5	3.5	3.5
PR-IDZ	9-Jan-22	0.1	8.3	197	3.5	3.5	3.5
PR-IDZ	10-Jan-22	1.4	8.6	189	3.6	3.6	3.6
PR-IDZ	11-Jan-22	3.9	8.3	180	3.2	3.2	3.2
PR-IDZ	12-Jan-22	2.3	8.4	175	2.8	2.8	2.8
PR-IDZ	13-Jan-22	3.1	8.2	174	2.1	2.1	2.1
PR-IDZ	14-Jan-22	2.2	8.4	177	3	3	3
PR-IDZ	15-Jan-22	5.2	8.5	173	2.9	2.9	2.9
PR-IDZ	16-Jan-22	1.6	8.5	178	5.5	5.5	5.5
PR-IDZ	17-Jan-22	3.4	8.4	185	4.6	4.6	4.6
PR-IDZ	18-Jan-22	-0.3	8.4	205	2.1	2.1	2.1
PR-IDZ	19-Jan-22	0.5	8.3	189	2.3	2.3	2.3
PR-IDZ	20-Jan-22	0.4	8.4	216	2.4	2.3	2.4
PR-IDZ	21-Jan-22	1	8.6	218	2.2	2.1	2.2
PR-IDZ	22-Jan-22	2.5	8.3	199	4.1	4.1	4.1
PR-IDZ	23-Jan-22	2.4	8.4	202	3.7	3.8	3.7
PR-IDZ	24-Jan-22	2.1	8.4	208	3.3	3.3	3.3
PR-IDZ	25-Jan-22	2.5	8.5	200	3.6	3.6	3.6
PR-IDZ	26-Jan-22	3.5	8.8	180	3.3	3.3	3.3
PR-IDZ	27-Jan-22	2.5	8.4	202	3.3	3.3	3.3
PR-IDZ	28-Jan-22	3.6	8.5	195	3.6	3.6	3.6
PR-IDZ	29-Jan-22	2.5	8.6	289	2.6	2.6	2.6
PR-IDZ	30-Jan-22	1.2	8.6	207	2.6	2.5	2.6
PR-IDZ	31-Jan-22	0.3	8.2	212	2.2	2.2	2.2
PR-IDZ	1-Feb-22	3.4	8.7	186	4.2	4.2	4.2
PR-IDZ	2-Feb-22	2.9	8.6	188	3.5	3.5	3.5
PR-IDZ	3-Feb-22	3.4	8.8	191	3	3	3
PR-IDZ	4-Feb-22	0.6	8	222	2.4	2.4	2.4
PR-IDZ	5-Feb-22	2.1	8.5	260	2.2	2.2	2.2
PR-IDZ	6-Feb-22	5	8.3	249	2.5	2.5	2.5
PR-IDZ	7-Feb-22	2.4	7.9	251	2.6	2.6	2.6
PR-IDZ	8-Feb-22	5.2	8.3	251	3	2.9	3
PR-IDZ	9-Feb-22	2.9	8.3	276	4.2	4.3	4.2
PR-IDZ	10-Feb-22	3	7.9	284	3.9	3.9	3.9
PR-IDZ	11-Feb-22	1.5	7.8	280	5.2	5.2	5.2
PR-IDZ	12-Feb-22	2.6	7.6	278	2.5	2.4	2.5
PR-IDZ	13-Feb-22	1.6	8.3	286	3.3	3.2	3.3
PR-IDZ	14-Feb-22	1.9	8.2	276	3.4	3.3	3.4
PR-IDZ	15-Feb-22	1.1	8.2	280	4.1	4	4.1
PR-IDZ	16-Feb-22	2.5	7.7	268	2.2	2.2	2.2
PR-IDZ	17-Feb-22	2.2	8.7	280	2.6	2.6	2.6
PR-IDZ	18-Feb-22	0.9	8.6	290	4.8	4.9	4.8
PR-IDZ	19-Feb-22	3.9	8.6	432	4.2	4.2	4.2
PR-IDZ	20-Feb-22	2	8.2	297	3	3	3
PR-IDZ	21-Feb-22	0.3	8.1	254	3	2.9	3
PR-IDZ	22-Feb-22	4.8	8.3	253	3.7	3.7	3.7
PR-IDZ	23-Feb-22	6.2	7.9	442	1.9	1.9	1.9
PR-IDZ	24-Feb-22	1.3	8.3	259	3.3	3.3	3.3
PR-IDZ	25-Feb-22	5.6	8.3	236	3.7	3.7	3.7
PR-IDZ	26-Feb-22	4.3	8.2	265	3.2	3.2	3.2
PR-IDZ	27-Feb-22	3.1	8.3	250	3.3	3.3	3.3
PR-IDZ	28-Feb-22	1.2	8.2	239	2.4	2.4	2.4
PR-IDZ	1-Mar-22	1.8	8.1	282	3.2	3.2	3.2
PR-IDZ	2-Mar-22	2.5	8	246	3	3	3
PR-IDZ	3-Mar-22	0.8	8	246	2.9	2.8	2.9
PR-IDZ	4-Mar-22	1	8.4	286	2.5	2.5	2.5
PR-IDZ	5-Mar-22	2.7	8	274	2.9	2.9	2.9
PR-IDZ	6-Mar-22	1.8	8.1	265	2.6	2.6	2.6
PR-IDZ	7-Mar-22	1.8	8.2	280	2.8	2.8	2.8
PR-IDZ	9-Mar-22	2.9	8.2	242	2.5	2.5	2.5
PR-IDZ	10-Mar-22	2.3	8.2	247	2.5	2.5	2.5
PR-IDZ	11-Mar-22	1.5	8.2	286	2.8	2.7	2.8
PR-IDZ	12-Mar-22	1.4	8.5	287	3.4	3.4	3.4
PR-IDZ	13-Mar-22	-0.2	8.3	265	3	3	3
PR-IDZ	14-Mar-22	0.2	8.4	248	3	3.1	3
PR-IDZ	15-Mar-22	5.6	8.2	245	2.5	2.5	2.5
PR-IDZ	16-Mar-22	6.5	8.3	258	4.8	4.8	4.8
PR-IDZ	17-Mar-22	4.7	7.9	245	17.6	17.7	17.6
PR-IDZ	18-Mar-22	1.9	8.1	243	3.8	3.8	3.8
PR-IDZ	19-Mar-22	2.4	8.2	279	6.1	6.1	6.1
PR-IDZ	20-Mar-22	2.2	8	282	4.1	4.1	4.1
PR-IDZ	22-Mar-22	2.8	7.9	281	5.5	5.4	5.5
PR-IDZ	23-Mar-22	6.2	7.6	244	6.4	6.3	6.4
PR-IDZ	24-Mar-22	3	7.7	278	6.1	6.2	6.1
PR-IDZ	25-Mar-22	2.6	8	305	7	7	7
PR-IDZ	26-Mar-22	2.3	8.2	284	3.9	3.8	3.9
PR-IDZ	27-Mar-22	3.1	7.9	272	4.4	4.4	4.4

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
PR-IDZ	28-Mar-22	3.1	8.1	282	7.1	7	7.1
PR-IDZ	29-Mar-22	3	8.1	283	4.3	4.4	4.3
PR-IDZ	30-Mar-22	7.7	8.2	255	3.8	3.7	3.8
PR-IDZ	31-Mar-22	8.1	8.2	224	3.8	3.8	3.8
PR-IDZ	1-Apr-22	2.9	8.1	286	4.6	4.6	4.6
PR-IDZ	3-Apr-22	3.6	8	291	4.3	4.3	4.3
PR-IDZ	4-Apr-22	3.2	7.5	269	4.7	4.8	4.7
PR-IDZ	5-Apr-22	6.1	8.4	188	4.2	4.2	4.2
PR-IDZ	6-Apr-22	7.4	8.6	184	4.4	4.4	4.4
PR-IDZ	7-Apr-22	8.3	8.5	186	4.4	4.4	4.4
PR-IDZ	8-Apr-22	5.8	8.4	184	12	12	12
PR-IDZ	9-Apr-22	4	8.2	187	8	8	8
PR-IDZ	10-Apr-22	5.2	8.3	190	6.5	6.5	6.5
PR-IDZ	11-Apr-22	3.8	8.5	186	6.6	6.6	6.6
PR-IDZ	12-Apr-22	2.1	8	217	5.5	5.5	5.5
PR-IDZ	13-Apr-22	4.7	8.3	188	4.8	4.9	4.8
PR-IDZ	15-Apr-22	3.6	8.3	209	3	3.1	3
PR-IDZ	16-Apr-22	3.5	8.3	207	2.9	2.9	2.9
PR-IDZ	17-Apr-22	2.9	8.2	216	2.6	2.6	2.6
PR-IDZ	18-Apr-22	3	7.9	206	3	3	3
PR-IDZ	19-Apr-22	2.4	8.5	206	3.6	3.6	3.6
PR-IDZ	20-Apr-22	5.2	8.5	183	3	3	3
PR-IDZ	21-Apr-22	3.7	8.5	251	2.9	2.9	2.9
PR-IDZ	22-Apr-22	4	8.2	216	4.7	4.6	4.7
PR-IDZ	23-Apr-22	4.9	8.4	254	4	3.9	4
PR-IDZ	24-Apr-22	5.3	8	245	4.3	4.3	4.3
PR-IDZ	25-Apr-22	4.6	7.9	254	5.2	5.2	5.2
PR-IDZ	26-Apr-22	9.4	8.5	225	7.5	7.5	7.5
PR-IDZ	27-Apr-22	5.5	8.4	223	8.8	8.8	8.8
PR-IDZ	28-Apr-22	3.7	8.6	165	16.5	16.4	16.5
PR-IDZ	29-Apr-22	7.1	8.3	169	18.7	18.6	18.7
PR-IDZ	30-Apr-22	5.6	8.2	164	2.8	2.8	2.8
PR-IDZ	1-May-22	11.1	8.3	165	18.5	18.6	18.5
PR-IDZ	2-May-22	6.9	8.5	171	26.9	27	26.9
PR-IDZ	3-May-22	5.4	8.7	191	31.1	30.2	31.1
PR-IDZ	4-May-22	8.8	8.6	189	44.9	44.9	44.9
PR-IDZ	5-May-22	5.7	8.6	194	42.7	43.4	42.7
PR-IDZ	6-May-22	4.4	8.6	181	37.9	37.9	37.9
PR-IDZ	7-May-22	3.9	8.6	193	62	62	62
PR-IDZ	8-May-22	3.8	8.6	183	82.5	82.4	82.5
PR-IDZ	9-May-22	3.4	8.6	190	68.7	67.9	68.7
PR-IDZ	10-May-22	4.9	8.6	186	29.4	29.5	29.4
PR-IDZ	11-May-22	10.7	8.2	187	50.3	49.7	50.3
PR-IDZ	12-May-22	6.2	8.4	174	39.9	39.9	39.9
PR-IDZ	13-May-22	6.1	8.2	192	37.1	36.8	37.1
PR-IDZ	14-May-22	6.2	8.4	187	30.1	29.9	30.1
PR-IDZ	15-May-22	5.7	8.6	184	33.5	33.4	33.5
PR-IDZ	17-May-22	9.9	8.1	170	29.6	29.1	29.6
PR-IDZ	18-May-22	10	8.4	175	35.3	35.1	35.3
PR-IDZ	19-May-22	7.8	8.4	238	32.6	32.6	32.6
PR-IDZ	20-May-22	8.9	8.5	203	23	23.1	23
PR-IDZ	21-May-22	9.9	8.4	201	19	18.9	19
PR-IDZ	22-May-22	13.9	8.3	205	22.2	22.1	22.2
PR-IDZ	23-May-22	11.6	8.6	209	21.1	21	21.1
PR-IDZ	28-May-22	7.7	8.1	281	OR		
PR-IDZ	31-May-22	10.9	8.6	251	1391	1390	1391
PR-IDZ	3-Jun-22	12.5	8.4	272	55	56	55
PR-IDZ	7-Jun-22	15.6	8.5	288	40	38	40
PR-IDZ	17-Jun-22	11.7	8.4	282	62.6	62.2	62.6
PR-IDZ	10-Jul-22	16.2	8.4	261	31	30.6	31
PR-IDZ	16-Jul-22	15.8	8.6	270	24.4	24.1	24.4
PR-IDZ	17-Jul-22	15.9	8.6	253	24.3	24.1	24.3
PR-IDZ	17-Jul-22				24.9	22.9	24.9
PR-IDZ	17-Jul-22				18.4	17.9	18.4
PR-IDZ	18-Jul-22	21.1	8.5	247	11.7	11.7	11.7
PR-IDZ	18-Jul-22	21.1	8.5	257	16	16	16
PR-IDZ	19-Jul-22	16.4	8.6	251	13.3	13.2	13.3
PR-IDZ	19-Jul-22	17.2	8.6	249	13.4	13.5	13.4
PR-IDZ	20-Jul-22	19	8.3	237	20.9	20.1	20.9
PR-IDZ	20-Jul-22				13.1	13.1	13.1
PR-IDZ	21-Jul-22				12.3	11.7	12.3
PR-IDZ	21-Jul-22				17.3	17.4	17.3
PR-IDZ	22-Jul-22				11.3	11.4	11.3
PR-IDZ	22-Jul-22				17	17	17
PR-IDZ	23-Jul-22				11.9	11.9	11.9
PR-IDZ	23-Jul-22				11.7	11.8	11.7
PR-IDZ	24-Jul-22				15.2	15.2	15.2
PR-IDZ	24-Jul-22				11.9	11.7	11.9
PR-IDZ	25-Jul-22				11.9	11.9	11.9
PR-IDZ	25-Jul-22				11.6	11.5	11.6
PR-IDZ	26-Jul-22	16.8	8.4	241	11.5	11.6	11.5
PR-IDZ	26-Jul-22	16.7	8.4	240	11.4	11.5	11.4
PR-IDZ	27-Jul-22	17.9	8.4	245	13	13	13
PR-IDZ	28-Jul-22	15.6	8.4	221	13.7	13.3	13.7
PR-IDZ	29-Jul-22	16.1	8.5	225	15.9	15.3	15.9
PR-IDZ	29-Jul-22	15.8	8.4	222	14.8	14.7	14.8
PR-IDZ	30-Jul-22	14.3	8.5	228	8.6	8.6	8.6
PR-IDZ	30-Jul-22	14.4	8.4	225	8.6	8.6	8.6
PR-IDZ	31-Jul-22	15	8.3	215	9.9	9.8	9.9
PR-IDZ	31-Jul-22	15	8.4	232	15.3	15.1	15.3
PR-IDZ	1-Aug-22	15.3	8.6	229	10.1	10	10.1
PR-IDZ	2-Aug-22	14.3	8.5	236	58.9	58.5	58.9
PR-IDZ	3-Aug-22	15.4	8.5	246	34.1	33.5	34.1
PR-IDZ	3-Aug-22	14.6	8.4	265	31.6	31.3	31.6
PR-IDZ	4-Aug-22	13.9	8.3	276	30	30	30
PR-IDZ	5-Aug-22	15.9	8.5	284	24.3	24.5	24.3
PR-IDZ	6-Aug-22	15	8.5	253	28.5	28	28.5
PR-IDZ	7-Aug-22	16.2	8.5	254	43.6	42.9	43.6
PR-IDZ	7-Aug-22	16.7	8.6	251	41.3	40.8	41.3

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
PR-IDZ	8-Aug-22				15.5	15.8	15.5
PR-IDZ	9-Aug-22				11.3	14.4	11.3
PR-IDZ	9-Aug-22				12.5	11.2	12.5
PR-IDZ	10-Aug-22				12.3	12.1	12.3
PR-IDZ	10-Aug-22				8.5	8.3	8.5
PR-IDZ	11-Aug-22				7.7	7.8	7.7
PR-IDZ	11-Aug-22				6.4	6.3	6.4
PR-IDZ	12-Aug-22				7.7	8.1	7.7
PR-IDZ	12-Aug-22				6.6	6.4	6.6
PR-IDZ	13-Aug-22				8.1	8.3	8.1
PR-IDZ	14-Aug-22				4.8	5.7	4.8
PR-IDZ	15-Aug-22				9.4	9.1	9.4
PR-IDZ	15-Aug-22				8.2	7.3	8.2
PR-IDZ	16-Aug-22				3.9	4	3.9
PR-IDZ	16-Aug-22				3.8	3.9	3.8
PR-IDZ	17-Aug-22				3.9	4	3.9
PR-IDZ	17-Aug-22				4.7	3.9	4.7
PR-IDZ	18-Aug-22				7.3	6.9	7.3
PR-IDZ	18-Aug-22				5.2	5.1	5.2
PR-IDZ	19-Aug-22				5.4	5.3	5.4
PR-IDZ	19-Aug-22				6.3	6.5	6.3
PR-IDZ	20-Aug-22				3	2.8	3
PR-IDZ	20-Aug-22				3	3	3
PR-IDZ	21-Aug-22				4	3.9	4
PR-IDZ	21-Aug-22				4.3	3.9	4.3
PR-IDZ	22-Aug-22				3.9	3.8	3.9
PR-IDZ	22-Aug-22				3.2	3.1	3.2
PR-IDZ	23-Aug-22				2.9	2.7	2.9
PR-IDZ	23-Aug-22				3	2.7	3
PR-IDZ	24-Aug-22				2.9	2.9	2.9
PR-IDZ	24-Aug-22				3	3	3
PR-IDZ	25-Aug-22				3	2.6	3
PR-IDZ	25-Aug-22				3.1	2.8	3.1
PR-IDZ	26-Aug-22				2.7	2.6	2.7
PR-IDZ	26-Aug-22				2.5	2.4	2.5
PR-IDZ	27-Aug-22				2.4	2.4	2.4
PR-IDZ	27-Aug-22				2.6	2.6	2.6
PR-IDZ	28-Aug-22				2.3	2.8	2.3
PR-IDZ	28-Aug-22				2.4	2.7	2.4
PR-IDZ	29-Aug-22				2.4	2.3	2.4
PR-IDZ	29-Aug-22				2.3	2.4	2.3
PR-IDZ	30-Aug-22				2.9	2.5	2.9
PR-IDZ	30-Aug-22				2.4	2.2	2.4
PR-IDZ	31-Aug-22				3.1	3.6	3.1
PR-IDZ	31-Aug-22				3.1	2.8	3.1
PR-IDZ	1-Sep-22				2.7	2.7	2.7
PR-IDZ	1-Sep-22				2.6	2.4	2.6
PR-IDZ	2-Sep-22				3.3	3.2	3.3
PR-IDZ	2-Sep-22				2.8	2.7	2.8
PR-IDZ	6-Sep-22	14.7	8.6	219	11.6	11.4	11.6
PR-IDZ	7-Sep-22	14.4	8.4	195	14.3	14.3	14.3
PR-IDZ	7-Sep-22	14.4	8.4	197	14.6	14.6	14.6
PR-IDZ	8-Sep-22	15.2	8.1	196	7.7	7.6	7.7
PR-IDZ	8-Sep-22	15.3	8.1	195	7.6	7.6	7.6
PR-IDZ	9-Sep-22	14.7	8.1	198	8.1	8	8.1
PR-IDZ	9-Sep-22	14.9	8.1	198	8	7.9	8
PR-IDZ	10-Sep-22	15.2	8.1	197	6.8	6.7	6.8
PR-IDZ	10-Sep-22	15.3	8.2	197	6.8	6.8	6.8
PR-IDZ	11-Sep-22	15.6	8.3	216	6.6	6.6	6.6
PR-IDZ	11-Sep-22	15.9	8.3	209	6.6	6.6	6.6
PR-IDZ	12-Sep-22	15.3	8.6	195	8.4	8.4	8.4
PR-IDZ	13-Sep-22	15.2	8.7	190	11.9	12	11.9
PR-IDZ	13-Sep-22	15.4	8.7	191	10.9	10.9	10.9
PR-IDZ	14-Sep-22	13.9	8.2	193	7	7	7
PR-IDZ	14-Sep-22	13.7	8.3	195	7	7.1	7
PR-IDZ	15-Sep-22	13.4	8.7	203	6.7	6.5	6.7
PR-IDZ	15-Sep-22	13.7	8.6	204	6.5	6.5	6.5
PR-IDZ	16-Sep-22	13.2	8.7	194	6.9	6.9	6.9
PR-IDZ	16-Sep-22	13	8.7	190	6.8	6.8	6.8
PR-IDZ	17-Sep-22				1.9	1.9	1.9
PR-IDZ	17-Sep-22				1.6	1.6	1.6
PR-IDZ	18-Sep-22				2.8	2.8	2.8
PR-IDZ	18-Sep-22				3.2	3.5	3.2
PR-IDZ	19-Sep-22				2	2	2
PR-IDZ	19-Sep-22				2.3	2.3	2.3
PR-IDZ	20-Sep-22				2.8	2.7	2.8
PR-IDZ	20-Sep-22				2.9	3	2.9
PR-IDZ	21-Sep-22				2.8	2.6	2.8
PR-IDZ	21-Sep-22				3.2	3	3.2
PR-IDZ	22-Sep-22				2.9	2.4	2.9
PR-IDZ	22-Sep-22				2	2.2	2
PR-IDZ	23-Sep-22				2.9	2.9	2.9
PR-IDZ	23-Sep-22				3.3	3.3	3.3
PR-IDZ	24-Sep-22				3.1	3.2	3.1
PR-IDZ	24-Sep-22				2.8	2.7	2.8
PR-IDZ	25-Sep-22				3.1	3.2	3.1
PR-IDZ	25-Sep-22				2.8	3	2.8
PR-IDZ	26-Sep-22				2.6	2.4	2.6
PR-IDZ	27-Sep-22	13.8	8.6	182	4.3	4.3	4.3
PR-IDZ	28-Sep-22	13.7	8.4	188	11.9	11.8	11.9
PR-IDZ	28-Sep-22	13.8	8.4	187	10.6	10.6	10.6
PR-IDZ	29-Sep-22	14.2	8.7	184	12.1	12	12.1
PR-IDZ	29-Sep-22	13.9	8.6	186	11.8	11.7	11.8
PR-IDZ	30-Sep-22	13.1	8.6	185	10.6	10.7	10.6
PR-IDZ	30-Sep-22	13.2	8.6	185	11.2	11.3	11.2
PR-IDZ	1-Oct-22	13	8.7	188	7.4	7.4	7.4
PR-IDZ	1-Oct-22	13.1	8.6	188	7.1	7.1	7.1
PR-IDZ	2-Oct-22	13.5	8.5	204	7.8	7.7	7.8
PR-IDZ	3-Oct-22	12.1	8.5	189	10.6	10.6	10.6

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
PR-IDZ	3-Oct-22	12.3	8.5	188	10.9	10.9	10.9
PR-IDZ	4-Oct-22	11.8	7.7	184	6.8	6.8	6.8
PR-IDZ	4-Oct-22				1.3	1.3	1.3
PR-IDZ	4-Oct-22				1.2	1.2	1.2
PR-IDZ	5-Oct-22	13	8.4	214	11.7	11.7	11.7
PR-IDZ	5-Oct-22				1.8	1.8	1.8
PR-IDZ	6-Oct-22	12.3	8.5	189	6.3	6.3	6.3
PR-IDZ	6-Oct-22				2	2	2
PR-IDZ	7-Oct-22				2.8	2.6	2.8
PR-IDZ	7-Oct-22				1.6	1.6	1.6
PR-IDZ	8-Oct-22				2.9	2.6	2.9
PR-IDZ	8-Oct-22				1.5	1.7	1.5
PR-IDZ	9-Oct-22				1.7	1.7	1.7
PR-IDZ	9-Oct-22				1.6	1.7	1.6
PR-IDZ	10-Oct-22				2.4	2.2	2.4
PR-IDZ	10-Oct-22				2.2	2.1	2.2
PR-IDZ	11-Oct-22				1.7	1.6	1.7
PR-IDZ	11-Oct-22				2.8	2.9	2.8
PR-IDZ	12-Oct-22				2.8	2.7	2.8
PR-IDZ	12-Oct-22				2.4	2.2	2.4
PR-IDZ	13-Oct-22				2.4	2.2	2.4
PR-IDZ	13-Oct-22				1.7	1.6	1.7
PR-IDZ	14-Oct-22				2.2	2.2	2.2
PR-IDZ	14-Oct-22				1.7	1.7	1.7
PR-IDZ	15-Oct-22				2.4	2.4	2.4
PR-IDZ	15-Oct-22				1.8	1.7	1.8
PR-IDZ	16-Oct-22				2.3	2.4	2.3
PR-IDZ	16-Oct-22				2.5	2.1	2.5
PR-IDZ	18-Oct-22	12.1	8.6	192	5.1	5	5.1
PR-IDZ	18-Oct-22	12.3	8.6	191	5	5	5
PR-IDZ	19-Oct-22	12.7	8.5	194	4.4	4.3	4.4
PR-IDZ	19-Oct-22	12.5	8.6	191	4.2	4.1	4.2
PR-IDZ	20-Oct-22	12.1	8.5	197	4.6	4.6	4.6
PR-IDZ	20-Oct-22	12	8.6	196	5.2	5.1	5.2
PR-IDZ	21-Oct-22	11.1	8.7	200	4.7	4.6	4.7
PR-IDZ	21-Oct-22	10.9	8.7	201	4.7	4.8	4.7
PR-IDZ	22-Oct-22	10.4	8.7	200	4.9	4.9	4.9
PR-IDZ	22-Oct-22	10.1	8.7	200	4.8	4.8	4.8
PR-IDZ	23-Oct-22	10.5	8.6	200	5.1	5	5.1
PR-IDZ	23-Oct-22	10.4	8.6	200	5.1	5.1	5.1
PR-IDZ	24-Oct-22	10.3	8.7	194	3.8	3.7	3.8
PR-IDZ	25-Oct-22				2.9	2.8	2.9
PR-IDZ	25-Oct-22				1.4	1.4	1.4
PR-IDZ	26-Oct-22				2.4	2.5	2.4
PR-IDZ	26-Oct-22				1.8	1.8	1.8
PR-IDZ	27-Oct-22				2.9	2.7	2.9
PR-IDZ	27-Oct-22				2	1.9	2
PR-IDZ	28-Oct-22				2.1	2.1	2.1
PR-IDZ	28-Oct-22				1.8	1.8	1.8
PR-IDZ	29-Oct-22				2.4	2.4	2.4
PR-IDZ	29-Oct-22				2	1.9	2
PR-IDZ	30-Oct-22				2.3	2.4	2.3
PR-IDZ	30-Oct-22				3.4	3	3.4
PR-IDZ	31-Oct-22				5.5	5.5	5.5
PR-IDZ	31-Oct-22				4.8	4.9	4.8
PR-IDZ	1-Nov-22				3.1	3.2	3.1
PR-IDZ	1-Nov-22				2.6	2.5	2.6
PR-IDZ	2-Nov-22				3.2	3.2	3.2
PR-IDZ	2-Nov-22				3.3	3.2	3.3
PR-IDZ	3-Nov-22				3.8	3.8	3.8
PR-IDZ	3-Nov-22				3.9	3.8	3.9
PR-IDZ	4-Nov-22				3.9	3.8	3.9
PR-IDZ	4-Nov-22				2.8	2.9	2.8
PR-IDZ	5-Nov-22				5.3	5.4	5.3
PR-IDZ	6-Nov-22				2.5	2.5	2.5
PR-IDZ	7-Nov-22				4.3	4.3	4.3
PR-IDZ	9-Nov-22	6	8.5	186	5	5	5
PR-IDZ	9-Nov-22	5.8	8.5	186	5	5	5
PR-IDZ	10-Nov-22	1.9	8.6	200	6.9	6.8	6.9
PR-IDZ	11-Nov-22	5.7	8.6	198	5.5	5.4	5.5
PR-IDZ	11-Nov-22	5.9	8.6	198	5.5	5.5	5.5
PR-IDZ	12-Nov-22	6.3	8.6	194	7.3	7.3	7.3
PR-IDZ	12-Nov-22	6.3	8.6	195	8	8	8
PR-IDZ	13-Nov-22	7.3	8.7	198	5.4	5.4	5.4
PR-IDZ	13-Nov-22	7.3	8.7	198	5	5.1	5
PR-IDZ	14-Nov-22	6.4	8.6	202	3.4	3.3	3.4
PR-IDZ	14-Nov-22	6.4	8.6	200	3.2	3.2	3.2
PR-IDZ	15-Nov-22				3.7	3.7	3.7
PR-IDZ	15-Nov-22				4	4	4
PR-IDZ	16-Nov-22				4.7	4.7	4.7
PR-IDZ	16-Nov-22				4.5	4.4	4.5
PR-IDZ	17-Nov-22				4.3	3.9	4.3
PR-IDZ	17-Nov-22				4.5	4.5	4.5
PR-IDZ	18-Nov-22				3.9	3.9	3.9
PR-IDZ	18-Nov-22				3.6	3.5	3.6
PR-IDZ	19-Nov-22				2.3	2.4	2.3
PR-IDZ	19-Nov-22				3.4	3	3.4
PR-IDZ	20-Nov-22				4.4	4.4	4.4
PR-IDZ	20-Nov-22				3.3	3.3	3.3
PR-IDZ	21-Nov-22				4.2	4.1	4.2
PR-IDZ	21-Nov-22				3.3	3.3	3.3
PR-IDZ	22-Nov-22				3.9	3.9	3.9
PR-IDZ	22-Nov-22				4	3.9	4
PR-IDZ	23-Nov-22				4.2	4.2	4.2
PR-IDZ	23-Nov-22				3.9	3.9	3.9
PR-IDZ	24-Nov-22				4.6	4.6	4.6
PR-IDZ	24-Nov-22				4.6	4.6	4.6
PR-IDZ	25-Nov-22				4.6	4.6	4.6
PR-IDZ	25-Nov-22				4.6	4.4	4.6

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
PR-IDZ	26-Nov-22				4	3.9	4
PR-IDZ	26-Nov-22				4	4	4
PR-IDZ	27-Nov-22				4	3.9	4
PR-IDZ	27-Nov-22				5.1	5.1	5.1
PR-IDZ	28-Nov-22				4.2	4.2	4.2
PR-IDZ	29-Nov-22				5.9	5.9	5.9
PR-IDZ	29-Nov-22				8.7	8.6	8.7
PR-IDZ	30-Nov-22				6.6	6.5	6.6
PR-IDZ	30-Nov-22				4.3	4.4	4.3
PR-IDZ	1-Dec-22				8	7.9	8
PR-IDZ	1-Dec-22				7.8	7.6	7.8
PR-IDZ	2-Dec-22				5.2	5.2	5.2
PR-IDZ	2-Dec-22				5	4.9	5
PR-IDZ	3-Dec-22	2.4	8.7	224	6.1	6.1	6.1
PR-IDZ	3-Dec-22	2.7	8.7	218	6.5	6.6	6.5
PR-IDZ	4-Dec-22	4.2	8.6	206	3.2	3.2	3.2
PR-IDZ	4-Dec-22	4.1	8.6	208	3.3	3.4	3.3
PR-IDZ	5-Dec-22	4.4	8.4	202	6	6	6
PR-IDZ	5-Dec-22	4.3	8.4	202	6.2	6.2	6.2
PR-IDZ	6-Dec-22				5	5	5
PR-IDZ	6-Dec-22				4.5	4.4	4.5
PR-IDZ	7-Dec-22				5.1	5.1	5.1
PR-IDZ	7-Dec-22				4.5	4.4	4.5
PR-IDZ	8-Dec-22				4.7	4.5	4.7
PR-IDZ	8-Dec-22				4.5	4.3	4.5
PR-IDZ	9-Dec-22	4.1	8.6	209	4.4	4.4	4.4
PR-IDZ	9-Dec-22	4.2	8.6	209	4.9	5	4.9
PR-IDZ	10-Dec-22	2.4	8.6	215	3.6	3.7	3.6
PR-IDZ	10-Dec-22	2.2	8.6	210	3.7	3.6	3.7
PR-IDZ	11-Dec-22	2.2	8.6	214	5.6	5.6	5.6
PR-IDZ	11-Dec-22	2.6	8.6	215	5.8	5.8	5.8
PR-IDZ	12-Dec-22				8.7	8.7	8.7
PR-IDZ	12-Dec-22				7.2	7.2	7.2
PR-Isolation-Zone	6-Aug-22	15.3	8.5	279	27.3	27.4	27.3
PR-Outlet-DS	17-Jul-22				13.7	12	13.7
PR-Outlet-DS	17-Jul-22				12.8	12.9	12.8
PR-Outlet-DS	19-Jul-22	17.2	8.6	249	12.1	12	12.1
PR-Outlet-DS	20-Jul-22				12.9	12.8	12.9
PR-Outlet-DS	20-Jul-22		8.2	258	12.8	12.8	12.8
PR-Outlet-DS	21-Jul-22				12.1	11.7	12.1
PR-Outlet-DS	21-Jul-22				15.7	15.7	15.7
PR-Outlet-DS	22-Jul-22				12.4	12.3	12.4
PR-Outlet-DS	22-Jul-22				13	13	13
PR-Outlet-DS	23-Jul-22				12.3	12.2	12.3
PR-Outlet-DS	23-Jul-22				12.1	12.1	12.1
PR-Outlet-DS	23-Jul-22		8.4	289	12.1	12.1	12.1
PR-Outlet-DS	24-Jul-22				13.7	13.8	13.7
PR-Outlet-DS	24-Jul-22				11.9	12	11.9
PR-Outlet-DS	25-Jul-22				11.3	11.4	11.3
PR-Outlet-DS	25-Jul-22				11	11	11
PR-Outlet-DS	26-Jul-22	15.5	8.5	219	12.1	12.2	12.1
PR-Outlet-DS	26-Jul-22	16.1	8.5	220	11.5	11.6	11.5
PR-Outlet-DS	27-Jul-22	14.5	8.4	232	13.6	13.5	13.6
PR-Outlet-DS	28-Jul-22	15.6	8.2	220	13.9	13.9	13.9
PR-Outlet-DS	29-Jul-22	18.1	8.3	213	10.9	10.9	10.9
PR-Outlet-DS	29-Jul-22	18	8.3	215	10.7	10.7	10.7
PR-Outlet-DS	30-Jul-22	14.8	8.5	208	9.8	9.7	9.8
PR-Outlet-DS	30-Jul-22	14.8	8.5	213	9.8	9.8	9.8
PR-Outlet-DS	31-Jul-22	16.1	8.5	239	9.6	9.6	9.6
PR-Outlet-DS	31-Jul-22	15.6	8.4	215	9.1	9.1	9.1
PR-Outlet-DS	1-Aug-22	14	8.4	223	8.9	8.9	8.9
PR-Outlet-DS	2-Aug-22	15	8.3	212	65.6	65.6	65.6
PR-Outlet-DS	3-Aug-22	14.9	8.5	231	26.5	26.2	26.5
PR-Outlet-DS	3-Aug-22	13.5	8.6	245	28.3	28.4	28.3
PR-Outlet-DS	4-Aug-22	14.9	8.4	249	27.9	27.7	27.9
PR-Outlet-DS	5-Aug-22	15.6	8.5	253	18.4	18.4	18.4
PR-Outlet-DS	6-Aug-22	15.8	8.5	254	22	21.7	22
PR-Outlet-DS	6-Aug-22	15.7	8.5	253	22.3	22.4	22.3
PR-Outlet-DS	7-Aug-22	16.8	8.4	253	40	39.2	40
PR-Outlet-DS	7-Aug-22	17.1	8.6	252	38.3	38.5	38.3
PR-Outlet-DS	8-Aug-22				14.1	14.1	14.1
PR-Outlet-DS	9-Aug-22				13.6	13.2	13.6
PR-Outlet-DS	9-Aug-22				11.8	11.7	11.8
PR-Outlet-DS	10-Aug-22				11.1	10.6	11.1
PR-Outlet-DS	10-Aug-22				8.5	8.1	8.5
PR-Outlet-DS	11-Aug-22				7.3	7.4	7.3
PR-Outlet-DS	11-Aug-22				7	7	7
PR-Outlet-DS	12-Aug-22				5.6	6.1	5.6
PR-Outlet-DS	12-Aug-22				7.1	7.2	7.1
PR-Outlet-DS	13-Aug-22				5.1	5.7	5.1
PR-Outlet-DS	14-Aug-22				9.1	9.1	9.1
PR-Outlet-DS	15-Aug-22				4.8	5.7	4.8
PR-Outlet-DS	15-Aug-22				7.2	7.2	7.2
PR-Outlet-DS	16-Aug-22				4.2	3.7	4.2
PR-Outlet-DS	16-Aug-22				5.1	4.6	5.1
PR-Outlet-DS	17-Aug-22				4.2	3.7	4.2
PR-Outlet-DS	17-Aug-22				5.1	4.4	5.1
PR-Outlet-DS	18-Aug-22				6.4	6.3	6.4
PR-Outlet-DS	18-Aug-22				5.9	5.3	5.9
PR-Outlet-DS	19-Aug-22				5.5	5.3	5.5
PR-Outlet-DS	19-Aug-22				5.9	5.7	5.9
PR-Outlet-DS	20-Aug-22	27			2.9	2.7	2.9
PR-Outlet-DS	20-Aug-22				2.9	2.9	2.9
PR-Outlet-DS	21-Aug-22				4.3	4.2	4.3
PR-Outlet-DS	21-Aug-22				4.8	4.3	4.8
PR-Outlet-DS	22-Aug-22				4	3.5	4
PR-Outlet-DS	22-Aug-22				3.6	3.9	3.6
PR-Outlet-DS	23-Aug-22				3	2.8	3
PR-Outlet-DS	23-Aug-22				2.6	2.7	2.6

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
PR-Outlet-DS	24-Aug-22				2.9	2.7	2.9
PR-Outlet-DS	24-Aug-22				3.2	3.4	3.2
PR-Outlet-DS	25-Aug-22				2.9	2.7	2.9
PR-Outlet-DS	25-Aug-22				3	2.7	3
PR-Outlet-DS	26-Aug-22				2.5	2.6	2.5
PR-Outlet-DS	26-Aug-22				2.9	2.8	2.9
PR-Outlet-DS	27-Aug-22				2.9	2.7	2.9
PR-Outlet-DS	27-Aug-22				2.7	2.6	2.7
PR-Outlet-DS	28-Aug-22				2.5	2.6	2.5
PR-Outlet-DS	28-Aug-22				2.8	2.8	2.8
PR-Outlet-DS	29-Aug-22				2.6	2.8	2.6
PR-Outlet-DS	29-Aug-22				2.4	2.4	2.4
PR-Outlet-DS	30-Aug-22				2.5	2.5	2.5
PR-Outlet-DS	30-Aug-22				2.4	2.5	2.4
PR-Outlet-DS	31-Aug-22				3	2.7	3
PR-Outlet-DS	31-Aug-22				3	2.8	3
PR-Outlet-DS	1-Sep-22				2.8	2.6	2.8
PR-Outlet-DS	1-Sep-22				2.3	2.3	2.3
PR-Outlet-DS	2-Sep-22				3.4	3.5	3.4
PR-Outlet-DS	2-Sep-22				2.9	2.8	2.9
PR-Outlet-DS	6-Sep-22	14.2	8.5	205	8.6	8.7	8.6
PR-Outlet-DS	7-Sep-22	14.1	8.4	204	10.1	10.1	10.1
PR-Outlet-DS	7-Sep-22	13.9	8.4	203	10	10	10
PR-Outlet-DS	8-Sep-22	15.1	8	194	6.7	6.7	6.7
PR-Outlet-DS	8-Sep-22	15.1	7.9	192	6.8	6.8	6.8
PR-Outlet-DS	9-Sep-22	15.1	8	178	7	6.9	7
PR-Outlet-DS	9-Sep-22	15.2	8	177	6.8	6.8	6.8
PR-Outlet-DS	10-Sep-22	15.6	8	196	6.2	6.2	6.2
PR-Outlet-DS	10-Sep-22	15.4	8	195	6.2	6.2	6.2
PR-Outlet-DS	11-Sep-22	15.8	8.1	189	6.4	6.4	6.4
PR-Outlet-DS	11-Sep-22	16.3	8	187	6	6	6
PR-Outlet-DS	12-Sep-22	15.9	8.5	180	6.4	6.4	6.4
PR-Outlet-DS	13-Sep-22	15.5	8.4	199	7.8	7.6	7.8
PR-Outlet-DS	13-Sep-22	15.1	8.4	199	7.8	7.8	7.8
PR-Outlet-DS	14-Sep-22	13.7	8.5	190	6.8	6.8	6.8
PR-Outlet-DS	14-Sep-22	13.2	8.4	188	6.8	6.8	6.8
PR-Outlet-DS	15-Sep-22	13.4	8.6	193	4.7	4.8	4.7
PR-Outlet-DS	15-Sep-22	13.2	8.6	193	4.6	4.6	4.6
PR-Outlet-DS	16-Sep-22	14.1	8.6	186	6	5.9	6
PR-Outlet-DS	16-Sep-22	13.8	8.6	192	6	6	6
PR-Outlet-DS	17-Sep-22				2.2	2.2	2.2
PR-Outlet-DS	17-Sep-22				1.8	1.8	1.8
PR-Outlet-DS	18-Sep-22				2.9	2.8	2.9
PR-Outlet-DS	18-Sep-22				3.4	3.1	3.4
PR-Outlet-DS	19-Sep-22				2.4	2.1	2.4
PR-Outlet-DS	19-Sep-22				2	2	2
PR-Outlet-DS	20-Sep-22				2.7	2.6	2.7
PR-Outlet-DS	20-Sep-22				2.6	2.6	2.6
PR-Outlet-DS	21-Sep-22				2.4	2.7	2.4
PR-Outlet-DS	21-Sep-22				2.4	2.5	2.4
PR-Outlet-DS	22-Sep-22				2.4	2.1	2.4
PR-Outlet-DS	22-Sep-22				2	2	2
PR-Outlet-DS	23-Sep-22				2.6	2.7	2.6
PR-Outlet-DS	23-Sep-22				4	3.5	4
PR-Outlet-DS	24-Sep-22				3.5	2.9	3.5
PR-Outlet-DS	24-Sep-22				2.6	2.8	2.6
PR-Outlet-DS	25-Sep-22				3	3	3
PR-Outlet-DS	25-Sep-22				3.4	3	3.4
PR-Outlet-DS	26-Sep-22				2.5	2.3	2.5
PR-Outlet-DS	27-Sep-22	13.9	8.2	168	4	4	4
PR-Outlet-DS	28-Sep-22	14.3	8.5	171	6.6	6.6	6.6
PR-Outlet-DS	28-Sep-22	14.5	8.6	171	6.9	6.9	6.9
PR-Outlet-DS	29-Sep-22	14.4	8.4	173	4.8	4.8	4.8
PR-Outlet-DS	29-Sep-22	14.3	8.6	172	4.4	4.3	4.4
PR-Outlet-DS	30-Sep-22	14.7	8.5	184	11	10.7	11
PR-Outlet-DS	30-Sep-22	14.5	8.5	180	9	9	9
PR-Outlet-DS	1-Oct-22	13.3	8.6	173	4.9	4.9	4.9
PR-Outlet-DS	1-Oct-22	13.2	8.6	172	4.7	4.6	4.7
PR-Outlet-DS	2-Oct-22	14	8.6	177	5	5	5
PR-Outlet-DS	3-Oct-22	12.6	8.4	170	4.3	4.2	4.3
PR-Outlet-DS	3-Oct-22	12.6	8.4	171	4.6	4.6	4.6
PR-Outlet-DS	4-Oct-22	11.9	7.8	183	6.7	6.8	6.7
PR-Outlet-DS	4-Oct-22				1.3	1.2	1.3
PR-Outlet-DS	4-Oct-22				1.3	1.3	1.3
PR-Outlet-DS	5-Oct-22	13.4	8.3	182	8.1	8	8.1
PR-Outlet-DS	5-Oct-22				1.8	1.8	1.8
PR-Outlet-DS	6-Oct-22	12.3	8.5	175	8.3	8.3	8.3
PR-Outlet-DS	6-Oct-22				2.6	2.4	2.6
PR-Outlet-DS	7-Oct-22				2.3	2.7	2.3
PR-Outlet-DS	7-Oct-22				2.4	2.5	2.4
PR-Outlet-DS	8-Oct-22				2.2	2.4	2.2
PR-Outlet-DS	8-Oct-22				2	2	2
PR-Outlet-DS	9-Oct-22				1.8	1.7	1.8
PR-Outlet-DS	9-Oct-22				2.4	2.2	2.4
PR-Outlet-DS	10-Oct-22				1.8	1.8	1.8
PR-Outlet-DS	11-Oct-22				1.8	1.8	1.8
PR-Outlet-DS	11-Oct-22				3	2.6	3
PR-Outlet-DS	12-Oct-22				3.2	3.1	3.2
PR-Outlet-DS	12-Oct-22				2.4	2.2	2.4
PR-Outlet-DS	13-Oct-22				2.4	2.3	2.4
PR-Outlet-DS	13-Oct-22				1.6	1.5	1.6
PR-Outlet-DS	14-Oct-22				2.5	2.2	2.5
PR-Outlet-DS	14-Oct-22				1.8	1.8	1.8
PR-Outlet-DS	15-Oct-22				2.5	2.4	2.5
PR-Outlet-DS	15-Oct-22				1.9	1.9	1.9
PR-Outlet-DS	16-Oct-22				2.5	2.5	2.5
PR-Outlet-DS	16-Oct-22				1.9	2	1.9
PR-Outlet-DS	18-Oct-22	12.3	8.5	180	4.2	4.2	4.2
PR-Outlet-DS	18-Oct-22	12.7	8.4	180	4.1	4.1	4.1

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
PR-Outlet-DS	19-Oct-22	14.1	8.7	233	5.3	5.2	5.3
PR-Outlet-DS	19-Oct-22	13.9	8.6	189	5.4	5.4	5.4
PR-Outlet-DS	20-Oct-22	12	8.6	195	3.8	3.8	3.8
PR-Outlet-DS	20-Oct-22	12	8.6	188	3.8	3.8	3.8
PR-Outlet-DS	21-Oct-22	12	8.7	200	2.7	2.7	2.7
PR-Outlet-DS	21-Oct-22	11.5	8.7	193	3.2	3.2	3.2
PR-Outlet-DS	22-Oct-22	10.5	8.6	179	3.4	3.4	3.4
PR-Outlet-DS	22-Oct-22	10.4	8.6	181	3.4	3.3	3.4
PR-Outlet-DS	23-Oct-22	11.6	8.7	211	4.1	4	4.1
PR-Outlet-DS	23-Oct-22	11.6	8.7	198	4.2	4.2	4.2
PR-Outlet-DS	24-Oct-22	11.1	8.7	198	3.9	3.9	3.9
PR-Outlet-DS	25-Oct-22				2.9	2.9	2.9
PR-Outlet-DS	25-Oct-22				1.6	1.4	1.6
PR-Outlet-DS	26-Oct-22				2.6	2.5	2.6
PR-Outlet-DS	26-Oct-22				1.8	1.7	1.8
PR-Outlet-DS	27-Oct-22				2.7	2.7	2.7
PR-Outlet-DS	27-Oct-22				3.4	3.3	3.4
PR-Outlet-DS	28-Oct-22				2.9	2.8	2.9
PR-Outlet-DS	28-Oct-22				2.1	2.1	2.1
PR-Outlet-DS	29-Oct-22				2.9	2.8	2.9
PR-Outlet-DS	29-Oct-22				2.3	2.2	2.3
PR-Outlet-DS	30-Oct-22				2.6	2.7	2.6
PR-Outlet-DS	1-Nov-22				3.2	3.1	3.2
PR-Outlet-DS	1-Nov-22				2.7	2.6	2.7
PR-Outlet-DS	2-Nov-22				3.6	3.4	3.6
PR-Outlet-DS	2-Nov-22				3	3	3
PR-Outlet-DS	3-Nov-22				9.4	9.5	9.4
PR-Outlet-DS	3-Nov-22				3.6	3.4	3.6
PR-Outlet-DS	4-Nov-22				3.6	3.6	3.6
PR-Outlet-DS	4-Nov-22				2.9	2.9	2.9
PR-Outlet-DS	5-Nov-22				3.9	3.9	3.9
PR-Outlet-DS	6-Nov-22				3.2	2.8	3.2
PR-Outlet-DS	7-Nov-22				4.2	4	4.2
PR-Outlet-DS	9-Nov-22	5.6	8.5	194	4.9	4.8	4.9
PR-Outlet-DS	9-Nov-22	5.5	8.5	192	4.8	4.8	4.8
PR-Outlet-DS	10-Nov-22	5.2	8.4	179	6.8	6.8	6.8
PR-Outlet-DS	11-Nov-22	5.8	8.5	196	6	5.9	6
PR-Outlet-DS	11-Nov-22	6.1	8.5	187	5.8	5.8	5.8
PR-Outlet-DS	12-Nov-22	6.4	8.5	194	8.3	8.3	8.3
PR-Outlet-DS	12-Nov-22	6.1	8.5	190	8.5	8.5	8.5
PR-Outlet-DS	13-Nov-22	6.7	8.7	197	4.2	4.2	4.2
PR-Outlet-DS	13-Nov-22	6.8	8.6	196	4.3	4.3	4.3
PR-Outlet-DS	14-Nov-22	6.5	8.5	200	3.1	3.1	3.1
PR-Outlet-DS	14-Nov-22	6.5	8.5	199	3	3	3
PR-Outlet-DS	15-Nov-22				3.2	3.2	3.2
PR-Outlet-DS	15-Nov-22				3	2.9	3
PR-Outlet-DS	16-Nov-22				4.7	4.5	4.7
PR-Outlet-DS	16-Nov-22				4.3	4.2	4.3
PR-Outlet-DS	17-Nov-22				3.7	3.5	3.7
PR-Outlet-DS	17-Nov-22				4.1	4.1	4.1
PR-Outlet-DS	18-Nov-22				3.9	3.9	3.9
PR-Outlet-DS	18-Nov-22				3.4	3.4	3.4
PR-Outlet-DS	19-Nov-22				2.6	2.7	2.6
PR-Outlet-DS	19-Nov-22				3.7	3.7	3.7
PR-Outlet-DS	20-Nov-22				4.9	4.9	4.9
PR-Outlet-DS	20-Nov-22				5.9	5.9	5.9
PR-Outlet-DS	21-Nov-22				4.2	4.1	4.2
PR-Outlet-DS	21-Nov-22				3.9	4	3.9
PR-Outlet-DS	22-Nov-22				4.2	4.1	4.2
PR-Outlet-DS	22-Nov-22				4.9	4.9	4.9
PR-Outlet-DS	23-Nov-22				4.4	4.3	4.4
PR-Outlet-DS	23-Nov-22				4.9	4.9	4.9
PR-Outlet-DS	24-Nov-22				4.9	4.7	4.9
PR-Outlet-DS	24-Nov-22				5.8	5.8	5.8
PR-Outlet-DS	25-Nov-22				6.3	6.3	6.3
PR-Outlet-DS	25-Nov-22				5.3	5.3	5.3
PR-Outlet-DS	26-Nov-22				4.2	4.2	4.2
PR-Outlet-DS	26-Nov-22				4.2	4.2	4.2
PR-Outlet-DS	27-Nov-22				4.2	4.2	4.2
PR-Outlet-DS	27-Nov-22				4.4	4.4	4.4
PR-Outlet-DS	28-Nov-22				5.9	5.9	5.9
PR-Outlet-DS	29-Nov-22				6.5	6.5	6.5
PR-Outlet-DS	29-Nov-22				8.7	8.7	8.7
PR-Outlet-DS	30-Nov-22				4.6	4.6	4.6
PR-Outlet-DS	30-Nov-22				4.3	4.4	4.3
PR-Outlet-DS	1-Dec-22				5	5.1	5
PR-Outlet-DS	1-Dec-22				4.9	4.9	4.9
PR-Outlet-DS	2-Dec-22				4.5	4.7	4.5
PR-Outlet-DS	2-Dec-22				4.4	4.7	4.4
PR-Outlet-DS	3-Dec-22	2.3	8.6	200	4	4.1	4
PR-Outlet-DS	3-Dec-22	2.4	8.6	199	4.2	4.1	4.2
PR-Outlet-DS	4-Dec-22	4.8	8.6	199	3	3.1	3
PR-Outlet-DS	4-Dec-22	4.6	8.6	200	3	2.9	3
PR-Outlet-DS	5-Dec-22	4.3	8.4	200	4.5	4.6	4.5
PR-Outlet-DS	5-Dec-22	4.3	8.4	199	4.4	4.4	4.4
PR-Outlet-DS	6-Dec-22				3.9	4	3.9
PR-Outlet-DS	6-Dec-22				3.9	3.7	3.9
PR-Outlet-DS	7-Dec-22				7.2	7.2	7.2
PR-Outlet-DS	7-Dec-22				3.8	3.7	3.8
PR-Outlet-DS	8-Dec-22				4	3.9	4
PR-Outlet-DS	8-Dec-22				3.6	3.5	3.6
PR-Outlet-DS	9-Dec-22	3.9	8.5	215	4.8	4.8	4.8
PR-Outlet-DS	9-Dec-22	4.1	8.5	211	4.6	4.6	4.6
PR-Outlet-DS	10-Dec-22	1.9	8.7	207	3.8	3.8	3.8
PR-Outlet-DS	10-Dec-22	1.8	8.7	207	3.5	3.5	3.5
PR-Outlet-DS	11-Dec-22	3.6	8.6	216	5.3	5.4	5.3
PR-Outlet-DS	11-Dec-22	3.6	8.6	209	5.2	5.1	5.2
PR-Outlet-DS	12-Dec-22				9.1	9.2	9.1
PR-Outlet-DS	12-Dec-22				7.8	7.7	7.8

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
QAQC_Curing_Tanks	23-Jun-22	20.3	9.5	1996	26.7	26.6	26.7
R5A-P2-A-EOP	21-Mar-22	5.9	8.2	397	18.4	18.4	18.4
R5A-P2-A-EOP	22-Mar-22	6.8	7.7	587	15.8	15.8	15.8
R5A-P2-A-EOP	23-Mar-22	5	7.6	614	12.4	12.2	12.4
R5A-P2-A-EOP	24-Mar-22	7.2	7.7	465	9.4	9.3	9.4
R5A-P2-A-EOP	25-Mar-22	6.6	7.6	380	14.1	14	14.1
R5A-P2-A-EOP	17-May-22	17.4	8.4	1920	16.6	16.6	16.6
R5A-P2-A-EOP	18-May-22	16.4	8.3	1933	8	8	8
R5A-P2-A-EOP	19-May-22	15.5	8.3	2270	17.1	17.1	17.1
R5A-P2-A-EOP	20-May-22	13.6	8.1	2040	22.2	22.1	22.2
R5A-P2-A-EOP	21-May-22	17.8	8.1	1986	31.5	31.5	31.5
R5A-P2-A-EOP	29-May-22	18	7.6	1621	21.2	21.1	21.2
R5A-P2-A-EOP	30-May-22	17.4	7.9	1835	20.2	20.1	20.2
R5A-P2-A-EOP	31-May-22	21.2	7.9	1810	17.3	17.3	17.3
R5A-P2-A-EOP	2-Jun-22	23.2	8	1748	13.1	13.1	13.1
R5A-P2-A-EOP	3-Jun-22	21	8.2	1671	11.1	11.3	11.1
R5A-P2-A-EOP	4-Jun-22	21	8.7	1570	13.1	13.1	13.1
R5A-P2-A-EOP	5-Jun-22	18.2	8.7	1448	17.7	17.4	17.7
R5A-P2-A-EOP	6-Jun-22	15.4	8.8	1297	29.1	29.2	29.1
R5A-P2-A-EOP	13-Jun-22	24.9	8.6	1285	13.2	13.2	13.2
R5A-P2-A-EOP	14-Jun-22	19.4	8.6	1125	14.1	14.1	14.1
R5A-P2-A-EOP	15-Jun-22	20.2	8.5	1120	24.5	24.7	24.5
R5A-P2-A-EOP	16-Jun-22	22	8.5	1102	21.2	20.9	21.2
R5A-P2-A-EOP	17-Jun-22	15.1	8.3	871	37.9	38.2	37.9
R5A-P2-A-EOP	18-Jun-22	19.6	8.6	1502	30.6	30.3	30.6
R5A-P2-A-EOP	19-Jun-22	21.5	8.7	1545	35.6	35.6	35.6
R5A-P2-A-EOP	20-Jun-22	23.1	8.6	1501	26.5	26.4	26.5
R5A-P2-A-EOP	21-Jun-22	19.7	8.6	1215	28.5	28.7	28.5
R5A-P2-A-EOP	23-Jun-22	17.4	8.7	1444	37.9	37.7	37.9
R5A-P2-A-EOP	24-Jun-22	21.2	8.6	1524	25.5	25.6	25.5
R5A-P2-A-EOP	26-Jun-22	22	8.8	1082	22.9	22.9	22.9
R5A-P2-A-EOP	27-Jun-22	18.7	8.3	1064	29.9	30	29.9
R5A-P2-A-EOP	10-Jul-22	22.9	8.5	1058	50.2	50	50.2
R5A-P2-A-EOP	12-Jul-22	20.3	8.6	1089	20.1	20.1	20.1
R5A-P2-A-EOP	14-Jul-22	21.5	8.5	1263	18.2	18.2	18.2
R5A-P2-A-EOP	15-Jul-22	22.9	8.3	1269	16.9	16.9	16.9
R5A-P2-A-EOP	16-Jul-22	25.9	8.5	1167	30.3	30.3	30.3
R5A-P2-A-EOP	17-Jul-22	22.6	8.3	1279	20.6	20.8	20.6
R5A-P2-A-EOP	28-Jul-22	29.6	8.5	1054	24	23.9	24
R5A-P2-A-EOP	29-Jul-22	25.6	8.2	1232	15.7	15.6	15.7
R5A-P2-A-EOP	3-Aug-22	22.5	8.5	1314	13.7	13.7	13.7
R5A-P2-A-EOP	4-Aug-22	18.5	8.6	1417	14.8	15.1	14.8
R5A-P2-A-EOP	18-Aug-22	26.3	8.5	1334	16.8	16.7	16.8
R5A-P2-A-EOP	21-Aug-22	26.5	8.5	1298	49.4	49.4	49.4
R5A-P2-A-EOP	9-Sep-22	16.2	8.2	582	17.3	17.3	17.3
R5A-P2-A-EOP	10-Sep-22	20.1	8.2	1054	12.8	12.8	12.8
R5A-P2-A-EOP	11-Sep-22	18.7	8.6	1155	19.1	18.8	19.1
R5A-P2-A-EOP	18-Sep-22	15.7	7.9	1488	30.5	30.7	30.5
R5A-P2-A-EOP	19-Sep-22	13.7	8.1	1391	11	11	11
R5A-P2-A-EOP	30-Sep-22	15.8	8.3	1241	14.4	14.1	14.4
R5A-P2-A-EOP	1-Oct-22	19.8	7.9	1152	20	19.9	20
R5A-P2-A-EOP	19-Oct-22	16.1	8.7	865	20.6	20.7	20.6
R5A-P2-A-EOP	28-Oct-22	8.8	8.2	1008	34	34.5	34
R5A-P2-A-EOP	29-Oct-22	5.6	8.6	1017	21.4	21.9	21.4
R5A-P2-A-SP	19-Mar-22	1.3	8.5	377	95.4	95.8	95.4
R5A-P2-A-SP	20-Mar-22	6.4	7.9	323	30.5	30.5	30.5
R5A-P2-A-SP	27-Mar-22	2.3	7.5	783	6.8	6.8	6.8
R5A-P2-A-SP	29-Mar-22	3.4	8.4	740	8.4	8.4	8.4
R5A-P2-A-SP	31-Mar-22	5.9	9.3	760	25.6	25.7	25.6
R5A-P2-A-SP	5-Apr-22	3.7	9	678	64	64	64
R5A-P2-A-SP	10-Apr-22	8.7	9.4	1339	OR		
R5A-P2-A-SP	13-Apr-22	2.2	9.6	1832	1905	1909	1905
R5A-P2-A-SP	17-Apr-22	2	10.3	1549	OR		
R5A-P2-A-SP	19-Apr-22	1.5	6.4	1630	1664	1667	1664
R5A-P2-A-SP	21-Apr-22	10.1	6.5	1760	1155	1158	1155
R5A-P2-A-SP	24-Apr-22	10.9	8.2	1846	73.7	74.1	73.7
R5A-P2-A-SP	26-Apr-22	15.2	7.5	2540	62.4	62.4	62.4
R5A-P2-A-SP	29-Apr-22	5.3	8.4	1980	38	38.1	38
R5A-P2-A-SP	3-May-22	8	8.2	2430	8.7	8.8	8.7
R5A-P2-A-SP	5-May-22	13.7	8.4	2320	8.4	8.5	8.4
R5A-P2-A-SP	6-May-22	9.3	8.6	1978	85.4	85.6	85.4
R5A-P2-A-SP	9-May-22	5	7.8	2150	14.8	15	14.8
R5A-P2-A-SP	11-May-22	14.5	8.1	2070	5.2	5.2	5.2
R5A-P2-A-SP	14-May-22	13.8	8.3	2090	5.6	5.6	5.6
R5A-P2-A-SP	18-May-22	16.4	8.3	1933	8	8	8
R5A-P2-A-SP	28-May-22	11.8	8.3	1457	27.3	27.7	27.3
R5A-P2-A-SP	1-Jun-22	22.3	8	1763	7.7	7.7	7.7
R5A-P2-A-SP	7-Jun-22	20.6	8.8	1223	10.9	10.9	10.9
R5A-P2-A-SP	8-Jun-22	21.4	8.8	1248	11.4	11.3	11.4
R5A-P2-A-SP	9-Jun-22	23.1	8.6	1238	14.2	14.3	14.2
R5A-P2-A-SP	10-Jun-22	20.1	8.6	1239	14.2	14.2	14.2
R5A-P2-A-SP	11-Jun-22	21.7	8.7	1254	15	15.1	15
R5A-P2-A-SP	12-Jun-22	21.4	8.7	1282	10.9	11	10.9
R5A-P2-A-SP	22-Jun-22	21.4	8.8	1299	20.2	20.2	20.2
R5A-P2-A-SP	25-Jun-22	23	8.6	1525	20.6	20.6	20.6
R5A-P2-A-SP	28-Jun-22	21.2	8.4	1091	24.7	24.8	24.7
R5A-P2-A-SP	29-Jun-22	27.3	8.6	1349	49	49	49
R5A-P2-A-SP	9-Jul-22	21.8	8.6	1025	28.4	28.5	28.4
R5A-P2-A-SP	11-Jul-22	25.3	8.6	1065	24.7	24.7	24.7
R5A-P2-A-SP	13-Jul-22	23.5	8.6	1159	78.3	77.7	78.3
R5A-P2-A-SP	18-Jul-22	26.5	8.8	987	30.3	30.4	30.3
R5A-P2-A-SP	23-Jul-22	24.7	8.8	1107	37.9	37.9	37.9
R5A-P2-A-SP	30-Jul-22	24.3	8.6	1102	32.2	32	32.2
R5A-P2-A-SP	5-Aug-22	23.1	8.6	1299	19.2	19.2	19.2
R5A-P2-A-SP	6-Aug-22	24.3	8.6	1198	18.3	18.3	18.3
R5A-P2-A-SP	7-Aug-22	24.7	8.6	1315	19.3	19.2	19.3
R5A-P2-A-SP	17-Aug-22	26.3	8.2	1346	56.8	56.8	56.8
R5A-P2-A-SP	20-Aug-22	26.4	8.5	1324	11.3	11.3	11.3
R5A-P2-A-SP	22-Aug-22	26.5	8.6	1283	20.3	20.3	20.3

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
R5A-P2-A-SP	29-Sep-22	18.5	7.9	1204	45.1	44.8	45.1
R5A-P2-A-SP	14-Oct-22	12.9	8.5	1121	59.3	59.3	59.3
R5A-P2-A-SP	15-Oct-22	9	8	1135	153	153	153
R5A-P2-A-SP	16-Oct-22	8.9	7.2	1128	49.9	49.9	49.9
R5A-P2-A-SP	17-Oct-22	6.8	6.9	1166	38.1	38.1	38.1
R5A-P2-A-SP	18-Oct-22	10.2	7.4	1338	23.4	23.3	23.4
R5A-P2-A-SP	30-Oct-22	5.5	8.7	1219	46.9	46.9	46.9
R5A-P2-A-SP	1-Nov-22	2.1	7.6	988	23	23.2	23
R5A-P2-A-SP	2-Nov-22	3.1	7.3	1086	18	18	18
R5A-P2-A-SP	3-Nov-22	3.3	7.1	1179	11	11.1	11
R5A-P2-B-EOP	20-Mar-22	7.9	8	371	32.2	32.4	32.2
R5A-P2-B-EOP	21-Mar-22	8.9	7.7	560	18.8	19	18.8
R5A-P2-B-SP	19-Mar-22	0.8	8.7	378	70.7	71.5	70.7
R5A-P2-B-SP	22-Mar-22	2.8	7.4	705	14.6	14.7	14.6
R5A-P2-B-SP	23-Mar-22	3.4	7.5	1018	22.2	22.3	22.2
R5A-P2-B-SP	24-Mar-22	4.9	7.6	766	26.7	26.5	26.7
R5A-P2-B-SP	27-Mar-22	2.4	7.7	792	5.4	5.4	5.4
R5A-P2-B-SP	29-Mar-22	3.2	8.4	835	4.3	4.3	4.3
R5A-P2-B-SP	31-Mar-22	5.8	8.4	962	8.4	8.4	8.4
R5A-P2-B-SP	5-Apr-22	3.3	8.4	920	8.1	8.1	8.1
R5A-P2-B-SP	13-Apr-22	2.4	9	1474	20	20.2	20
R5A-P2-B-SP	17-Apr-22	2	9.2	1450	100.3	100.1	100.3
R5A-P2-B-SP	19-Apr-22	1.2	9	1469	37.3	37.2	37.3
R5A-P2-B-SP	21-Apr-22	7.9	8.4	1701	18	18	18
R5A-P2-B-SP	24-Apr-22	9.4	8.2	1706	8.2	8.3	8.2
R5A-P2-B-SP	26-Apr-22	13.1	8.4	1602	11.1	11.1	11.1
R5A-P2-B-SP	29-Apr-22	3.4	8.1	1667	20.3	20.5	20.3
R5A-P2-B-SP	3-May-22	8.2	7.6	2280	5.3	5.4	5.3
R5A-P2-B-SP	5-May-22	12.8	8.4	2310	5.4	5.4	5.4
R5A-P2-B-SP	6-May-22	9.7	8.6	2250	12.7	12.6	12.7
R5A-P2-B-SP	9-May-22	4.9	8.1	2280	11.6	11.6	11.6
R5A-P2-B-SP	11-May-22	12.7	8	2200	6	6	6
R5A-P2-B-SP	14-May-22	13.7	8.3	2100	11.9	12	11.9
R5A-P2-B-SP	17-May-22	18.4	8.2	1909	8.9	8.9	8.9
R5A-P2-B-SP	28-May-22	10.6	9.1	1450	42.7	42.2	42.7
R5A-P2-B-SP	30-May-22	16.4	7.8	2180	13.8	14	13.8
R5A-P2-B-SP	31-May-22	20.5	8.1	1988	9.2	9.1	9.2
R5A-P2-B-SP	2-Jun-22	22.8	8.2	2140	7.1	7	7.1
R5A-P2-B-SP	4-Jun-22	22.7	8.4	1820	7.8	7.9	7.8
R5A-P2-B-SP	7-Jun-22	22.3	8.8	1756	12.4	12.3	12.4
R5A-P2-B-SP	15-Jun-22	20.5	8.6	1736	10.4	10.4	10.4
R5A-P2-B-SP	17-Jun-22	15.5	8.4	1690	20.5	21.7	20.5
R5A-P2-B-SP	19-Jun-22	22.1	8.6	1544	15.5	15.4	15.5
R5A-P2-B-SP	22-Jun-22	21.5	8.6	1732	28.7	28.7	28.7
R5A-P2-B-SP	9-Jul-22	22.2	8.4	1161	24	23.5	24
R5A-P2-B-SP	5-Aug-22	22	8.7	1318	13.2	13.2	13.2
R5A-P2-B-SP	7-Aug-22	23.9	9	1328	8.4	8.5	8.4
R5A-P2-B-SP	18-Sep-22	14.4	8.2	1694	15.7	15.8	15.7
R5A-P2-B-SP	17-Oct-22				39.4	39.3	39.4
R5A-P2-C-SP	19-Mar-22	0.7	8.5	342	69	68.9	69
R5A-P2-C-SP	20-Mar-22	5.9	7.7	358	32.1	32.2	32.1
R5A-P2-C-SP	21-Mar-22	5	7.9	346	22.7	22.8	22.7
R5A-P2-C-SP	22-Mar-22	3.6	7.7	628	17.4	17.6	17.4
R5A-P2-C-SP	23-Mar-22	2.9	7.5	699	14.3	14.6	14.3
R5A-P2-C-SP	24-Mar-22	3.3	7.5	652	8.7	8.6	8.7
R5A-P2-C-SP	27-Mar-22	2.4	7.6	677	8	7.9	8
R5A-P2-C-SP	29-Mar-22	4.4	8	674	8.1	8.2	8.1
R5A-P2-C-SP	31-Mar-22	5.3	8.4	773	18.2	18.3	18.2
R5A-P2-C-SP	13-Apr-22	4.5	9.1	870	8.2	8.2	8.2
R5A-P2-C-SP	17-Apr-22	3.8	8.9	993	26.3	26.4	26.3
R5A-P2-C-SP	19-Apr-22	1.8	8.9	1013	14.1	14.1	14.1
R5A-P2-C-SP	21-Apr-22	8.2	8.4	1065	7.2	7.2	7.2
R5A-P2-C-SP	24-Apr-22	10.5	8.6	1163	6.6	6.7	6.6
R5A-P2-C-SP	26-Apr-22	14.3	8.4	1073	8.6	8.7	8.6
R5A-P2-C-SP	29-Apr-22	5.6	8.3	1265	26.1	26	26.1
R5A-P2-C-SP	3-May-22	9.2	8.1	1660	7.7	7.7	7.7
R5A-P2-C-SP	5-May-22	13.5	8.2	1679	8.1	8.1	8.1
R5A-P2-C-SP	6-May-22	9.9	8.5	1587	8.8	8.8	8.8
R5A-P2-C-SP	9-May-22	6.1	8.5	1767	16.2	16.3	16.2
R5A-P2-C-SP	11-May-22	12.8	8.2	1726	9	8.8	9
R5A-P2-C-SP	14-May-22	12.5	8.2	1743	8.7	8.6	8.7
R5A-P2-C-SP	17-May-22	16.2	7.9	1590	12.4	12.4	12.4
R5A-P2-C-SP	28-May-22	11.4	8.3	1848	51.8	51.8	51.8
R5A-P2-C-SP	30-May-22	7.6	7.7	2140	6.6	6.6	6.6
R5A-P2-C-SP	31-May-22	21.6	7.8	2080	5.8	5.7	5.8
R5A-P2-C-SP	2-Jun-22	24.1	8.1	2300	19	19.2	19
R5A-P2-C-SP	4-Jun-22	22.5	8.3	2110	4.6	4.5	4.6
R5A-P2-C-SP	15-Jun-22	20.2	8.6	2280	7.8	7.8	7.8
R5A-P2-C-SP	17-Jun-22	16.9	8.4	2260	12.5	12.7	12.5
R5A-P2-C-SP	19-Jun-22	20.6	8.6	2260	8.1	8.1	8.1
R5A-P2-C-SP	22-Jun-22	21.4	8.6	2260	10.3	10.3	10.3
R5A-P2-C-SP	9-Jul-22	22.4	8.4	2380	11	10.9	11
R5A-P2-C-SP	12-Jul-22	21.2	8.4	2440	9	9	9
R5A-P2-D-SP	19-Mar-22	0.3	8.5	405	43.6	43	43.6
R5A-P2-D-SP	20-Mar-22	2.4	7.8	539	16.9	16.9	16.9
R5A-P2-D-SP	21-Mar-22	1.9	7.6	786	12.3	11.9	12.3
R5A-P2-D-SP	22-Mar-22	3	7.3	1031	24.1	23.8	24.1
R5A-P2-D-SP	23-Mar-22	4.4	7.4	1149	18.6	18.4	18.6
R5A-P2-D-SP	24-Mar-22	3.6	7.3	1204	13.8	13.9	13.8
R5A-P2-D-SP	27-Mar-22	3.5	6.2	1917	5.2	5.3	5.2
R5A-P2-D-SP	29-Mar-22	5	6.9	1919	4.8	4.9	4.8
R5A-P2-D-SP	31-Mar-22	6.7	6.9	1950	6.5	6.5	6.5
R5A-P2-D-SP	13-Apr-22	2.8	8.2	1388	6.8	6.8	6.8
R5A-P2-D-SP	17-Apr-22	4.2	8.2	1323	2.6	2.6	2.6
R5A-P2-D-SP	19-Apr-22	2.7	8.1	1114	3.2	3.1	3.2
R5A-P2-D-SP	21-Apr-22	6.8	8.1	1221	3	3	3
R5A-P2-D-SP	24-Apr-22	9.7	7.7	1580	5.1	5	5.1
R5A-P2-D-SP	26-Apr-22	13.3	7.8	1459	7.6	7.6	7.6
R5A-P2-D-SP	29-Apr-22	4.4	8	1629	23.4	23.4	23.4

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
R5A-P2-D-SP	3-May-22	8.5	7.4	1896	8.1	8.1	8.1
R5A-P2-D-SP	5-May-22	12.5	8	1963	4.7	4.6	4.7
R5A-P2-D-SP	6-May-22	9.9	8.1	1996	8.8	8.7	8.8
R5A-P2-D-SP	7-May-22	8.9	7.9	1965	7.7	7.8	7.7
R5A-P2-D-SP	9-May-22	6.2	8	2140	7.1	7.1	7.1
R5A-P2-D-SP	11-May-22	12.4	7.6	2110	4.5	4.4	4.5
R5A-P2-D-SP	14-May-22	13.1	7.7	2080	11	11.1	11
R5A-P2-D-SP	17-May-22	15.2	7.9	1933	9.1	9.1	9.1
R5A-P2-D-SP	20-May-22	16.6	8	2430	21.2	21	21.2
R5A-P2-D-SP	28-May-22	10.3	7.7	1783	91.2	91.2	91.2
R5A-P2-D-SP	30-May-22	18.2	3.7	3760	29.3	29.3	29.3
R5A-P2-D-SP	1-Jun-22	22	3.4	4020	13.6	13.2	13.6
R5A-P2-D-SP	2-Jun-22	22.1	3.7	3920	5.6	5.6	5.6
R5A-P2-D-SP	4-Jun-22	20.9	3.6	4150	6.4	6.3	6.4
R5A-P2-D-SP	9-Jun-22	23.7	6.7	3300	16.1	16.2	16.1
R5b-AC-US	19-May-22	13	8.4	869	4079	4065	4079
R5b-AC-US	20-May-22	17.3	8.6	1022	21.4	21.3	21.4
R5b-AC-US	22-May-22	24.3	8.6	975	23.7	23.9	23.7
R5b-AC-US	25-May-22	17	8.7	848	48	49	48
R5b-AC-US	27-May-22	16.1	8.5	1934	2097	2091	2097
R5b-AC-US	29-May-22	10.4	8	1858	OR		
R5b-AC-US	31-May-22	22.5	8.8	2520	1188	1189	1188
R5b-AC-US	4-Jun-22	20.3	9.3	903	3914	3931	3914
R5b-AC-US	8-Jun-22	20.4	8.7	1506	56.9	56.2	56.9
R5b-AC-US	17-Jun-22	15.2	8.6	2390	OR		
R5b-AC-US	19-Jun-22	24.1	8.7	1692	912	911	912
R5b-AC-US	23-Jun-22	14.7	8.7	1158	2220	2223	2220
R5b-AC-US	6-Jul-22	26.3	8.6	927	16.5	16.7	16.5
R5b-AC-US	13-Jul-22	23.2	8.6	936	16.9	16.8	16.9
R5b-AC-US	16-Jul-22	25.5	9.2	792	1490	1461	1490
R5b-AC-US	28-Jul-22	30.5	8.7	1486	28	28	28
R5b-AC-US	3-Aug-22	24.4	8.3	1448	46.6	45.8	46.6
R5b-AC-US	5-Aug-22	24.4	8.5	1625	2571	2563	2571
R5b-AC-US	4-Sep-22	18.6	9	2000	OR		
R5b-AC-US	15-Sep-22	21.8	8.8	854	20	19.8	20
R5b-AC-US	17-Sep-22	11.9	8	3010	OR		
R5b-AC-US	27-Sep-22	19.1	8.7	1172	3290	3285	3290
R5b-AC-US	28-Sep-22	21.2	8.7	918	34.3	34.6	34.3
R5b-AC-US	1-Oct-22	18.6	9.2	1307	1113	1111	1113
R5b-AC-US	24-Oct-22	8	8.7	849	2389	2369	2389
R5b-AC-US	27-Oct-22	9.1	9	717	118	118	118
R5b-AC-US	29-Oct-22	5	8.6	1148	68.1	69	68.1
R5b-AC-US	15-Nov-22	4.1	9.6	1047	7.7	7.7	7.7
R5b-P2-Sump	10-Feb-22	2.6	8.6	354	OR		
R5b-P2-Sump	19-Mar-22	2.5	7.9	646	23.4	23.3	23.4
R5b-P2-Sump	20-Mar-22	5.4	7.7	672	13.5	13.5	13.5
R5b-P2-Sump	21-Mar-22	8.8	7.9	630	16.6	16.6	16.6
R5b-P2-Sump	22-Mar-22	3.7	7.6	757	18.6	18.4	18.6
R5b-P2-Sump	23-Mar-22	5.3	7.6	746	18.3	18.3	18.3
R5b-P2-Sump	24-Mar-22	5.4	7.8	781	16.5	16.5	16.5
R5b-P2-Sump	25-Mar-22	3.3	7.5	786	14.2	14.1	14.2
R5b-P2-Sump	26-Mar-22	3.4	8	787	8.5	8.3	8.5
R5b-P2-Sump	28-Mar-22	5.1	7.9	798	7.1	7.1	7.1
R5b-P2-Sump	29-Mar-22	4.8	8.3	798	14.8	14.8	14.8
R5b-P2-Sump	30-Mar-22	5.9	7.9	749	11.4	11.5	11.4
R5b-P2-Sump	31-Mar-22	6.4	8.4	821	15.7	15.7	15.7
R5b-P2-Sump	3-Apr-22	6	8.2	797	13.8	13.8	13.8
R5b-P2-Sump	5-Apr-22	7.5	8.4	675	12.5	12.5	12.5
R5b-P2-Sump	6-Apr-22	11.5	8.2	655	12.9	13	12.9
R5b-P2-Sump	7-Apr-22	10.8	8.3	669	12.7	12.6	12.7
R5b-P2-Sump	10-Apr-22	5	8.5	685	18.7	18.7	18.7
R5b-P2-Sump	13-Apr-22	6.9	8.3	730	8.7	8.7	8.7
R5b-P2-Sump	14-Apr-22	3.6	8.1	757	7.1	7	7.1
R5b-P2-Sump	15-Apr-22	3.9	8.2	527	14	13.7	14
R5b-P2-Sump	16-Apr-22	3.8	8.3	573	7.2	7.1	7.2
R5b-P2-Sump	17-Apr-22	3	8.6	401	5.3	5.2	5.3
R5b-P2-Sump	18-Apr-22	2.5	8	693	3.9	4	3.9
R5b-P2-Sump	19-Apr-22	1.8	7.8	686	8.7	8.7	8.7
R5b-P2-Sump	20-Apr-22	2	8.1	642	4.5	4.4	4.5
R5b-P2-Sump	21-Apr-22	3	8.7	520	3.9	3.9	3.9
R5b-P2-Sump	22-Apr-22	8.1	8.3	785	14.9	15.5	14.9
R5b-P2-Sump	23-Apr-22	7.4	8.1	840	4.6	4.6	4.6
R5b-P2-Sump	24-Apr-22	7.9	8.3	711	4.8	4.9	4.8
R5b-P2-Sump	28-Apr-22	6.1	8.2	1223	53.5	53.5	53.5
R5b-P2-Sump	29-Apr-22	7.8	7.2	1266	18.1	18.2	18.1
R5b-P2-Sump	3-May-22	10.6	7.9	1339	5.2	5.2	5.2
R5b-P2-Sump	4-May-22	11.6	8.5	1455	12.6	12.7	12.6
R5b-P2-Sump	5-May-22	12.5	8.5	1439	10.7	10.7	10.7
R5b-P2-Sump	6-May-22	9.4	8.5	1497	42.6	42.7	42.6
R5b-P2-Sump	7-May-22	7.9	8.5	1605	53.9	53.5	53.9
R5b-P2-Sump	8-May-22	8.1	8.2	1640	25.6	25.5	25.6
R5b-P2-Sump	9-May-22	6.6	8.3	1701	19.3	19.3	19.3
R5b-P2-Sump	10-May-22	11.7	8.4	1525	11.2	11.2	11.2
R5b-P2-Sump	11-May-22	12.1	8	1588	8.9	8.8	8.9
R5b-P2-Sump	12-May-22	12.1	8	1609	11.4	11.4	11.4
R5b-P2-Sump	13-May-22	14.8	8.1	1431	11	10.9	11
R5b-P2-Sump	14-May-22	12.4	8.2	1562	13.1	13.2	13.1
R5b-P2-Sump	15-May-22	12.6	8.4	1552	7.7	7.7	7.7
R5b-P2-Sump	16-May-22	15.9	8.3	1364	15.8	15.7	15.8
R5b-P2-Sump	17-May-22	14.5	8.4	1408	19.4	19.3	19.4
R5b-P2-Sump	19-May-22	12.5	8.4	1993	11.3	11.3	11.3
R5b-P2-Sump	20-May-22	13	8.5	1747	10.5	10.5	10.5
R5b-P2-Sump	21-May-22	21.1	8.7	978	20.5	20.5	20.5
R5b-P2-Sump	22-May-22	18.6	8.6	1714	13.2	13.2	13.2
R5b-P2-Sump	24-May-22	17.1	8.7	1746	6.7	6.9	6.7
R5b-P2-Sump	25-May-22	16.4	8.6	1600	7	7	7
R5b-P2-Sump	26-May-22	15.4	8.6	1667	6.3	6.3	6.3
R5b-P2-Sump	27-May-22	15.2	8.6	1639	14.6	14.6	14.6
R5b-P2-Sump	28-May-22	12.1	8.4	1643	53.1	52.6	53.1

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
R5b-P2-Sump	29-May-22	15	8.2	1991	26.6	26.9	26.6
R5b-P2-Sump	30-May-22	17.1	8.2	1855	45.4	45.7	45.4
R5b-P2-Sump	31-May-22	19.6	8.5	1823	35	35.1	35
R5b-P2-Sump	1-Jun-22	20.9	8.5	1709	20.4	20.4	20.4
R5b-P2-Sump	2-Jun-22	21.8	8.7	1725	39.1	38.5	39.1
R5b-P2-Sump	3-Jun-22	21.1	8.8	1718	22.9	22.4	22.9
R5b-P2-Sump	4-Jun-22	19.8	8.9	1654	16.4	16.1	16.4
R5b-P2-Sump	5-Jun-22	18.8	8.8	1318	75.4	75.6	75.4
R5b-P2-Sump	6-Jun-22	15	8.9	1417	17.1	17.1	17.1
R5b-P2-Sump	7-Jun-22	21.5	8.8	1268	16.6	16.6	16.6
R5b-P2-Sump	8-Jun-22	20.9	8.8	1150	20	20	20
R5b-P2-Sump	10-Jun-22	21	8.5	1113.7	21.8	21.8	21.8
R5b-P2-Sump	11-Jun-22	21.4	8.6	1147	21.6	21.7	21.6
R5b-P2-Sump	15-Jun-22	20	8.5	1093	16.6	16.6	16.6
R5b-P2-Sump	16-Jun-22	22.1	8.4	1210	25.3	25.3	25.3
R5b-P2-Sump	17-Jun-22	15.4	8.5	1370	84	83.6	84
R5b-P2-Sump	18-Jun-22	18.3	8.6	1498	21.9	22	21.9
R5b-P2-Sump	19-Jun-22	22.4	8.8	1563	77.9	78	77.9
R5b-P2-Sump	20-Jun-22	25.7	8.8	1295	51.2	51	51.2
R5b-P2-Sump	22-Jun-22	19.6	8.9	1197	36.1	35.8	36.1
R5b-P2-Sump	23-Jun-22	16.4	8.8	1075	33.8	33.7	33.8
R5b-P2-Sump	24-Jun-22	17.3	8.8	1152	33.1	33.3	33.1
R5b-P2-Sump	25-Jun-22	21	8.7	1140	19.4	19.3	19.4
R5b-P2-Sump	26-Jun-22	21.6	8.8	1065	27.4	27.3	27.4
R5b-P2-Sump	27-Jun-22	18.8	8.7	1129	34.1	34.3	34.1
R5b-P2-Sump	28-Jun-22	22.6	8.8	1072	53	52.9	53
R5b-P2-Sump	30-Jun-22	26.2	8.9	1011	26	25.9	26
R5b-P2-Sump	1-Jul-22	21	8.8	1019	28.1	28.1	28.1
R5b-P2-Sump	3-Jul-22	24.4	8.7	1005	20.9	20.8	20.9
R5b-P2-Sump	5-Jul-22	21	8.7	1038	19.8	19.8	19.8
R5b-P2-Sump	6-Jul-22	23.7	8.6	1079	30.2	30.5	30.2
R5b-P2-Sump	7-Jul-22	22.7	8.5	1070	21.5	21.4	21.5
R5b-P2-Sump	8-Jul-22	23.2	8.6	1016	26	26.1	26
R5b-P2-Sump	9-Jul-22	21.3	8.6	1099	37.6	37.5	37.6
R5b-P2-Sump	10-Jul-22	23.2	8.5	1127	72.7	72.1	72.7
R5b-P2-Sump	11-Jul-22	25.5	8.4	1147	59.9	61.1	59.9
R5b-P2-Sump	12-Jul-22	24.4	8.5	1136	61.7	61.2	61.7
R5b-P2-Sump	13-Jul-22	21.3	8.6	1056	77.8	76.7	77.8
R5b-P2-Sump	14-Jul-22	20	8.5	1113	56.4	57.1	56.4
R5b-P2-Sump	15-Jul-22	24.4	8.6	1147	38.9	39.1	38.9
R5b-P2-Sump	16-Jul-22	24.9	8.9	997	34	33	34
R5b-P2-Sump	17-Jul-22	22.7	8.7	1131	74.2	74.6	74.2
R5b-P2-Sump	20-Jul-22	25.7	8.8	1075	44.4	44.5	44.4
R5b-P2-Sump	23-Jul-22	22.1	8.7	1058	31.5	31.5	31.5
R5b-P2-Sump	26-Jul-22	27.8	8.8	1128	26	26	26
R5b-P2-Sump	27-Jul-22	29	8.6	1062	17.8	17.8	17.8
R5b-P2-Sump	28-Jul-22	29.5	8.6	1044	24.9	24.5	24.9
R5b-P2-Sump	29-Jul-22	28.9	8.6	1128	53.8	53.2	53.8
R5b-P2-Sump	31-Jul-22	23	8.6	1131	78.6	78.2	78.6
R5b-P2-Sump	1-Aug-22	24.6	8.9	1139	21.6	21.3	21.6
R5b-P2-Sump	2-Aug-22	22.8	8.4	1220	15.4	15	15.4
R5b-P2-Sump	3-Aug-22	23.8	8.6	1379	13.1	13.1	13.1
R5b-P2-Sump	5-Aug-22	24.6	8.6	1615	31.1	31.2	31.1
R5b-P2-Sump	6-Aug-22	23.4	8.8	1525	15.7	15.7	15.7
R5b-P2-Sump	7-Aug-22	23.2	8.8	1595	16	15.2	16
R5b-P2-Sump	10-Aug-22	28	8.8	1353	18.8	18.7	18.8
R5b-P2-Sump	14-Aug-22	20.1	8.8	1289	21.7	21.5	21.7
R5b-P2-Sump	26-Aug-22	26.7	8.9	1214	77.7	77.6	77.7
R5b-P2-Sump	27-Aug-22	19.8	9.1	1196	64.2	64.2	64.2
R5b-P2-Sump	31-Aug-22	24	9.2	1212	54.8	54.6	54.8
R5b-P2-Sump	2-Sep-22	25.7	9.1	1205	48.5	48.4	48.5
R5b-P2-Sump	5-Sep-22	18.3	9	1292	57.1	57.1	57.1
R5b-P2-Sump	6-Sep-22	15.8	8.6	1398	64.4	64.7	64.4
R5b-P2-Sump	7-Sep-22	18	8.4	1293	46.1	46.1	46.1
R5b-P2-Sump	8-Sep-22	15.4	8.4	1308	50.7	51	50.7
R5b-P2-Sump	9-Sep-22	15.2	8.4	1311	61.5	60.9	61.5
R5b-P2-Sump	12-Sep-22	20.1	9	1265	90.2	90.3	90.2
R5b-P2-Sump	13-Sep-22	18.8	9	1229	36.3	36.3	36.3
R5b-P2-Sump	14-Sep-22	17.4	9.1	1199	25.6	25.7	25.6
R5b-P2-Sump	15-Sep-22	20.7	9	1113	37.6	37.5	37.6
R5b-P2-Sump	16-Sep-22	13.1	9	1198	30.5	30.1	30.5
R5b-P2-Sump	17-Sep-22	11	8.8	1748	29.2	29.5	29.2
R5b-P2-Sump	20-Sep-22	19	9	1032	28	28	28
R5b-P2-Sump	23-Sep-22	13.9	8.9	1191	47.3	47.3	47.3
R5b-P2-Sump	24-Sep-22	14.1	9.2	1239	43.1	42.9	43.1
R5b-P2-Sump	25-Sep-22	16.1	9.2	1153	43.1	42.9	43.1
R5b-P2-Sump	26-Sep-22	13.5	9.1	1216	40.2	40.3	40.2
R5b-P2-Sump	27-Sep-22	15.5	9	1284	27.7	27.8	27.7
R5b-P2-Sump	28-Sep-22	21.1	9	1170	39.9	39.9	39.9
R5b-P2-Sump	29-Sep-22	15.7	8.8	1277	46.2	46.3	46.2
R5b-P2-Sump	3-Oct-22	13.9	7.9	1206	163	163	163
R5b-P2-Sump	4-Oct-22	11.7	7.9	1105	57	57	57
R5b-P2-Sump	5-Oct-22	13.3	8.6	1259	81.4	80.8	81.4
R5b-P2-Sump	6-Oct-22	10.2	8.5	1210	63.6	64.2	63.6
R5b-P2-Sump	7-Oct-22	9	8.4	1198	50	49.9	50
R5b-P2-Sump	8-Oct-22	8.7	8.9	1208	35.7	35.7	35.7
R5b-P2-Sump	9-Oct-22	11.8	8.3	1175	25.6	25.6	25.6
R5b-P2-Sump	10-Oct-22	11.7	8.3	1256	58.7	58.9	58.7
R5b-P2-Sump	11-Oct-22	10.1	8.9	1081	75.7	75.6	75.7
R5b-P2-Sump	12-Oct-22	8.4	8.9	1082	77.7	77.8	77.7
R5b-P2-Sump	13-Oct-22	13.5	8.6	1095	51.3	51.3	51.3
R5b-P2-Sump	14-Oct-22	13.2	8.3	1108	68.9	68.7	68.9
R5b-P2-Sump	15-Oct-22	11.5	9.6	1012	81.1	81.1	81.1
R5b-P2-Sump	17-Oct-22	6	9.2	1118	167	167	167
R5b-P2-Sump	18-Oct-22	13.2	9	1130	250	251	250
R5b-P2-Sump	19-Oct-22	13.6	9.1	1243	163	162	163
R5b-P2-Sump	20-Oct-22	12.2	9.1	1173	160	162	160
R5b-P2-Sump	21-Oct-22	9.9	9.2	1207	129	129	129
R5b-P2-Sump	22-Oct-22	5.7	9.1	1225	108.9	109.3	108.9

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
R5b-P2-Sump	23-Oct-22	5.3	9.2	1267	61.6	61.6	61.6
R5b-P2-Sump	24-Oct-22	4.6	9.2	1272	59.3	59.8	59.3
R5b-P2-Sump	25-Oct-22	6.1	8.5	1076	53.5	54.2	53.5
R5b-P2-Sump	26-Oct-22	3.2	8	1246	40	40.6	40
R5b-P2-Sump	27-Oct-22	5.5	8.3	1254	97.4	96.8	97.4
R5b-P2-Sump	28-Oct-22	5.2	7.9	1208	53.4	53.4	53.4
R5b-P2-W-Sump	10-Feb-22	3.7	8	358	OR		
R5b-P2-W-Sump	28-May-22	10.3	7.6	1862	65.2	65.5	65.2
RBAC-Sump	1-Jan-22	5	8	1058	4	4	4
RBAC-Sump	2-Jan-22	6.5	7.5	1458	19.7	19.9	19.7
RBAC-Sump	3-Jan-22	3.9	7.8	1312	13.4	13.5	13.4
RBAC-Sump	4-Jan-22	4.5	8.2	926	20.9	20.8	20.9
RBAC-Sump	5-Jan-22	-0.2	8.1	933	6.9	6.9	6.9
RBAC-Sump	8-Jan-22	10.6	8.1	1202	36.2	35.8	36.2
RBAC-Sump	9-Jan-22	10.6	8.1	1202	36.2	35.8	36.2
RBAC-Sump	11-Jan-22	6.1	8.2	906	4.7	4.7	4.7
RBAC-Sump	13-Jan-22	2.7	8.3	938	7	7	7
RBAC-Sump	15-Jan-22	6.7	8.4	1283	59	59	59
RBAC-Sump	18-Jan-22	5.3	8.1	920	23.4	23.3	23.4
RBAC-Sump	19-Jan-22	2.2	8.4	1506	39.3	39.1	39.3
RBAC-Sump	20-Jan-22	6.6	8.2	1057	20.3	20.3	20.3
RBAC-Sump	22-Jan-22	6.3	8.3	924	42.1	42.3	42.1
RBAC-Sump	24-Jan-22	8.8	8	889	6.5	6.3	6.5
RBAC-Sump	25-Jan-22	8.7	8.1	803	6.9	6.8	6.9
RBAC-Sump	26-Jan-22	7.6	8	819	3.4	3.3	3.4
RBAC-Sump	28-Jan-22	7.9	8.3	934	5.8	5.8	5.8
RBAC-Sump	29-Jan-22	6.2	9.7	438	82.3	82.4	82.3
RBAC-Sump	30-Jan-22	6.5	8.6	781	31	28	31
RBAC-Sump	1-Feb-22	5	8.6	1240	48	47.9	48
RBAC-Sump	2-Feb-22	2.6	8.5	850	5.5	5.5	5.5
RBAC-Sump	4-Feb-22	3.6	8.2	976	4.5	4.5	4.5
RBAC-Sump	6-Feb-22	9.7	8.1	1071	13.5	13.6	13.5
RBAC-Sump	8-Feb-22	7.3	8.1	770	79.1	78.7	79.1
RBAC-Sump	10-Feb-22	4.2	8.2	643	2723	2719	2723
RBAC-Sump	12-Feb-22	9.1	9.1	324	61	60.7	61
RBAC-Sump	15-Feb-22	4.6	8.3	573	28.8	28.9	28.8
RBAC-Sump	16-Feb-22	4.4	8.9	404	37.8	38	37.8
RBAC-Sump	17-Feb-22	6.2	11.6	393	35.8	35.6	35.8
RBAC-Sump	18-Feb-22	4.5	9.2	463	21.2	21.3	21.2
RBAC-Sump	19-Feb-22	2.4	9.4	335	22.9	23.1	22.9
RBAC-Sump	20-Feb-22	5.2	7.8	673	8.9	8.9	8.9
RBAC-Sump	22-Feb-22	6.5	8.6	273	21.1	21	21.1
RBAC-Sump	24-Feb-22	5.6	8.3	365	55	55	55
RBAC-Sump	25-Feb-22	6.9	8.8	358	64.1	64	64.1
RBAC-Sump	27-Feb-22	7.5	8.3	423	37.5	37.5	37.5
RBAC-Sump	1-Mar-22	7.7	8.3	302	37.3	37.4	37.3
RBAC-Sump	3-Mar-22	8.8	7.5	967	4.3	4.3	4.3
RBAC-Sump	5-Mar-22	7.2	7.7	777	3	2.9	3
RBAC-Sump	6-Mar-22	9.4	8.2	302	26.6	26.6	26.6
RBAC-Sump	7-Mar-22	7	7.8	945	2.8	2.8	2.8
RBAC-Sump	10-Mar-22	7.2	8	883	3.4	3.3	3.4
RBAC-Sump	12-Mar-22	8.1	7.7	967	4.3	4.3	4.3
RBAC-Sump	20-Mar-22	6	8.8	587	95	105	95
RBAC-Sump	22-Mar-22	7.3	7.6	999	655	654	655
RBAC-Sump	24-Mar-22	6.4	7.2	2540	19	18	19
RBAC-Sump	26-Mar-22	3.5	7.5	1037	40.9	41	40.9
RBAC-Sump	29-Mar-22	4.2	7.5	966	46	45	46
RBAC-Sump	31-Mar-22	5	7.5	944	90	91	90
RSEM-R5a-A	17-Mar-22	2.6	8.2	243	1617	1617	1617
RSEM-R5a-A-EOP	19-Aug-22	23.1	8.5	1316	18.6	18.6	18.6
RSEM-R5a-B-EOP	17-Mar-22	1.2	8.2	234	826	826	826
RSEM-R5a-CP	30-Oct-22				3.4	3	3.4
RSEM-R5b-SP	16-Oct-22	11.2	9.4	1114	235	235	235
RSEM-R6-EEOP	23-Jan-22	3.8	8.1	366	49.6	49.6	49.6
RSEM-R6-EEOP	8-Feb-22	1.4	7.7	522	39.2	39	39.2
RSEM-R6-EEOP	12-Feb-22	0.3	7.2	558	10.4	10.4	10.4
RSEM-R6-EEOP	13-Feb-22	1.4	8.2	450	7.1	7.1	7.1
RSEM-R6-EEOP	14-Feb-22	0.6	7.6	455	7.4	7.4	7.4
RSEM-R6-EEOP	15-Feb-22	0.4	7.9	406	17.2	17.1	17.2
RSEM-R6-EEOP	16-Feb-22	1.4	8.3	546	6.5	6.5	6.5
RSEM-R6-EEOP	17-Mar-22	3.6	7.9	518	1353	1357	1353
RSEM-R6-EEOP	18-Mar-22	3.3	7.8	653	13.1	13.2	13.1
RSEM-R6-EEOP	8-Apr-22	2.8	8.2	484	44.3	44.3	44.3
RSEM-R6-EEOP	10-Apr-22	1.5	8.2	607	12.2	12.2	12.2
RSEM-R6-EEOP	11-Apr-22	0.1	8.1	605	11	11.1	11
RSEM-R6-EEOP	12-Apr-22	1.3	8.1	675	11.1	11.2	11.1
RSEM-R6-EEOP	13-Apr-22	2.2	8	683	7.8	7.7	7.8
RSEM-R6-EEOP	14-Apr-22	2.2	8	681	5.6	5.6	5.6
RSEM-R6-EEOP	15-Apr-22	3.2	8.2	693	5.5	5.6	5.5
RSEM-R6-EEOP	16-Apr-22	3.5	8	671	5.3	5.2	5.3
RSEM-R6-EEOP	17-Apr-22	3.3	8.2	632	5	5	5
RSEM-R6-EEOP	18-Apr-22	1.9	8.1	697	4.4	4.4	4.4
RSEM-R6-EEOP	19-Apr-22	2.1	8.1	692	4.3	4.2	4.3
RSEM-R6-EEOP	20-Apr-22	3.4	8.5	832	4.5	4.5	4.5
RSEM-R6-EEOP	21-Apr-22	3.6	8.3	829	4.3	4.2	4.3
RSEM-R6-EEOP	22-Apr-22	3.7	8	688	4.3	4.3	4.3
RSEM-R6-EEOP	23-Apr-22	6.8	8.1	782	8	7.9	8
RSEM-R6-EEOP	24-Apr-22	6.1	8.3	793	5.6	5.6	5.6
RSEM-R6-EEOP	25-Apr-22	6.1	8.1	749	6.1	6.1	6.1
RSEM-R6-EEOP	26-Apr-22	6.7	8.3	705	8.3	8.3	8.3
RSEM-R6-EEOP	27-Apr-22	8.2	8.3	721	9.1	9.1	9.1
RSEM-R6-EEOP	28-Apr-22	3.9	8.3	536	30.8	30.9	30.8
RSEM-R6-EEOP	29-Apr-22	3.3	8.3	566	21.5	21.5	21.5
RSEM-R6-EEOP	30-Apr-22	7.4	8.1	617	13.2	13.2	13.2
RSEM-R6-EEOP	1-May-22	6.4	7.8	469	11	11	11
RSEM-R6-EEOP	2-May-22	7.8	8.2	699	8.7	8.7	8.7
RSEM-R6-EEOP	3-May-22	8.7	8.1	795	11	10.9	11
RSEM-R6-EEOP	4-May-22	9.2	8.4	805	11.1	11.1	11.1
RSEM-R6-EEOP	5-May-22	10.9	8.6	796	7.3	7.4	7.3

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6-EEOP	6-May-22	10.2	8.4	797	9.3	9.2	9.3
RSEM-R6-EEOP	7-May-22	8.4	8.3	798	12.8	12.6	12.8
RSEM-R6-EEOP	8-May-22	7.6	8.4	799	8.3	8.3	8.3
RSEM-R6-EEOP	9-May-22	6.5	8.3	820	8.7	8.6	8.7
RSEM-R6-EEOP	10-May-22	7.9	8.4	822	6.5	6.4	6.5
RSEM-R6-EEOP	11-May-22	9.8	8.3	843	5.7	5.7	5.7
RSEM-R6-EEOP	12-May-22	11.3	8.1	840	5.8	5.8	5.8
RSEM-R6-EEOP	13-May-22	12.1	8.3	850	4.4	4.4	4.4
RSEM-R6-EEOP	14-May-22	13.4	8.3	852	4.6	4.6	4.6
RSEM-R6-EEOP	15-May-22	12.5	8.3	856	7.7	7.9	7.7
RSEM-R6-EEOP	16-May-22	14.1	8.3	864	4.4	4.4	4.4
RSEM-R6-EEOP	17-May-22	12.5	8.4	867	4.8	4.8	4.8
RSEM-R6-EEOP	18-May-22	13.8	8.4	965	6.1	6.1	6.1
RSEM-R6-EEOP	19-May-22	11.2	8.4	1395	4.4	4.4	4.4
RSEM-R6-EEOP	20-May-22	12.2	8.5	1195	7.6	7.6	7.6
RSEM-R6-EEOP	21-May-22	14	8.4	1170	20.9	20.8	20.9
RSEM-R6-EEOP	22-May-22	15.7	8.4	1030	9.2	9.2	9.2
RSEM-R6-EEOP	23-May-22	15.4	8.5	991	5.9	5.9	5.9
RSEM-R6-EEOP	24-May-22	14.2	8.5	970	4.8	4.7	4.8
RSEM-R6-EEOP	25-May-22	15.8	8.4	874	4.9	4.9	4.9
RSEM-R6-EEOP	26-May-22	15.6	8.2	868	5.1	4.9	5.1
RSEM-R6-EEOP	27-May-22	15.2	8.2	846	8.6	8.6	8.6
RSEM-R6-EEOP	28-May-22	12.4	8.2	1112	16.4	16.4	16.4
RSEM-R6-EEOP	29-May-22	15.2	8.1	1087	8.9	8.8	8.9
RSEM-R6-EEOP	30-May-22	18.5	8.2	1021	7.7	7.7	7.7
RSEM-R6-EEOP	31-May-22	17.9	8.4	1021	6.7	6.6	6.7
RSEM-R6-EEOP	1-Jun-22	18.7	8.6	1007	7.2	7.2	7.2
RSEM-R6-EEOP	2-Jun-22	18.8	8.4	926	5.8	5.8	5.8
RSEM-R6-EEOP	3-Jun-22	21.1	8.4	923	5.8	5.9	5.8
RSEM-R6-EEOP	4-Jun-22	17.8	8.5	833	5.5	5.4	5.5
RSEM-R6-EEOP	5-Jun-22	17.6	8.5	771	5.7	5.8	5.7
RSEM-R6-EEOP	6-Jun-22	16.3	8.4	758	5.8	5.7	5.8
RSEM-R6-EEOP	7-Jun-22	17.1	8.4	749	8.5	8.5	8.5
RSEM-R6-EEOP	8-Jun-22	19.4	8.4	739	8.8	8.8	8.8
RSEM-R6-EEOP	9-Jun-22	19.4	8.3	734	8.4	8.4	8.4
RSEM-R6-EEOP	10-Jun-22	18.3	8.1	718	6.5	6.5	6.5
RSEM-R6-EEOP	11-Jun-22	17.5	8.3	712	7	7	7
RSEM-R6-EEOP	12-Jun-22	17.1	8.3	694	7.6	7.6	7.6
RSEM-R6-EEOP	13-Jun-22	18	7.9	677	6.8	6.8	6.8
RSEM-R6-EEOP	14-Jun-22	16.8	8.2	657	8	8	8
RSEM-R6-EEOP	15-Jun-22	17.3	8.2	700	9	9.1	9
RSEM-R6-EEOP	16-Jun-22	20.6	8.2	641	7.8	7.8	7.8
RSEM-R6-EEOP	17-Jun-22	15.7	8.2	681	16.3	16.5	16.3
RSEM-R6-EEOP	18-Jun-22	16.1	8.5	696	9.3	9.3	9.3
RSEM-R6-EEOP	19-Jun-22	17.5	8.4	726	9.5	9.4	9.5
RSEM-R6-EEOP	20-Jun-22	18.2	8.5	713	8.5	8.6	8.5
RSEM-R6-EEOP	21-Jun-22	19.5	8.4	700	10.6	10.7	10.6
RSEM-R6-EEOP	22-Jun-22	19.8	8.4	654	8.7	8.7	8.7
RSEM-R6-EEOP	23-Jun-22	17.3	8.5	638	7.9	8	7.9
RSEM-R6-EEOP	24-Jun-22	17	8.6	668	11	10.8	11
RSEM-R6-EEOP	25-Jun-22	19.4	8.6	617	12.2	11.8	12.2
RSEM-R6-EEOP	26-Jun-22	19.8	8.5	633	11.2	11.3	11.2
RSEM-R6-EEOP	27-Jun-22	19.5	8.5	665	6.9	6.9	6.9
RSEM-R6-EEOP	28-Jun-22	21	8.5	592	7.7	7.7	7.7
RSEM-R6-EEOP	28-Jun-22	21.3	7	1323	4.9	4.9	4.9
RSEM-R6-EEOP	29-Jun-22	21	8.3	588	7.8	7.8	7.8
RSEM-R6-EEOP	30-Jun-22	21	8.2	581	10	10	10
RSEM-R6-EEOP	1-Jul-22	19.3	8.2	577	8.4	8.4	8.4
RSEM-R6-EEOP	2-Jul-22	19.6	8.3	591	6.7	6.7	6.7
RSEM-R6-EEOP	3-Jul-22	19.4	8.2	1267	8.7	8.7	8.7
RSEM-R6-EEOP	4-Jul-22	20.2	8.3	576	10.6	10.6	10.6
RSEM-R6-EEOP	5-Jul-22	18.6	8.4	593	15.1	15	15.1
RSEM-R6-EEOP	6-Jul-22	21	8.3	632	7.7	7.6	7.7
RSEM-R6-EEOP	7-Jul-22	21.2	8.2	648	10.9	10.7	10.9
RSEM-R6-EEOP	8-Jul-22	21.3	8.4	623	13.8	13.5	13.8
RSEM-R6-EEOP	9-Jul-22	19.7	8.4	622	9.4	9.3	9.4
RSEM-R6-EEOP	10-Jul-22	20.3	8.3	606	8.6	8.6	8.6
RSEM-R6-EEOP	11-Jul-22	20.4	8.3	597	6.8	6.8	6.8
RSEM-R6-EEOP	12-Jul-22	21	8.3	598	6.4	6.3	6.4
RSEM-R6-EEOP	13-Jul-22	19	8.4	612	6.5	6.4	6.5
RSEM-R6-EEOP	14-Jul-22	19.1	8.3	609	7.3	7.2	7.3
RSEM-R6-EEOP	15-Jul-22	20.8	8.5	590	8.5	8.4	8.5
RSEM-R6-EEOP	16-Jul-22	20.3	8.4	605	7.7	7.7	7.7
RSEM-R6-EEOP	17-Jul-22	20.2	8.4	606	8.4	8.4	8.4
RSEM-R6-EEOP	18-Jul-22	22.6	8.1	551	7.8	7.8	7.8
RSEM-R6-EEOP	19-Jul-22	20.6	8.4	559	7	7	7
RSEM-R6-EEOP	20-Jul-22	23	8.4	571	10	10	10
RSEM-R6-EEOP	21-Jul-22	21.8	8.3	596	10.3	10.3	10.3
RSEM-R6-EEOP	22-Jul-22	20.1	8.3	611	11.2	11.1	11.2
RSEM-R6-EEOP	23-Jul-22	20	8.4	584	10	10	10
RSEM-R6-EEOP	24-Jul-22	22.2	8.3	608	11.5	11.5	11.5
RSEM-R6-EEOP	25-Jul-22	19.5	8.3	611	9	9	9
RSEM-R6-EEOP	26-Jul-22	22.7	8.3	580	8.2	8.2	8.2
RSEM-R6-EEOP	27-Jul-22	25.3	8.2	565	9.8	9.9	9.8
RSEM-R6-EEOP	28-Jul-22	26.4	8.2	589	9.1	9	9.1
RSEM-R6-EEOP	29-Jul-22	24.6	8.3	567	7.2	7.2	7.2
RSEM-R6-EEOP	30-Jul-22	22.8	8.3	584	7.5	7.5	7.5
RSEM-R6-EEOP	31-Jul-22	22.6	8.3	595	5.8	5.8	5.8
RSEM-R6-EEOP	1-Aug-22	23	8.3	592	7.4	7.4	7.4
RSEM-R6-EEOP	2-Aug-22	21.5	8.1	1044	9.7	9.7	9.7
RSEM-R6-EEOP	3-Aug-22	21.5	8.2	1015	9	9	9
RSEM-R6-EEOP	4-Aug-22	19.6	8.2	857	8.4	8.3	8.4
RSEM-R6-EEOP	5-Aug-22	17.7	8.4	913	12.6	12.6	12.6
RSEM-R6-EEOP	6-Aug-22	19.3	8.3	824	10.4	10.4	10.4
RSEM-R6-EEOP	7-Aug-22	21	8.3	743	9.8	9.9	9.8
RSEM-R6-EEOP	8-Aug-22	21.4	8.4	626	9.1	9.1	9.1
RSEM-R6-EEOP	9-Aug-22	22.3	8.2	611	7.1	7.1	7.1
RSEM-R6-EEOP	10-Aug-22	23.8	8.4	559	8.3	8.3	8.3
RSEM-R6-EEOP	11-Aug-22	22.2	8.5	523	8.1	8.1	8.1

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6-EEOP	12-Aug-22	21.3	8.5	498	8.5	8.5	8.5
RSEM-R6-EEOP	13-Aug-22	21.1	8.1	479	9.5	9.5	9.5
RSEM-R6-EEOP	14-Aug-22	19.3	8.4	497	9.5	9.5	9.5
RSEM-R6-EEOP	15-Aug-22	21	8.3	601	5.6	5.6	5.6
RSEM-R6-EEOP	16-Aug-22	20.7	7.8	576	11	11	11
RSEM-R6-EEOP	17-Aug-22	21.7	8.3	577	10.8	10.8	10.8
RSEM-R6-EEOP	18-Aug-22	22.2	8.4	551	9.4	9.4	9.4
RSEM-R6-EEOP	19-Aug-22	21.9	8.4	534	9.3	9.3	9.3
RSEM-R6-EEOP	20-Aug-22	23.4	8.4	531	9.7	9.7	9.7
RSEM-R6-EEOP	21-Aug-22	22.4	8.5	506	6.9	6.9	6.9
RSEM-R6-EEOP	22-Aug-22	23.8	8.5	503	9.6	9.6	9.6
RSEM-R6-EEOP	23-Aug-22	23.7	8.5	511	9	9	9
RSEM-R6-EEOP	24-Aug-22	24.2	8.5	504	7.5	7.5	7.5
RSEM-R6-EEOP	25-Aug-22	24.5	8.5	499	11.8	11.6	11.8
RSEM-R6-EEOP	26-Aug-22	21.7	8.2	499	12.1	12.1	12.1
RSEM-R6-EEOP	27-Aug-22	21.1	8.1	511	9.4	9.4	9.4
RSEM-R6-EEOP	28-Aug-22	19.4	8.4	523	9.1	9.1	9.1
RSEM-R6-EEOP	29-Aug-22	19.8	8.4	527	13.2	13.2	13.2
RSEM-R6-EEOP	30-Aug-22	21.9	8.5	530	14.5	14.5	14.5
RSEM-R6-EEOP	31-Aug-22	20.1	8.4	511	12	11.7	12
RSEM-R6-EEOP	1-Sep-22	18.8	8.3	509	15.1	15.1	15.1
RSEM-R6-EEOP	2-Sep-22	15.7	8.2	526	14.5	14.5	14.5
RSEM-R6-EEOP	3-Sep-22	19.8	8.4	513	16.1	16.1	16.1
RSEM-R6-EEOP	4-Sep-22	18.8	8.3	524	16.3	16.3	16.3
RSEM-R6-EEOP	5-Sep-22	17.9	8.5	530	16.1	16.1	16.1
RSEM-R6-EEOP	6-Sep-22	17.7	8.5	517	6.2	6.2	6.2
RSEM-R6-EEOP	7-Sep-22	16.6	8	521	7.6	7.7	7.6
RSEM-R6-EEOP	8-Sep-22	17.1	8.1	482	11.6	11.6	11.6
RSEM-R6-EEOP	9-Sep-22	13.8	8.1	515	11.9	11.8	11.9
RSEM-R6-EEOP	10-Sep-22	17.2	8.2	498	12	12.1	12
RSEM-R6-EEOP	11-Sep-22	15.2	8.2	565	10.1	10.1	10.1
RSEM-R6-EEOP	12-Sep-22	13	8.3	527	11	10.6	11
RSEM-R6-EEOP	13-Sep-22	14.6	8.3	488	10.1	10.1	10.1
RSEM-R6-EEOP	14-Sep-22	14.2	8.3	483	13.7	13.3	13.7
RSEM-R6-EEOP	15-Sep-22	13.6	8.5	495	8	7.9	8
RSEM-R6-EEOP	16-Sep-22	13	8.6	490	6.8	6.8	6.8
RSEM-R6-EEOP	17-Sep-22	12.6	8.4	636	8.2	8.2	8.2
RSEM-R6-EEOP	18-Sep-22	12.8	8.4	770	19.5	19.9	19.5
RSEM-R6-EEOP	19-Sep-22	12.4	8.6	729	8.5	8.4	8.5
RSEM-R6-EEOP	20-Sep-22	13.9	8.3	497	5.6	5.6	5.6
RSEM-R6-EEOP	21-Sep-22	14.3	8.3	472	5.8	5.7	5.8
RSEM-R6-EEOP	22-Sep-22	15	8.4	457	6.7	6.7	6.7
RSEM-R6-EEOP	23-Sep-22	13.6	8.4	454	7.1	7.1	7.1
RSEM-R6-EEOP	24-Sep-22	12.4	8.3	445	5.6	5.6	5.6
RSEM-R6-EEOP	25-Sep-22	13.9	8.4	434	5.6	5.6	5.6
RSEM-R6-EEOP	26-Sep-22	12.8	8.2	425	7.5	7.5	7.5
RSEM-R6-EEOP	27-Sep-22	13.9	8.2	459	5.2	5.3	5.2
RSEM-R6-EEOP	28-Sep-22	15.3	8.3	464	7.2	7.1	7.2
RSEM-R6-EEOP	29-Sep-22	14.8	8.3	452	9.7	9.8	9.7
RSEM-R6-EEOP	30-Sep-22	13.8	8.6	438	10.7	10.6	10.7
RSEM-R6-EEOP	1-Oct-22	13.7	8.6	440	10.3	10.3	10.3
RSEM-R6-EEOP	2-Oct-22	15.3	8.7	433	18.9	18.7	18.9
RSEM-R6-EEOP	3-Oct-22	12.8	8.6	449	9.7	9.7	9.7
RSEM-R6-EEOP	4-Oct-22	12	8.2	440	16.6	16.7	16.6
RSEM-R6-EEOP	5-Oct-22	12.9	8.4	840	12.8	12.7	12.8
RSEM-R6-EEOP	6-Oct-22	10.8	8.2	473	15.1	14.6	15.1
RSEM-R6-EEOP	7-Oct-22	10.7	8.3	474	6.8	6.7	6.8
RSEM-R6-EEOP	8-Oct-22	10.1	8.5	472	6.1	6	6.1
RSEM-R6-EEOP	9-Oct-22	10	8.1	467	5.8	5.8	5.8
RSEM-R6-EEOP	10-Oct-22	12.2	8.5	503	4.7	4.7	4.7
RSEM-R6-EEOP	11-Oct-22	10.1	8.5	431	5.2	5.2	5.2
RSEM-R6-EEOP	12-Oct-22	9.8	8.6	422	7.9	7.9	7.9
RSEM-R6-EEOP	13-Oct-22	10.8	8.4	431	4.6	4.6	4.6
RSEM-R6-EEOP	14-Oct-22	12.1	8.3	427	5	5	5
RSEM-R6-EEOP	15-Oct-22	10.9	8.4	392	3.8	3.8	3.8
RSEM-R6-EEOP	16-Oct-22	10.9	8.4	405	7.3	7.3	7.3
RSEM-R6-EEOP	17-Oct-22	8.8	8.4	411	5	5	5
RSEM-R6-EEOP	18-Oct-22	9.7	8.7	486	4.8	4.8	4.8
RSEM-R6-EEOP	19-Oct-22	10.9	8.6	480	4.6	4.5	4.6
RSEM-R6-EEOP	20-Oct-22	11.7	8.5	470	6.8	6.8	6.8
RSEM-R6-EEOP	21-Oct-22	8.5	8.7	492	9.9	9.9	9.9
RSEM-R6-EEOP	22-Oct-22	7.2	8.6	498	4.7	4.7	4.7
RSEM-R6-EEOP	23-Oct-22	5.5	8.8	492	5.3	5.3	5.3
RSEM-R6-EEOP	24-Oct-22	5.7	8.6	497	3.6	3.7	3.6
RSEM-R6-EEOP	25-Oct-22	4.2	8.7	544	19.9	19.1	19.9
RSEM-R6-EEOP	26-Oct-22	4.1	8.5	543	6.5	6.5	6.5
RSEM-R6-EEOP	27-Oct-22	6.3	8.5	517	12.4	12.5	12.4
RSEM-R6-EEOP	28-Oct-22	5.5	8.4	524	14.5	14.6	14.5
RSEM-R6-EEOP	29-Oct-22	7.4	8.6	504	24.3	24.3	24.3
RSEM-R6-EEOP	30-Oct-22	5.6	8.6	508	15	15	15
RSEM-R6-EEOP	31-Oct-22	5.1	8.5	504	11.2	11.2	11.2
RSEM-R6-EEOP	1-Nov-22	1.4	8.6	423	6.9	6.9	6.9
RSEM-R6-EEOP	2-Nov-22	1.4	8.3	449	7.4	7.4	7.4
RSEM-R6-EEOP	3-Nov-22	1.5	8.3	542	11.1	11.1	11.1
RSEM-R6-EEOP	4-Nov-22	2.4	8.2	446	7.8	7.7	7.8
RSEM-R6-EEOP	5-Nov-22	2.7	8.4	447	6.2	6.2	6.2
RSEM-R6-EEOP	6-Nov-22	1.6	8.1	449	7.9	7.9	7.9
RSEM-R6-EEOP	7-Nov-22	1.2	7.9	583	8.1	8.1	8.1
RSEM-R6-EEOP	8-Nov-22	0.1	8.6	550	13	13.2	13
RSEM-R6-EEOP	9-Nov-22	1.2	8.5	544	10.4	10.4	10.4
RSEM-R6-EEOP	10-Nov-22	2.3	8.4	542	8.6	8.7	8.6
RSEM-R6-EEOP	11-Nov-22	1.2	8.4	535	8.3	8.3	8.3
RSEM-R6-EEOP	12-Nov-22	2.5	8.5	520	8	8	8
RSEM-R6-EEOP	13-Nov-22	2.5	8.5	545	9.1	9.1	9.1
RSEM-R6-EEOP	14-Nov-22	2.7	8.6	526	2.6	2.6	2.6
RSEM-R6-EEOP	15-Nov-22	1.8	8.7	520	2.2	2.2	2.2
RSEM-R6-EEOP	16-Nov-22	3	8.7	537	4.2	4.3	4.2
RSEM-R6-EEOP	17-Nov-22	4.7	8.5	461	2.6	2.5	2.6
RSEM-R6-EEOP	18-Nov-22	4.1	8.6	493	2.5	2.5	2.5

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6-EEOP	19-Nov-22	2.6	8.6	473	2.5	2.5	2.5
RSEM-R6-EEOP	20-Nov-22	2.3	8.4	543	2.2	2.2	2.2
RSEM-R6-EEOP	21-Nov-22	2.5	8.4	562	2	2	2
RSEM-R6-EEOP	22-Nov-22	2.2	8.5	473	4	4	4
RSEM-R6-EEOP	23-Nov-22	2.2	8.6	463	2.5	2.5	2.5
RSEM-R6-EEOP	24-Nov-22	2.9	8.3	476	3	3	3
RSEM-R6-EEOP	25-Nov-22	3.6	8.2	472	1.9	1.9	1.9
RSEM-R6-EEOP	26-Nov-22	3.1	8.3	474	1.8	1.8	1.8
RSEM-R6-EEOP	27-Nov-22	2.2	8.5	473	2.2	2.1	2.2
RSEM-R6-EEOP	28-Nov-22	1	8.4	481	1.9	1.9	1.9
RSEM-R6-EP	1-Jan-22	4.3	7.5	1534	3.5	3.5	3.5
RSEM-R6-EP	2-Jan-22	0.1	7.2	1738	3.7	3.7	3.7
RSEM-R6-EP	4-Jan-22	2	7.7	1265	5.3	5.3	5.3
RSEM-R6-EP	5-Jan-22	0.2	8	1208	2.8	2.7	2.8
RSEM-R6-EP	6-Jan-22	0.5	7.5	1219	3.7	3.7	3.7
RSEM-R6-EP	7-Jan-22	0.6	8.4	1273	2.8	2.8	2.8
RSEM-R6-EP	8-Jan-22	1.3	7.7	1242	3	3	3
RSEM-R6-EP	9-Jan-22	1.3	7.7	1242	3	3	3
RSEM-R6-EP	10-Jan-22	-0.1	7.3	1377	4.3	4.3	4.3
RSEM-R6-EP	11-Jan-22	2.6	7.6	1266	4	4	4
RSEM-R6-EP	12-Jan-22	0.4	7.5	1217	2.6	2.6	2.6
RSEM-R6-EP	13-Jan-22	3.6	7.6	1291	3	3	3
RSEM-R6-EP	14-Jan-22	3.1	7.6	1294	8.5	8.5	8.5
RSEM-R6-EP	15-Jan-22	3	7.6	1291	6.1	6.1	6.1
RSEM-R6-EP	16-Jan-22	4.2	7.8	1224	3.5	3.5	3.5
RSEM-R6-EP	17-Jan-22	2.9	7.7	1220	6.8	6.8	6.8
RSEM-R6-EP	18-Jan-22	-0.2	7.7	1359	13	13	13
RSEM-R6-EP	19-Jan-22	-0.2	7.7	1287	3.8	3.8	3.8
RSEM-R6-EP	20-Jan-22	3.2	7.6	1267	4.1	4.1	4.1
RSEM-R6-EP	21-Jan-22	0.5	7.6	1393	5.2	5.2	5.2
RSEM-R6-EP	22-Jan-22	5.1	8	802	30.3	30.4	30.3
RSEM-R6-EP	24-Jan-22	1.6	8.2	361	31.2	31.1	31.2
RSEM-R6-EP	25-Jan-22	2.9	8.3	341	22.1	22.1	22.1
RSEM-R6-EP	26-Jan-22	0.5	8.2	429	16.8	16.8	16.8
RSEM-R6-EP	27-Jan-22	1.1	8.2	456	11.8	11.8	11.8
RSEM-R6-EP	28-Jan-22	3.2	8.2	434	8.8	8.8	8.8
RSEM-R6-EP	29-Jan-22	2.7	8.2	452	6.6	6.6	6.6
RSEM-R6-EP	30-Jan-22	0.5	8.3	525	5.1	5.2	5.1
RSEM-R6-EP	31-Jan-22	0.1	8.2	510	8.6	8.7	8.6
RSEM-R6-EP	1-Feb-22	2.5	8	610	7.2	7.2	7.2
RSEM-R6-EP	2-Feb-22	2.7	8	681	6.9	6.9	6.9
RSEM-R6-EP	3-Feb-22	1.3	7.9	678	4.1	4.1	4.1
RSEM-R6-EP	4-Feb-22	2.3	8	718	3.8	3.8	3.8
RSEM-R6-EP	5-Feb-22	0.9	7.7	774	2.8	2.8	2.8
RSEM-R6-EP	6-Feb-22	2.8	7.6	674	2.8	2.8	2.8
RSEM-R6-EP	7-Feb-22	2.2	7.5	696	2.4	2.4	2.4
RSEM-R6-EP	9-Feb-22	6.8	7.6	584	32.8	33	32.8
RSEM-R6-EP	10-Feb-22	3.3	8.2	345	36.6	36.7	36.6
RSEM-R6-EP	11-Feb-22	0.6	7.5	401	13.5	13.3	13.5
RSEM-R6-EP	17-Feb-22	4.6	8.4	452	10	10	10
RSEM-R6-EP	18-Feb-22	0.5	8.2	509	6	5.9	6
RSEM-R6-EP	19-Feb-22	0.9	8.2	488	7.1	7.1	7.1
RSEM-R6-EP	20-Feb-22	0.1	7.6	556	11.8	11.8	11.8
RSEM-R6-EP	21-Feb-22	-0.3	7.5	546	11.2	11.1	11.2
RSEM-R6-EP	22-Feb-22	0.5	7.5	538	11.5	11.5	11.5
RSEM-R6-EP	23-Feb-22	1.2	7.9	552	8.4	8.4	8.4
RSEM-R6-EP	24-Feb-22	4.7	7.9	539	7.7	7.7	7.7
RSEM-R6-EP	25-Feb-22	2.7	8	575	8.8	8.8	8.8
RSEM-R6-EP	26-Feb-22	2.7	7.8	586	6.6	6.6	6.6
RSEM-R6-EP	27-Feb-22	0.1	7.4	635	6.5	6.5	6.5
RSEM-R6-EP	28-Feb-22	0.3	7.6	600	6.1	6.1	6.1
RSEM-R6-EP	1-Mar-22	0.9	8.1	715	5.4	5.2	5.4
RSEM-R6-EP	2-Mar-22	0.8	7.6	660	6	6	6
RSEM-R6-EP	3-Mar-22	1.1	7.9	658	5.4	5.4	5.4
RSEM-R6-EP	4-Mar-22	0.3	7.6	723	5.2	5.1	5.2
RSEM-R6-EP	5-Mar-22	3.9	7.5	663	4.8	4.7	4.8
RSEM-R6-EP	6-Mar-22	0.8	7.7	733	5.3	5.2	5.3
RSEM-R6-EP	7-Mar-22	3.4	7.7	663	4.3	4.2	4.3
RSEM-R6-EP	8-Mar-22	0.4	8.1	738	7.5	7.5	7.5
RSEM-R6-EP	9-Mar-22	1.3	7.8	671	7.5	7.5	7.5
RSEM-R6-EP	10-Mar-22	0.2	7.6	748	5.2	5.2	5.2
RSEM-R6-EP	11-Mar-22	1.8	7.7	676	4	4	4
RSEM-R6-EP	12-Mar-22	0.4	7.5	759	3.7	3.7	3.7
RSEM-R6-EP	13-Mar-22	0	7.6	764	4	4	4
RSEM-R6-EP	14-Mar-22	0.5	7.9	711	5.3	5.3	5.3
RSEM-R6-EP	15-Mar-22	3.6	7.7	700	3.9	3.9	3.9
RSEM-R6-EP	16-Mar-22	3.1	7.8	720	4	4	4
RSEM-R6-EP	19-Mar-22	4.3	7.7	511	47.4	47.3	47.4
RSEM-R6-EP	20-Mar-22	1.5	7.8	434	53.4	53.4	53.4
RSEM-R6-EP	22-Mar-22	1.3	7.8	450	31.7	31.8	31.7
RSEM-R6-EP	23-Mar-22	2.6	7.7	412	29.7	29.6	29.7
RSEM-R6-EP	24-Mar-22	2.1	7.7	389	45.5	45.1	45.5
RSEM-R6-EP	26-Mar-22	1.3	7.8	555	8.9	9	8.9
RSEM-R6-EP	27-Mar-22	0.8	7.6	533	12	12	12
RSEM-R6-EP	28-Mar-22	4.5	7.8	377	24.4	24.4	24.4
RSEM-R6-EP	29-Mar-22	2	7.6	412	28.4	28.3	28.4
RSEM-R6-EP	30-Mar-22	2.3	7.9	566	18.4	18.4	18.4
RSEM-R6-EP	1-Apr-22	1.4	7.6	411	37.1	37.1	37.1
RSEM-R6-EP	3-Apr-22	1.4	7.2	522	16.6	16.5	16.6
RSEM-R6-EP	5-Apr-22	2.8	7.7	406	14	14	14
RSEM-R6-EP	6-Apr-22	7.2	8.3	385	13.6	13.7	13.6
RSEM-R6-EP	7-Apr-22	4.4	8.2	379	14.9	14.9	14.9
RSEM-R6-EP	9-Apr-22	3.8	8.1	558	17.8	17.9	17.8
RSEM-R6-EP	29-Nov-22	1.4	8.2	566	2.3	2.3	2.3
RSEM-R6-EP	1-Dec-22	0.4	8.2	604	8.2	8.2	8.2
RSEM-R6-EP	2-Dec-22	0.1	8.3	593	2.8	2.8	2.8
RSEM-R6-EP	3-Dec-22	2.6	8.3	558	2.3	2.3	2.3
RSEM-R6-EP	4-Dec-22	0.9	8.2	640	2.6	2.6	2.6
RSEM-R6-EP	5-Dec-22	0.6	8.2	651	2.8	2.9	2.8

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6-EP	6-Dec-22	0.3	8.2	656	2.3	2.2	2.3
RSEM-R6-EP	7-Dec-22	2.5	8.4	587	3.5	3.5	3.5
RSEM-R6-EP	8-Dec-22	1.2	8.1	681	3.8	3.8	3.8
RSEM-R6-EP	9-Dec-22	1.2	8.2	636	2	2	2
RSEM-R6-EP	10-Dec-22	0.7	8.2	675	2.2	2.2	2.2
RSEM-R6-EP	11-Dec-22	0.3	8.4	690	2.4	2.4	2.4
RSEM-R6-EP	12-Dec-22	0.2	8.1	699	4	4	4
RSEM-R6-EP	13-Dec-22	0.8	8.1	562	2.1	2.1	2.1
RSEM-R6-EP	14-Dec-22	0.8	8.1	594	2.3	2.3	2.3
RSEM-R6-EP	15-Dec-22	0.5	7.9	605	3.7	3.7	3.7
RSEM-R6-EP	16-Dec-22	0.8	8	585	5.6	5.6	5.6
RSEM-R6-EP	17-Dec-22	1.9	8	536	3.9	3.9	3.9
RSEM-R6-EP	18-Dec-22	1.6	8	664	2.4	2.4	2.4
RSEM-R6-EP	19-Dec-22	1.1	7.9	696	2.6	2.7	2.6
RSEM-R6-EP	20-Dec-22	1.8	8	714	2.3	2.3	2.3
RSEM-R6-EP	21-Dec-22	-0.1	8.2	807	1.9	1.9	1.9
RSEM-R6-EP	22-Dec-22	1	8	769	2.8	2.8	2.8
RSEM-R6-EP	23-Dec-22	0.4	8	823	2.1	2.2	2.1
RSEM-R6-EP	24-Dec-22	0.6	7.8	834	2.2	2.2	2.2
RSEM-R6-EP	25-Dec-22	0.3	8	839	1.9	1.9	1.9
RSEM-R6-EP	26-Dec-22	0.6	7.9	838	2.2	2.2	2.2
RSEM-R6-EP	27-Dec-22	0.6	7.6	883	1.7	1.7	1.7
RSEM-R6-EP	28-Dec-22	1.3	7.8	859	2.1	2.1	2.1
RSEM-R6-EP	29-Dec-22	1.1	8	848	1.8	1.8	1.8
RSEM-R6-EP	30-Dec-22	0.9	7.8	873	1.8	1.8	1.8
RSEM-R6-EP	31-Dec-22	1.9	7.6	862	2.6	2.6	2.6
SEM-R6-EP-US(SBIAR_PIP	16-Mar-22	2.8	8.5	340	OR		
RSEM-R6-EP-US-SD	22-Jan-22	3.7	8.3	434	89	89	89
RSEM-R6-EP-US-SD	23-Jan-22	2.4	8.3	318	762	765	762
RSEM-R6-EP-US-SD	24-Jan-22	4.3	7.9	648	28.1	28	28.1
RSEM-R6-EP-US-SD	25-Jan-22	1.2	8.6	655	67	66	67
RSEM-R6-EP-US-SD	26-Jan-22	1.4	8.3	577	17.9	17.9	17.9
RSEM-R6-EP-US-SD	28-Jan-22	1.3	8.7	566	23.2	23.2	23.2
RSEM-R6-EP-US-SD	8-Feb-22	2.4	7.8	766	22.1	22	22.1
RSEM-R6-EP-US-SD	9-Feb-22	6.2	8.5	303	OR		
RSEM-R6-EP-US-SD	10-Feb-22	1.3	8	519	77.3	77.1	77.3
RSEM-R6-EP-US-SD	13-Feb-22	2.8	7.7	741	45.2	45	45.2
RSEM-R6-EP-US-SD	14-Feb-22	2.1	8	740	26.2	26.2	26.2
RSEM-R6-EP-US-SD	17-Feb-22	4.2	8.2	959	20.4	20.2	20.4
RSEM-R6-EP-US-SD	19-Feb-22	3.7	8.2	1015	11.3	11.3	11.3
RSEM-R6-EP-US-SD	4-Mar-22	0.1	7.9	1371	22.9	22.9	22.9
RSEM-R6-EP-US-SD	12-Mar-22	0.6	8.3	956	15.5	15.2	15.5
RSEM-R6-EP-US-SD	19-Mar-22	1.6	7.9	542	852	854	852
RSEM-R6-EP-US-SD	20-Mar-22	2.9	8	719	91.3	91.5	91.3
RSEM-R6-EP-US-SD	22-Mar-22	4.7	7.7	799	1115	1101	1115
RSEM-R6-EP-US-SD	24-Mar-22	4.6	7.9	763	788	778	788
RSEM-R6-EP-US-SD	26-Mar-22	2.2	7.8	981	66.7	67	66.7
RSEM-R6-EP-US-SD	28-Mar-22	3.5	7.8	874	787	787	787
RSEM-R6-EP-US-SD	29-Mar-22	3.6	7.7	987	62	61	62
RSEM-R6-EP-US-SD	31-Mar-22	4.5	8	1095	30	30	30
RSEM-R6-EP-US-SD	1-Apr-22	5.1	7.7	922	33	30	33
RSEM-R6-EP-US-SD	3-Apr-22	7.5	8	903	50	48.6	50
RSEM-R6-EP-US-SD	10-Apr-22	5.4	8.2	1027	30	29.7	30
RSEM-R6-EP-US-SD	12-Apr-22	1.9	7.8	973	92.5	92.6	92.5
RSEM-R6-EP-US-SD	13-Apr-22	3.8	8.3	928	52	52.1	52
RSEM-R6-EP-US-SD	15-Apr-22	4	8.3	994	50.4	50.1	50.4
RSEM-R6-EP-US-SD	16-Apr-22	5.6	8.2	924	18.4	18.4	18.4
RSEM-R6-EP-US-SD	18-Apr-22	0.3	7.6	849	24	23.8	24
RSEM-R6-EP-US-SD	19-Apr-22	3.5	7.8	545	26.8	26.7	26.8
RSEM-R6-EP-US-SD	20-Apr-22	4	8.3	526	69.8	69.8	69.8
RSEM-R6-EP-US-SD	21-Apr-22	5.7	8	909	91	92	91
RSEM-R6-EP-US-SD	22-Apr-22	10.4	8.2	838	54	55	54
RSEM-R6-EP-US-SD	23-Apr-22	11.9	8.1	838	60.9	61.5	60.9
RSEM-R6-EP-US-SD	24-Apr-22	11.2	8.3	889	29.2	29	29.2
RSEM-R6-EP-US-SD	27-Apr-22	8.1	8.2	1150			
RSEM-R6-EP-US-SD	29-Apr-22	7.2	5.8	1429	753	754	753
RSEM-R6-EP-US-SD	1-May-22	10.7	8.1	1244	81.5	79.9	81.5
RSEM-R6-EP-US-SD	3-May-22	10.2	8.2	1104	36	35	36
RSEM-R6-EP-US-SD	4-May-22	9.9	8.2	674	1555	1552	1555
RSEM-R6-EP-US-SD	5-May-22	13.9	8.7	926	59.1	57.8	59.1
RSEM-R6-EP-US-SD	6-May-22	6.1	8.4	826	OR		
RSEM-R6-EP-US-SD	7-May-22	8.4	8	892	695	693	695
RSEM-R6-EP-US-SD	8-May-22	7.4	8.1	941	105.5	104.9	105.5
RSEM-R6-EP-US-SD	9-May-22	6.2	8.1	1090	96	92	96
RSEM-R6-EP-US-SD	10-May-22	11.7	8.2	988	89.6	89.6	89.6
RSEM-R6-EP-US-SD	11-May-22	13.7	8.2	1017	51.4	51.6	51.4
RSEM-R6-EP-US-SD	13-May-22	11.5	8.2	1006	36.4	35.5	36.4
RSEM-R6-EP-US-SD	14-May-22	15.9	8.4	985	39.5	39.5	39.5
RSEM-R6-EP-US-SD	15-May-22	13.1	8.3	982	63.1	62.9	63.1
RSEM-R6-EP-US-SD	18-May-22	13.6	8.6	770	26	26.1	26
RSEM-R6-EP-US-SD	24-May-22	15.4	8.7	866	16.3	16.3	16.3
RSEM-R6-EP-US-SD	25-May-22	12.9	8.4	842	39.7	40	39.7
RSEM-R6-EP-US-SD	26-May-22	13.6	8.4	849	34.3	34.1	34.3
RSEM-R6-EP-US-SD	27-May-22	11.5	8.5	850	1175	1171	1175
RSEM-R6-EP-US-SD	28-May-22	10.6	8	906	OR		
RSEM-R6-EP-US-SD	30-May-22	19	8.4	917	1628	1629	1628
RSEM-R6-EP-US-SD	31-May-22	18.5	8.5	880	2550	2538	2550
RSEM-R6-EP-US-SD	1-Jun-22	18.6	8.4	865	16	16	16
RSEM-R6-EP-US-SD	2-Jun-22	18.3	8.4	877	1299	1305	1299
RSEM-R6-EP-US-SD	3-Jun-22	20.4	8.5	822	20	22	20
RSEM-R6-EP-US-SD	4-Jun-22	12.7	8.5	832	691	687	691
RSEM-R6-EP-US-SD	5-Jun-22	14.6	8.6	759	702	701	702
RSEM-R6-EP-US-SD	8-Jun-22	17.2	8.6	736	21	21	21
RSEM-R6-EP-US-SD	10-Jun-22	21	8.3	743	OR		
RSEM-R6-EP-US-SD	15-Jun-22	16.1	8.3	783	2339	2322	2339
RSEM-R6-EP-US-SD	16-Jun-22	19.5	8.3	720	22.5	22.4	22.5
RSEM-R6-EP-US-SD	17-Jun-22	13.1	8.2	748	OR		
RSEM-R6-EP-US-SD	18-Jun-22	16.1	8.6	755	46.1	45.7	46.1
RSEM-R6-EP-US-SD	19-Jun-22	20.3	8.5	679	3469	3462	3469

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6-EP-US-SD	20-Jun-22	19.6	8.5	716	69.9	69.8	69.9
RSEM-R6-EP-US-SD	21-Jun-22	19	8.5	721	14.4	13.9	14.4
RSEM-R6-EP-US-SD	22-Jun-22	21	8.5	697	18.6	18.3	18.6
RSEM-R6-EP-US-SD	23-Jun-22	13	8.5	704	16.9	16.8	16.9
RSEM-R6-EP-US-SD	24-Jun-22	17.1	8.7	711	19.3	19.2	19.3
RSEM-R6-EP-US-SD	25-Jun-22	20.4	8.5	680	17.9	17.4	17.9
RSEM-R6-EP-US-SD	2-Jul-22	20.7	8.5	675	OR		
RSEM-R6-EP-US-SD	5-Jul-22	15.8	8.4	701	10.5	10.5	10.5
RSEM-R6-EP-US-SD	6-Jul-22	17.8	8.6	678	12.9	13.1	12.9
RSEM-R6-EP-US-SD	7-Jul-22	20.8	8.3	681	7.3	7.3	7.3
RSEM-R6-EP-US-SD	8-Jul-22	21.4	8.3	674	9	8.9	9
RSEM-R6-EP-US-SD	9-Jul-22	18.3	8.4	670	7	6.9	7
RSEM-R6-EP-US-SD	12-Jul-22	20.7	8.4	663	5.8	5.7	5.8
RSEM-R6-EP-US-SD	13-Jul-22	18.3	8.4	670	5.3	5.4	5.3
RSEM-R6-EP-US-SD	14-Jul-22	19.5	8.3	671	32.6	32.3	32.6
RSEM-R6-EP-US-SD	16-Jul-22	18.9	8.5	661	7.2	7	7.2
RSEM-R6-EP-US-SD	28-Jul-22	25.9	8.1	689	OR		
RSEM-R6-EP-US-SD	30-Jul-22	21.2	8.4	669	OR		
RSEM-R6-EP-US-SD	1-Aug-22	23.5	8.4	656	12	11.5	12
RSEM-R6-EP-US-SD	3-Aug-22	20.7	8.4	703	9.8	9.8	9.8
RSEM-R6-EP-US-SD	5-Aug-22	18.3	8.4	760	100.5	101.2	100.5
RSEM-R6-EP-US-SD	6-Aug-22	19.1	8.5	709	100.5	100.1	100.5
RSEM-R6-EP-US-SD	31-Aug-22	19.5	8.4	571	12	11.9	12
RSEM-R6-EP-US-SD	6-Sep-22	17.1	8.5	607	6.1	6.1	6.1
RSEM-R6-EP-US-SD	7-Sep-22	14.3	8.2	537	3880	3854	3880
RSEM-R6-EP-US-SD	9-Sep-22	11.8	8.1	553	OR		
RSEM-R6-EP-US-SD	12-Sep-22	13.7	8.5	539	19.5	19.3	19.5
RSEM-R6-EP-US-SD	13-Sep-22	14.9	8.6	470	37	37.6	37
RSEM-R6-EP-US-SD	15-Sep-22	12.9	8.6	516	11	10.8	11
RSEM-R6-EP-US-SD	16-Sep-22	13.5	8.6	671	20.1	19.9	20.1
RSEM-R6-EP-US-SD	17-Sep-22	12.2	8.5	771	OR		
RSEM-R6-EP-US-SD	20-Sep-22	14.9	8.4	449	3.3	3.4	3.3
RSEM-R6-EP-US-SD	23-Sep-22	14.1	8	463	62.6	61.9	62.6
RSEM-R6-EP-US-SD	27-Sep-22	14.3	8.2	477	4.5	4.5	4.5
RSEM-R6-EP-US-SD	28-Sep-22	14.9	8.4	467	96.5	96.4	96.5
RSEM-R6-EP-US-SD	30-Sep-22	16.3	8.6	441	10	10	10
RSEM-R6-EP-US-SD	1-Oct-22	13.4	8.6	454	9.4	9.4	9.4
RSEM-R6-EP-US-SD	3-Oct-22	12.1	8.3	466	9	9	9
RSEM-R6-EP-US-SD	4-Oct-22	11.2	7.7	501	30.2	30.2	30.2
RSEM-R6-EP-US-SD	5-Oct-22	12.7	8.4	506	95.8	95.2	95.8
RSEM-R6-EP-US-SD	6-Oct-22	11.1	8.5	475	23.2	23.5	23.2
RSEM-R6-EP-US-SD	8-Oct-22	9.5	8.8	460	9.5	9.4	9.5
RSEM-R6-EP-US-SD	9-Oct-22	11.2	8.2	511	7.5	7.4	7.5
RSEM-R6-EP-US-SD	11-Oct-22	10.6	8.8	429	17.4	17.4	17.4
RSEM-R6-EP-US-SD	13-Oct-22	13.5	8.7	404	10.2	10.2	10.2
RSEM-R6-EP-US-SD	15-Oct-22	11.1	8.5	455	11.6	11.6	11.6
RSEM-R6-EP-US-SD	18-Oct-22	10.4	8.4	443	3.1	3	3.1
RSEM-R6-EP-US-SD	19-Oct-22	12.5	8.6	497	151	154	151
RSEM-R6-EP-US-SD	21-Oct-22	8.8	8.6	499	4.9	4.9	4.9
RSEM-R6-EP-US-SD	22-Oct-22	7.6	8.6	496	4.1	4.1	4.1
RSEM-R6-EP-US-SD	24-Oct-22	6.8	8.7	502	16.3	16.2	16.3
RSEM-R6-EP-US-SD	25-Oct-22	5.7	8.4	498	6.7	6.8	6.7
RSEM-R6-EP-US-SD	26-Oct-22	6.7	8.5	493	4.2	4.1	4.2
RSEM-R6-EP-US-SD	27-Oct-22	7.3	8.4	500	50.9	51.3	50.9
RSEM-R6-EP-US-SD	29-Oct-22	7.8	8.5	499	1854	1852	1854
RSEM-R6-EP-US-SD	30-Oct-22	7.3	8.6	489	96.3	96.3	96.3
RSEM-R6-EP-US-SD	31-Oct-22	4.9	8.6	505	1296	1286	1296
RSEM-R6-EP-US-SD	1-Nov-22	4.2	9.2	449	22	22	22
RSEM-R6-EP-US-SD	2-Nov-22	2	8.2	416	99.1	99	99.1
RSEM-R6-EP-US-SD	3-Nov-22	3.2	8.4	428	47.8	47.8	47.8
RSEM-R6-EP-US-SD	4-Nov-22	4.9	8.6	410	3	3.1	3
RSEM-R6-EP-US-SD	5-Nov-22	0.1	8.6	415	58.4	58.2	58.4
RSEM-R6-EP-US-SD	8-Nov-22	1.1	8.4	501	8.8	8.7	8.8
RSEM-R6-EP-US-SD	9-Nov-22	1.5	8.4	514	18.8	18.2	18.8
RSEM-R6-EP-US-SD	10-Nov-22	1.1	8.3	509	12.7	12.6	12.7
RSEM-R6-EP-US-SD	11-Nov-22	1.8	8.4	513	7.9	7.9	7.9
RSEM-R6-EP-US-SD	12-Nov-22	2	8.5	504	6.4	6.4	6.4
RSEM-R6-EP-US-SD	13-Nov-22	3.8	8.5	508	7.9	7.9	7.9
RSEM-R6-EP-US-SD	14-Nov-22	2.2	8.4	511	2.9	2.8	2.9
RSEM-R6-EP-US-SD	15-Nov-22	2.4	8.7	509	2.7	2.6	2.7
RSEM-R6-EP-US-SD	16-Nov-22	1.9	8.6	521	2.6	2.6	2.6
RSEM-R6-EP-US-SD	17-Nov-22	2.1	8.6	510	3.8	3.8	3.8
RSEM-R6-EP-US-SD	18-Nov-22	0.7	8.4	550	7.8	7.8	7.8
RSEM-R6-EP-US-SD	19-Nov-22	1.3	8.5	505	4.6	4.5	4.6
RSEM-R6-EP-US-SD	20-Nov-22	4.6	8.4	530	3.7	3.7	3.7
RSEM-R6-EP-US-SD	22-Nov-22	2.3	8.4	505	1.8	1.8	1.8
RSEM-R6-EP-US-SD	24-Nov-22	3.9	8.6	498	2.9	2.9	2.9
RSEM-R6-EP-US-SD	25-Nov-22	2.3	8.6	535	1.1	1.1	1.1
RSEM-R6-EP-US-SD	26-Nov-22	3.3	8.5	527	1.1	1.1	1.1
RSEM-R6-EP-US-SD	1-Dec-22	1.7	8.6	209	46.8	46.3	46.8
RSEM-R6-SP	18-Aug-22	22.2	8.4	551	9.4	9.4	9.4
RSEM-R6-WEOP	4-Jan-22	0.4	7.3	768	11.3	11.3	11.3
RSEM-R6-WEOP	20-Jan-22	3.1	7.9	776	8	7.9	8
RSEM-R6-WEOP	21-Jan-22	2.7	7.8	783	6.8	6.8	6.8
RSEM-R6-WEOP	22-Jan-22	6.6	7.9	755	7.4	7.4	7.4
RSEM-R6-WEOP	23-Jan-22	1.6	8	833	7.3	7.4	7.3
RSEM-R6-WEOP	24-Jan-22	7.2	7.9	653	15	14.8	15
RSEM-R6-WEOP	25-Jan-22	2.3	8.2	631	7.6	7.6	7.6
RSEM-R6-WEOP	26-Jan-22	2.8	8.2	646	7.4	7.4	7.4
RSEM-R6-WEOP	27-Jan-22	2.6	8	670	11.4	11.5	11.4
RSEM-R6-WEOP	29-Jan-22	3.4	8.2	679	6.2	6.3	6.2
RSEM-R6-WEOP	30-Jan-22	5	7.6	688	10.1	10.1	10.1
RSEM-R6-WEOP	31-Jan-22	1.8	8.2	711	7.9	7.9	7.9
RSEM-R6-WEOP	7-Feb-22	1.1	6.8	774	5.7	5.7	5.7
RSEM-R6-WEOP	8-Feb-22	1.2	7.2	778	8.5	8.6	8.5
RSEM-R6-WEOP	9-Feb-22	6.9	8	767	12.2	12.2	12.2
RSEM-R6-WEOP	10-Feb-22	4.7	8.1	527	32.9	32.9	32.9
RSEM-R6-WEOP	11-Feb-22	2	7.7	539	13.6	13.6	13.6
RSEM-R6-WEOP	12-Feb-22	1	7.7	624	6.7	6.7	6.7

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6-WEOP	13-Feb-22	1	8	584	6.4	6.4	6.4
RSEM-R6-WEOP	14-Feb-22	0.8	7.8	548	7.6	7.5	7.6
RSEM-R6-WEOP	15-Feb-22	0.2	7.6	555	7.8	7.8	7.8
RSEM-R6-WEOP	16-Feb-22	0.5	8.2	557	7.5	7.5	7.5
RSEM-R6-WEOP	17-Feb-22	1.3	7.9	566	7.3	7.3	7.3
RSEM-R6-WEOP	18-Feb-22	2	8	531	6.7	6.8	6.7
RSEM-R6-WEOP	19-Feb-22	2.3	8	522	6	6	6
RSEM-R6-WEOP	20-Feb-22	2.1	7.4	562	6.5	6.6	6.5
RSEM-R6-WEOP	21-Feb-22	-0.4	7.3	561	6	6	6
RSEM-R6-WEOP	22-Feb-22	1.7	6.9	527	5.7	5.7	5.7
RSEM-R6-WEOP	23-Feb-22	0.7	7	527	5.3	5.3	5.3
RSEM-R6-WEOP	24-Feb-22	2.2	7	513	4.8	4.8	4.8
RSEM-R6-WEOP	25-Feb-22	2.3	7.5	507	4	4	4
RSEM-R6-WEOP	26-Feb-22	3.2	7.2	454	4.2	4.2	4.2
RSEM-R6-WEOP	27-Feb-22	0.7	6.8	527	4	4	4
RSEM-R6-WEOP	28-Feb-22	0.7	6.9	555	4.2	4.2	4.2
RSEM-R6-WEOP	1-Mar-22	5.6	7.6	556	3.7	3.7	3.7
RSEM-R6-WEOP	4-Mar-22	2.7	8	561	3.1	3	3.1
RSEM-R6-WEOP	5-Mar-22	6	7.2	556	3.5	3.5	3.5
RSEM-R6-WEOP	6-Mar-22	2.1	7.4	572	4.3	4.2	4.3
RSEM-R6-WEOP	7-Mar-22	8.1	7.3	574	5.3	5.2	5.3
RSEM-R6-WEOP	8-Mar-22	2.7	8.2	581	6	6	6
RSEM-R6-WEOP	9-Mar-22	1.9	7.7	569	5.8	5.8	5.8
RSEM-R6-WEOP	10-Mar-22	2.2	7.9	587	5.8	5.8	5.8
RSEM-R6-WEOP	11-Mar-22	2.4	8.1	570	5.3	5.3	5.3
RSEM-R6-WEOP	12-Mar-22	1.4	8	564	5.3	5.3	5.3
RSEM-R6-WEOP	13-Mar-22	1.3	8.1	576	5.7	5.6	5.7
RSEM-R6-WEOP	14-Mar-22	0.2	8.4	604	5.2	5.1	5.2
RSEM-R6-WEOP	15-Mar-22	3.5	7.5	591	4.7	4.7	4.7
RSEM-R6-WEOP	16-Mar-22	3.3	7.5	570	4.6	4.6	4.6
RSEM-R6-WEOP	17-Mar-22	1.5	7	594	8.8	8.8	8.8
RSEM-R6-WEOP	18-Mar-22	1.2	7.4	592	17.8	17.7	17.8
RSEM-R6-WEOP	19-Mar-22	3.7	7.9	579	19.9	19.9	19.9
RSEM-R6-WEOP	20-Mar-22	3.4	7.6	501	6.3	6.3	6.3
RSEM-R6-WEOP	21-Mar-22	6.7	7.7	492	31	30.9	31
RSEM-R6-WEOP	22-Mar-22	6.5	7.4	482	21.1	21.1	21.1
RSEM-R6-WEOP	23-Mar-22	7	7.2	498	16.8	16.8	16.8
RSEM-R6-WEOP	24-Mar-22	6.4	7.3	492	13.2	13	13.2
RSEM-R6-WEOP	25-Mar-22	1.7	7.2	619	14.1	13.9	14.1
RSEM-R6-WEOP	26-Mar-22	1.4	8	637	9	8.9	9
RSEM-R6-WEOP	27-Mar-22	4.9	7.8	619	6.6	6.6	6.6
RSEM-R6-WEOP	28-Mar-22	4.7	7.6	632	5	5	5
RSEM-R6-WEOP	29-Mar-22	4.1	7.2	597	6.1	6.1	6.1
RSEM-R6-WEOP	30-Mar-22	5.6	8.2	607	6.8	6.8	6.8
RSEM-R6-WEOP	31-Mar-22	4.2	7.3	587	8.9	8.9	8.9
RSEM-R6-WEOP	1-Apr-22	4.2	8	596	6.1	6.1	6.1
RSEM-R6-WEOP	2-Apr-22	3.4	7.3	583	4.9	4.9	4.9
RSEM-R6-WEOP	3-Apr-22	6.1	7.5	547	4.7	4.7	4.7
RSEM-R6-WEOP	4-Apr-22	4.9	7.5	546	4.9	4.9	4.9
RSEM-R6-WEOP	5-Apr-22	3.7	7.1	469	5	5	5
RSEM-R6-WEOP	6-Apr-22	3.1	7.3	475	5.3	5.3	5.3
RSEM-R6-WEOP	7-Apr-22	6.1	7.2	423	6.6	6.6	6.6
RSEM-R6-WEOP	8-Apr-22	3.1	7.5	204	11.3	11.3	11.3
RSEM-R6-WEOP	9-Apr-22	3.8	7.2	476	9.2	9.2	9.2
RSEM-R6-WEOP	10-Apr-22	3.1	7.3	516	8.8	8.8	8.8
RSEM-R6-WEOP	11-Apr-22	1	7.4	535	8	8	8
RSEM-R6-WEOP	12-Apr-22	0.3	7.5	615	6.5	6.4	6.5
RSEM-R6-WEOP	13-Apr-22	1.5	7.5	624	5.1	5.2	5.1
RSEM-R6-WEOP	14-Apr-22	1	7.6	617	3.3	3.3	3.3
RSEM-R6-WEOP	15-Apr-22	2	7.6	577	3	3	3
RSEM-R6-WEOP	16-Apr-22	2.1	8.2	555	2.7	2.8	2.7
RSEM-R6-WEOP	18-Apr-22	0.7	7.8	549	2.5	2.5	2.5
RSEM-R6-WEOP	19-Apr-22	1.9	7.8	544	3	3	3
RSEM-R6-WEOP	20-Apr-22	1.8	8	482	2.3	2.3	2.3
RSEM-R6-WEOP	21-Apr-22	2.6	7.4	716	2.7	2.7	2.7
RSEM-R6-WEOP	22-Apr-22	3.5	7.4	647	4	4	4
RSEM-R6-WEOP	23-Apr-22	6.2	7.7	775	4.6	4.6	4.6
RSEM-R6-WEOP	24-Apr-22	4.4	7.2	783	5.8	5.9	5.8
RSEM-R6-WEOP	25-Apr-22	4.5	8	717	6.1	6.2	6.1
RSEM-R6-WEOP	26-Apr-22	7.9	7.5	657	6.5	6.5	6.5
RSEM-R6-WEOP	27-Apr-22	5.6	7.4	666	7	7	7
RSEM-R6-WEOP	28-Apr-22	5	7.7	486	9.7	9.7	9.7
RSEM-R6-WEOP	29-Apr-22	5.2	7.8	468	10.3	10.3	10.3
RSEM-R6-WEOP	30-Apr-22	5.3	8.1	464	12.8	12.8	12.8
RSEM-R6-WEOP	1-May-22	6.4	7.8	469	11	11	11
RSEM-R6-WEOP	2-May-22	6.7	8	488	7	7	7
RSEM-R6-WEOP	3-May-22	9	7.7	598	6.2	6.2	6.2
RSEM-R6-WEOP	4-May-22	9.5	8.1	640	6.6	6.6	6.6
RSEM-R6-WEOP	5-May-22	10.9	8.2	681	5.8	5.9	5.8
RSEM-R6-WEOP	6-May-22	9.2	8.6	707	5.6	5.6	5.6
RSEM-R6-WEOP	7-May-22	8.7	8.5	724	4.9	4.9	4.9
RSEM-R6-WEOP	8-May-22	8	8.2	735	9.2	9.3	9.2
RSEM-R6-WEOP	9-May-22	6.6	8.1	777	6.7	6.7	6.7
RSEM-R6-WEOP	10-May-22	7.6	8.2	789	7.2	7.3	7.2
RSEM-R6-WEOP	11-May-22	10.7	7.9	869	5.4	5.3	5.4
RSEM-R6-WEOP	12-May-22	11.6	8	912	6.1	6.1	6.1
RSEM-R6-WEOP	13-May-22	12.3	7.9	934	6.2	6.2	6.2
RSEM-R6-WEOP	14-May-22	13.4	7.9	983	5.7	5.8	5.7
RSEM-R6-WEOP	15-May-22	12.7	8.2	1021	5.6	5.6	5.6
RSEM-R6-WEOP	16-May-22	14	8.3	1038	4.7	4.8	4.7
RSEM-R6-WEOP	17-May-22	12.2	8.2	966	4.6	4.6	4.6
RSEM-R6-WEOP	18-May-22	12.9	8.3	989	5.5	5.5	5.5
RSEM-R6-WEOP	19-May-22	11.3	8.4	1361	4.7	4.7	4.7
RSEM-R6-WEOP	20-May-22	11.8	8.3	1213	6.3	6.3	6.3
RSEM-R6-WEOP	21-May-22	12.6	8.4	1233	5.2	5.2	5.2
RSEM-R6-WEOP	22-May-22	15.6	8.3	1232	6.7	6.7	6.7
RSEM-R6-WEOP	23-May-22	15.4	8.5	1244	5.8	5.8	5.8
RSEM-R6-WEOP	24-May-22	15.7	8.6	1338	3.2	3.3	3.2
RSEM-R6-WEOP	25-May-22	17	8.5	1251	3.2	3.3	3.2

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6-WEOP	26-May-22	16.4	8.5	1345	3	3	3
RSEM-R6-WEOP	27-May-22	16.5	8.5	1347	3.5	3.6	3.5
RSEM-R6-WEOP	28-May-22	13.2	8.5	1247	8.2	8.2	8.2
RSEM-R6-WEOP	29-May-22	16.1	8.4	1270	9.8	9.7	9.8
RSEM-R6-WEOP	30-May-22	20	8.3	1290	11.9	11.8	11.9
RSEM-R6-WEOP	31-May-22	19	8.5	1309	9	9.2	9
RSEM-R6-WEOP	1-Jun-22	19.9	8.5	1340	6.6	6.5	6.6
RSEM-R6-WEOP	2-Jun-22	19.2	8.5	1336	5.8	5.8	5.8
RSEM-R6-WEOP	3-Jun-22	21.9	8.6	1361	4.6	4.5	4.6
RSEM-R6-WEOP	4-Jun-22	18.9	8.5	1376	3.8	3.8	3.8
RSEM-R6-WEOP	5-Jun-22	18.2	8.8	1405	3.6	3.6	3.6
RSEM-R6-WEOP	6-Jun-22	17.2	8.6	1431	3	3	3
RSEM-R6-WEOP	7-Jun-22	18.7	8.6	1451	4.3	4.3	4.3
RSEM-R6-WEOP	8-Jun-22	19.6	8.7	1462	6.4	6.4	6.4
RSEM-R6-WEOP	9-Jun-22	20.3	8.7	1449	3.8	3.8	3.8
RSEM-R6-WEOP	10-Jun-22	19.2	8.6	1450	3.7	3.7	3.7
RSEM-R6-WEOP	11-Jun-22	18.8	8.7	1457	4.4	4.4	4.4
RSEM-R6-WEOP	12-Jun-22	18.3	8.8	1468	4.3	4.3	4.3
RSEM-R6-WEOP	13-Jun-22	18.8	8.3	1472	3.8	3.8	3.8
RSEM-R6-WEOP	14-Jun-22	18	8.7	1478	4.1	4.1	4.1
RSEM-R6-WEOP	15-Jun-22	19.9	8.6	1481	4.2	4.2	4.2
RSEM-R6-WEOP	16-Jun-22	21.8	8.6	1474	5	5	5
RSEM-R6-WEOP	17-Jun-22	16.8	8.6	1449	13.7	13.7	13.7
RSEM-R6-WEOP	18-Jun-22	17.8	8.8	1450	6.4	6.4	6.4
RSEM-R6-WEOP	18-Jun-22	20	8.8	1559	6.9	7	6.9
RSEM-R6-WEOP	20-Jun-22	19.7	8.8	1547	6.6	6.6	6.6
RSEM-R6-WEOP	21-Jun-22	20.6	8.8	1559	6.6	6.5	6.6
RSEM-R6-WEOP	22-Jun-22	20.3	8.7	1432	7.6	7.6	7.6
RSEM-R6-WEOP	23-Jun-22	18	8.8	1430	6.7	6.7	6.7
RSEM-R6-WEOP	24-Jun-22	19.4	8.8	1512	8.8	8.9	8.8
RSEM-R6-WEOP	25-Jun-22	20	8.8	1400	7.7	7.6	7.7
RSEM-R6-WEOP	26-Jun-22	21.2	8.8	1487	5.3	5.4	5.3
RSEM-R6-WEOP	27-Jun-22	20.6	7.8	1453	6.4	6.4	6.4
RSEM-R6-WEOP	29-Jun-22	22.6	7.1	1312	5.4	5.4	5.4
RSEM-R6-WEOP	30-Jun-22	22.9	6.9	1299	5.5	5.5	5.5
RSEM-R6-WEOP	1-Jul-22	21	7.1	1280	4.3	4.3	4.3
RSEM-R6-WEOP	2-Jul-22	20.5	7.1	1277	4.4	4.4	4.4
RSEM-R6-WEOP	3-Jul-22	21.8	7.2	577	5.8	5.8	5.8
RSEM-R6-WEOP	4-Jul-22	21	7.2	1257	6.4	6.4	6.4
RSEM-R6-WEOP	5-Jul-22	19.9	7.8	1255	6.1	6.1	6.1
RSEM-R6-WEOP	6-Jul-22	23.2	8.7	1324	6.8	6.7	6.8
RSEM-R6-WEOP	7-Jul-22	22.5	7.8	1327	7.4	7.4	7.4
RSEM-R6-WEOP	8-Jul-22	22.1	7.7	1325	6.9	7	6.9
RSEM-R6-WEOP	9-Jul-22	19.9	7.9	1324	8.1	8.1	8.1
RSEM-R6-WEOP	10-Jul-22	20.5	7.8	1341	7.1	7.2	7.1
RSEM-R6-WEOP	11-Jul-22	21.5	7.9	1328	5.8	5.8	5.8
RSEM-R6-WEOP	12-Jul-22	23.5	8.4	1224	6.5	6.5	6.5
RSEM-R6-WEOP	13-Jul-22	20.1	8.4	1323	6.9	7	6.9
RSEM-R6-WEOP	14-Jul-22	20.7	8.2	1334	6.2	6	6.2
RSEM-R6-WEOP	15-Jul-22	21.8	8.1	1349	6.7	6.8	6.7
RSEM-R6-WEOP	16-Jul-22	22.7	8	1376	7.2	7.1	7.2
RSEM-R6-WEOP	17-Jul-22	21.4	7.9	1350	6.6	6.6	6.6
RSEM-R6-WEOP	18-Jul-22	23.2	7.8	1292	6.6	6.6	6.6
RSEM-R6-WEOP	19-Jul-22	21.3	7.8	1295	7.1	7.1	7.1
RSEM-R6-WEOP	20-Jul-22	22.8	7.9	1223	7.9	7.9	7.9
RSEM-R6-WEOP	21-Jul-22	22.3	7.7	1287	8.2	8.2	8.2
RSEM-R6-WEOP	22-Jul-22	19.6	8.3	1290	8.7	8.7	8.7
RSEM-R6-WEOP	23-Jul-22	20.1	8.3	1301	7.3	7.3	7.3
RSEM-R6-WEOP	24-Jul-22	23.8	7.8	1264	9.7	9.7	9.7
RSEM-R6-WEOP	25-Jul-22	21	7.4	1257	7.1	7.7	7.1
RSEM-R6-WEOP	26-Jul-22	22.8	7.5	1249	6.8	6.7	6.8
RSEM-R6-WEOP	28-Jul-22	30.3	8.1	1218	7.4	7.4	7.4
RSEM-R6-WEOP	29-Jul-22	26.1	8.2	1299	5.9	5.8	5.9
RSEM-R6-WEOP	30-Jul-22	24.5	8	1261	6.1	6.1	6.1
RSEM-R6-WEOP	31-Jul-22	24.5	8	1226	4.8	4.8	4.8
RSEM-R6-WEOP	1-Aug-22	25	7.9	1211	7.5	7.5	7.5
RSEM-R6-WEOP	2-Aug-22	23.2	7.9	1192	8.4	8.4	8.4
RSEM-R6-WEOP	3-Aug-22	22.7	8	1178	7.1	7.2	7.1
RSEM-R6-WEOP	4-Aug-22	20.2	8.2	1094	6.9	6.9	6.9
RSEM-R6-WEOP	5-Aug-22	19.4	8	1161	8.2	8.2	8.2
RSEM-R6-WEOP	6-Aug-22	21.1	8	1135	8.4	8.5	8.4
RSEM-R6-WEOP	7-Aug-22	22.5	8.5	1065	9	9	9
RSEM-R6-WEOP	8-Aug-22	22.5	8.6	923	7	7	7
RSEM-R6-WEOP	9-Aug-22	22.2	8.5	923	5.6	5.6	5.6
RSEM-R6-WEOP	10-Aug-22	24.1	8.8	913	5.8	5.8	5.8
RSEM-R6-WEOP	11-Aug-22	22.7	8	909	5.4	5.3	5.4
RSEM-R6-WEOP	12-Aug-22	21	7.9	903	7	7	7
RSEM-R6-WEOP	13-Aug-22	20.1	7.9	901	5.8	5.8	5.8
RSEM-R6-WEOP	14-Aug-22	19.3	8	876	6.5	6.5	6.5
RSEM-R6-WEOP	15-Aug-22	20.2	8.1	891	5.9	5.9	5.9
RSEM-R6-WEOP	16-Aug-22	19.2	7.2	880	6.8	6.8	6.8
RSEM-R6-WEOP	17-Aug-22	19.3	8.3	929	9	9	9
RSEM-R6-WEOP	18-Aug-22	23.6	8.8	910	9.7	9.7	9.7
RSEM-R6-WEOP	19-Aug-22	22.7	8.7	911	8.2	8.2	8.2
RSEM-R6-WEOP	20-Aug-22	23.3	8.6	908	8.8	8.8	8.8
RSEM-R6-WEOP	21-Aug-22	23.2	8.7	923	8.2	8.2	8.2
RSEM-R6-WEOP	22-Aug-22	24.5	8.7	943	8.4	8.4	8.4
RSEM-R6-WEOP	23-Aug-22	25.3	7.5	927	8.7	8.7	8.7
RSEM-R6-WEOP	24-Aug-22	24.5	7.5	973	9	9	9
RSEM-R6-WEOP	25-Aug-22	25.2	7.5	975	8.8	8.8	8.8
RSEM-R6-WEOP	26-Aug-22	21.7	7.5	991	10.3	10.3	10.3
RSEM-R6-WEOP	27-Aug-22	21.6	7	1000	8.2	8.2	8.2
RSEM-R6-WEOP	28-Aug-22	20.6	8	984	8.5	8.5	8.5
RSEM-R6-WEOP	29-Aug-22	20.8	7.1	971	12.2	12.2	12.2
RSEM-R6-WEOP	30-Aug-22	20.9	7.3	961	13.7	13.7	13.7
RSEM-R6-WEOP	31-Aug-22	21.7	7.2	965	9.8	9.8	9.8
RSEM-R6-WEOP	1-Sep-22	18.5	7.6	941	14	14	14
RSEM-R6-WEOP	2-Sep-22	16.6	8.1	925	12.3	12.3	12.3
RSEM-R6-WEOP	3-Sep-22	21.6	7.8	913	16.7	16.7	16.7

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6-WEOP	4-Sep-22	19.7	8.4	907	15.3	15.3	15.3
RSEM-R6-WEOP	5-Sep-22	18.3	8.1	929	15.3	15.3	15.3
RSEM-R6-WEOP	6-Sep-22	18.4	8.3	946	6.1	6.2	6.1
RSEM-R6-WEOP	7-Sep-22	18.6	8	891	6.2	6.2	6.2
RSEM-R6-WEOP	8-Sep-22	18	8	893	6.6	6.6	6.6
RSEM-R6-WEOP	9-Sep-22	15.1	8	897	6.8	6.8	6.8
RSEM-R6-WEOP	10-Sep-22	16.7	8	979	6.7	6.7	6.7
RSEM-R6-WEOP	11-Sep-22	15.2	8.2	565	10.1	10.1	10.1
RSEM-R6-WEOP	12-Sep-22	15.7	8.4	1066	5.4	5.4	5.4
RSEM-R6-WEOP	13-Sep-22	17.2	7.8	1085	5.2	5.3	5.2
RSEM-R6-WEOP	14-Sep-22	14.4	7.4	1038	6.3	6.3	6.3
RSEM-R6-WEOP	15-Sep-22	14.4	7.3	1059	3.6	3.6	3.6
RSEM-R6-WEOP	16-Sep-22	14.4	7.6	1144	3.9	3.9	3.9
RSEM-R6-WEOP	17-Sep-22	14.9	8.5	1073	4.3	4.3	4.3
RSEM-R6-WEOP	18-Sep-22	14.6	7.6	1095	4	4	4
RSEM-R6-WEOP	19-Sep-22	12.2	8.3	1382	3.6	3.6	3.6
RSEM-R6-WEOP	20-Sep-22	14.9	7.7	1121	3	2.8	3
RSEM-R6-WEOP	21-Sep-22	13.3	7.8	1163	2.8	2.8	2.8
RSEM-R6-WEOP	22-Sep-22	14.6	7.9	1151	2.8	2.8	2.8
RSEM-R6-WEOP	23-Sep-22	13.2	7.7	1162	2.7	2.6	2.7
RSEM-R6-WEOP	24-Sep-22	12.5	7.6	1163	3.4	3.4	3.4
RSEM-R6-WEOP	25-Sep-22	14.2	7.5	1152	3.2	3.2	3.2
RSEM-R6-WEOP	26-Sep-22	12.9	7.2	1153	3	3	3
RSEM-R6-WEOP	27-Sep-22	14.3	7.8	1156	2.9	2.9	2.9
RSEM-R6-WEOP	28-Sep-22	15.8	7.9	1134	4.3	4.3	4.3
RSEM-R6-WEOP	29-Sep-22	15.5	7.7	1153	2.8	2.8	2.8
RSEM-R6-WEOP	30-Sep-22	14.2	8.3	1227	3.8	3.8	3.8
RSEM-R6-WEOP	1-Oct-22	14.9	8.2	1216	3.2	3.2	3.2
RSEM-R6-WEOP	2-Oct-22	16.2	8.2	1116	4.5	4.4	4.5
RSEM-R6-WEOP	3-Oct-22	14.5	8.3	1083	4.1	4.1	4.1
RSEM-R6-WEOP	4-Oct-22	13	7.4	1175	3.2	3.2	3.2
RSEM-R6-WEOP	5-Oct-22	13.9	8.1	1082	4.8	4.8	4.8
RSEM-R6-WEOP	6-Oct-22	11.7	7.9	1108	3.9	3.9	3.9
RSEM-R6-WEOP	7-Oct-22	11.2	8	1095	3.9	3.9	3.9
RSEM-R6-WEOP	8-Oct-22	10.3	8.2	1086	3.3	3.3	3.3
RSEM-R6-WEOP	9-Oct-22	10.6	7.9	1078	3.3	3.3	3.3
RSEM-R6-WEOP	10-Oct-22	12.3	8.2	1155	3.5	3.5	3.5
RSEM-R6-WEOP	11-Oct-22	9.9	8.3	1011	3.6	3.6	3.6
RSEM-R6-WEOP	12-Oct-22	9.8	8.1	1017	3.4	3.4	3.4
RSEM-R6-WEOP	13-Oct-22	10.2	8.2	1029	1.2	1.2	1.2
RSEM-R6-WEOP	14-Oct-22	10.7	7.8	1032	1.6	1.6	1.6
RSEM-R6-WEOP	15-Oct-22	10.4	7.8	1040	1.6	1.6	1.6
RSEM-R6-WEOP	16-Oct-22	10.4	7.6	1046	2.1	2	2.1
RSEM-R6-WEOP	17-Oct-22	8.7	7.6	1046	1.3	1.3	1.3
RSEM-R6-WEOP	18-Oct-22	11.8	8.3	1119	1.9	1.9	1.9
RSEM-R6-WEOP	19-Oct-22	11.8	8	1241	2.1	2.2	2.1
RSEM-R6-WEOP	20-Oct-22	10.8	8	1117	2.6	2.6	2.6
RSEM-R6-WEOP	21-Oct-22	9.1	7.9	1221	2.5	2.5	2.5
RSEM-R6-WEOP	22-Oct-22	7.6	7.9	1211	2	2	2
RSEM-R6-WEOP	23-Oct-22	5.7	8.3	1166	1.8	1.8	1.8
RSEM-R6-WEOP	24-Oct-22	5.9	8.1	1152	1.4	1.4	1.4
RSEM-R6-WEOP	25-Oct-22	4.5	8	1093	3.6	3.6	3.6
RSEM-R6-WEOP	26-Oct-22	4.3	8.2	1061	3.1	3	3.1
RSEM-R6-WEOP	27-Oct-22	5.8	8.4	1029	3.1	3.1	3.1
RSEM-R6-WEOP	28-Oct-22	5.1	8.3	985	2.9	3	2.9
RSEM-R6-WEOP	29-Oct-22	5.4	8.6	945	3.3	3.3	3.3
RSEM-R6-WEOP	30-Oct-22	4.9	8.6	907	3.2	3.1	3.2
RSEM-R6-WEOP	31-Oct-22	5.3	8.6	782	3.5	3.5	3.5
RSEM-R6-WEOP	1-Nov-22	1.3	7.5	728	2.6	2.6	2.6
RSEM-R6-WEOP	2-Nov-22	1	7.5	725	3.4	3.4	3.4
RSEM-R6-WEOP	3-Nov-22	1.4	7.7	723	4.9	4.9	4.9
RSEM-R6-WEOP	4-Nov-22	1.6	7.7	294	3	3.1	3
RSEM-R6-WEOP	5-Nov-22	2	8.1	653	3.7	3.7	3.7
RSEM-R6-WEOP	6-Nov-22	1.3	8	595	4.8	4.8	4.8
RSEM-R6-WEOP	7-Nov-22	1.2	7.9	583	4.4	4.4	4.4
RSEM-R6-WEOP	8-Nov-22	1.3	8	665	5.7	5.7	5.7
RSEM-R6-WEOP	9-Nov-22	1.2	8.3	646	6	6	6
RSEM-R6-WEOP	10-Nov-22	4	8	581	7.3	7.3	7.3
RSEM-R6-WEOP	11-Nov-22	2.7	7.9	616	8.2	8.2	8.2
RSEM-R6-WEOP	12-Nov-22	3	8	594	8.2	8.2	8.2
RSEM-R6-WEOP	13-Nov-22	4	8	595	8.6	8.6	8.6
RSEM-R6-WEOP	14-Nov-22	3.4	8.1	571	2.9	2.8	2.9
RSEM-R6-WEOP	15-Nov-22	4.3	8.2	563	3.9	3.9	3.9
RSEM-R6-WEOP	16-Nov-22	4.5	8.2	574	5	5.1	5
RSEM-R6-WEOP	17-Nov-22	4.6	8.4	528	3.7	3.8	3.7
RSEM-R6-WEOP	18-Nov-22	3.7	8.5	528	4.4	4.4	4.4
RSEM-R6-WEOP	19-Nov-22	3.5	8.6	524	4.3	4.3	4.3
RSEM-R6-WEOP	20-Nov-22	3.5	8.4	558	4.2	4.2	4.2
RSEM-R6-WEOP	21-Nov-22	3.8	8.2	546	5.5	5.4	5.5
RSEM-R6-WEOP	22-Nov-22	2.8	8.3	455	6.4	6.4	6.4
RSEM-R6-WEOP	23-Nov-22	3.5	8.2	446	4.4	4.4	4.4
RSEM-R6-WEOP	24-Nov-22	3.7	8.1	442	6	6	6
RSEM-R6-WEOP	25-Nov-22	3.7	7.9	442	4.4	4.4	4.4
RSEM-R6-WEOP	26-Nov-22	3.5	7.9	444	5.9	5.9	5.9
RSEM-R6-WEOP	27-Nov-22	2.9	8.2	446	6.3	6.3	6.3
RSEM-R6-WEOP	28-Nov-22	1.8	8	443	5.8	5.8	5.8
RSEM-R6-WEOP	29-Nov-22	4.7	8	588	5.4	5.4	5.4
RSEM-R6-WEOP	30-Nov-22	5.6	8.2	499	4.7	4.7	4.7
RSEM-R6-WEOP	1-Dec-22	1.9	8.2	524	4.8	4.7	4.8
RSEM-R6-WEOP	2-Dec-22	2.5	8.4	554	5.3	5.3	5.3
RSEM-R6-WEOP	3-Dec-22	3.5	8.5	537	5.2	5.2	5.2
RSEM-R6-WEOP	4-Dec-22	5.3	8.4	483	5.8	5.9	5.8
RSEM-R6-WEOP	5-Dec-22	4.1	8.4	493	5.4	5.4	5.4
RSEM-R6-WEOP	6-Dec-22	1.1	8.6	508	5.5	5.6	5.5
RSEM-R6-WEOP	7-Dec-22	3.4	8.5	528	5.4	5.4	5.4
RSEM-R6-WEOP	8-Dec-22	2.8	8.6	565	6.6	6.6	6.6
RSEM-R6-WEOP	9-Dec-22	4	8.3	567	6.7	6.6	6.7
RSEM-R6-WEOP	10-Dec-22	3.6	8.2	563	5.5	5.5	5.5
RSEM-R6-WEOP	11-Dec-22	2.9	8.3	581	8	8	8

Appendix 3-B: 2022 *In Situ* Field Measurement Water Quality Data

Station	Collect Date	Temperature	pH-field	Conductivity-field	Turbidity1-field	Turbidity2-field	Turbidity3-field
		°Celsius	pH	uS/cm	NTU	NTU	NTU
RSEM-R6-WEOP	12-Dec-22	2.6	8.2	560	7.1	7.2	7.1
RSEM-R6-WEOP	13-Dec-22	4.1	7.7	492	9.7	9.7	9.7
RSEM-R6-WEOP	14-Dec-22	3.2	8.1	476	7.2	7.2	7.2
RSEM-R6-WEOP	15-Dec-22	3.4	8.2	457	7.6	7.7	7.6
RSEM-R6-WEOP	16-Dec-22	4.8	7.8	470	5.9	5.9	5.9
RSEM-R6-WEOP	17-Dec-22	3.2	8.2	492	6.7	6.7	6.7
RSEM-R6-WEOP	18-Dec-22	2.5	8.2	509	5.3	5.3	5.3
RSEM-R6-WEOP	19-Dec-22	1.2	8	543	5.6	5.6	5.6
RSEM-R6-WEOP	20-Dec-22	3	8	559	4.5	4.5	4.5
RSEM-R6-WEOP	21-Dec-22	2.3	8.4	604	5.1	5.1	5.1
RSEM-R6-WEOP	22-Dec-22	5.3	8.1	541	4.6	4.5	4.6
RSEM-R6-WEOP	23-Dec-22	2.4	8.4	604	4.4	4.5	4.4
RSEM-R6-WEOP	24-Dec-22	2.3	8.2	585	4.1	4.1	4.1
RSEM-R6-WEOP	25-Dec-22	1.7	8.3	618	4	3.9	4
RSEM-R6-WEOP	26-Dec-22	3.1	8.2	639	4	4	4
RSEM-R6-WEOP	27-Dec-22	1.1	7.9	618	3.4	3.4	3.4
RSEM-R6-WEOP	28-Dec-22	1.5	8	623	3.3	3.3	3.3
RSEM-R6-WEOP	29-Dec-22	1.2	8	638	4.2	4.2	4.2
RSEM-R6-WEOP	30-Dec-22	0.8	7.9	648	4.6	4.6	4.6
RSEM-R6-WEOP	31-Dec-22	2.4	7.9	648	5.6	5.6	5.6
RSEM-R6-WP	6-Jan-22	-0.2	6.9	823	7.6	7.5	7.6
RSEM-R6-WP	7-Jan-22	-0.3	6.6	932	11.5	11.3	11.5
RSEM-R6-WP	8-Jan-22	0.1	7	849	21.3	21.2	21.3
RSEM-R6-WP	9-Jan-22	0.1	7	849	21.3	21.2	21.3
RSEM-R6-WP	10-Jan-22	0.8	6.9	823	5.5	5.6	5.5
RSEM-R6-WP	11-Jan-22	0.3	8.6	758	6.9	6.9	6.9
RSEM-R6-WP	12-Jan-22	1.9	6.8	764	8.3	8.3	8.3
RSEM-R6-WP	13-Jan-22	0.3	6.9	770	12.5	12.5	12.5
RSEM-R6-WP	14-Jan-22	0.5	7.5	771	51	51	51
RSEM-R6-WP	15-Jan-22	0.7	7.5	799	68	67	68
RSEM-R6-WP	16-Jan-22	0.4	8	771	OR		
RSEM-R6-WP	17-Jan-22	0.2	8	764	61	61	61
RSEM-R6-WP	18-Jan-22	0.8	7.8	752	13	13	13
RSEM-R6-WP	19-Jan-22	0.3	7.9	773	8.8	8.8	8.8
RSEM-R6-WP	1-Feb-22	0.4	7.6	756	11.3	11.3	11.3
RSEM-R6-WP	2-Feb-22	0.4	7.4	796	8.7	8.7	8.7
RSEM-R6-WP	3-Feb-22	0.4	8	490	8.1	8.1	8.1
RSEM-R6-WP	4-Feb-22	1.7	7.7	877	6.5	6.5	6.5
RSEM-R6-WP	5-Feb-22	0.6	7.6	914	6.6	6.6	6.6
RSEM-R6-WP	6-Feb-22	1.9	7.3	744	7.8	7.8	7.8
RSEM-R6-WP	2-Mar-22	2.5	7.5	548	4.2	4.2	4.2
RSEM-R6-WP	3-Mar-22	1.9	7.5	548	3.4	3.3	3.4
RSEM-R6-WP	17-Apr-22	3.9	7.7	473	3.6	3.5	3.6
RSEM-R6-WP	27-Jul-22	24.5	7.6	1244	6.2	6.3	6.2

Note: OR- over range

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

PEACE RIVER
HYDRO PARTNERS

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
85-Background	5/19/2022 12:10	ATL918	M	C234314				90.8																			
85-EOP	3/24/2022 15:30	AQP987	M	C219524				211																			
85-EOP	3/30/2022 16:15	AQX839	M	C221206				14.6																			
85-EOP	5/4/2022 18:10	ASP685	M	C230320				83.1																			
85-EOP	5/7/2022 17:10	ASS950	M	C230886				113																			
85-EOP	5/12/2022 16:45	ATA820	M	C232369				6.25																			
85-EOP	5/19/2022 11:50	ATL916	M	C234314				25.3																			
85-EOP	5/29/2022 11:45	ATW973	M	C236421				17.7																			
85-EP	3/27/2022 10:40	AQS346	M	C219976				12.1																			
85-EP	4/3/2022 17:05	ARB463	M	C221989				16.0																			
85-IDZ	3/24/2022 16:35	AQP988	M	C219524				187																			
85-IDZ	3/30/2022 16:50	AQX840	M	C221206				138																			
85-IDZ	5/4/2022 18:35	ASP687	M	C230320				28.7																			
85-IDZ	5/7/2022 18:00	ASS952	M	C230886				20.6																			
85-IDZ	5/12/2022 17:15	ATA822	M	C232369				5.00																			
85-IDZ	5/19/2022 12:00	ATL917	M	C234314				54.9																			
85-IDZ	5/29/2022 12:15	ATW975	M	C236421				237																			
85-US	3/24/2022 16:30	AQP989	M	C219524				278																			
85-US	5/4/2022 18:30	ASP686	M	C230320				8.7																			
85-US	5/7/2022 17:55	ASS951	M	C230886				29.9																			
85-US	5/12/2022 17:00	ATA821	M	C232369				2.37																			
85-US	5/29/2022 12:05	ATW974	M	C236421				165																			
85-WP	4/3/2022 17:00	ARB462	M	C221989				28.7																			
A25_EOP	2/10/2022 14:45	AOM668	M	C208923				99.9																			
A25_EOP	2/12/2022 12:50	AOP218	M	C209346				53.2																			
A25_EOP	3/20/2022 17:15	AQJ918	M	C218219				28.7																			
A25_EOP	3/26/2022 19:00	AQS242	M	C219944				20.3																			
A25-SP	4/2/2022 13:40	ARB530	M	C222000				1.0																			
A25-SP	4/29/2022 14:00	ASL383	M	C229488																							
A25-SP	5/3/2022 15:40	ASO451	M	C230063				12.0																			
AC-S-Sump	3/6/2022 14:00	APS818	M	C214508	8.03	1130	696	64.6	463	420	356	<1.0	434	<1.0	<1.0	34.0	0.193	0.204	244			0.554	<0.010	0.45	0.45	0.0034	1.06
Area_20_Sump	7/8/2022 12:15	AWW523	M	C249170	7.90	786	468	133	401	371	281	<1.0	343	<1.0	<1.0	50.2	0.198	0.467	61.4			0.042	0.032	0.96	0.99	<0.0030	2.65
Area_23_BT	2/11/2022 12:55	AOM649	M	C208915	7.66	871	516	6.71	283	256	290	<1.0	353	<1.0	<1.0	34.7	0.123	0.331	131			0.453	0.036	0.95	0.98	0.0032	0.95
Area_23_NCD	4/21/2022 16:00	ARX711	M	C226546				11.7																			
Area_23_NCD	5/7/2022 13:15	ASS948	M	C230886				43.5																			
Area_23_NCD-EOP	4/21/2022 17:05	ARX712	M	C226546				138																			
Area_23_NCD-EOP	5/7/2022 13:50	ASS949	M	C230886				18.4																			
Area_24_E_Sump	7/27/2022 15:35	AYK064	M	C255556				8.0																			
Area_24_E_Sump	8/3/2022 16:35	AYX385	M	C257672				<1.0																			
Area_24_E_Sump	8/7/2022 14:25	AZC303	M	C258444				3.6																			
Area_24_E_Sump	8/11/2022 15:30	AZR300	M	C260829				15.2																			
Area_24_E_Sump	9/10/2022 12:50	BBR905	M	C269730				4.0																			
Area_24_E_Sump	9/13/2022 11:40	BBX516	M	C270776	8.38	543	338	1.6	282	280	230	2.7	274	3.2	<1.0	7.92	0.190	0.074	51.4			<0.015	0.0063	0.132	0.138	<0.0030	2.38
Area_24_E_Sump	9/22/2022 16:00	BCR620	M	C273969				2.0																			
Area_24_E_Sump	9/28/2022 13:45	BDE183	M	C276033				8.0																			
Area_24_E_Sump	10/4/2022 13:25	BDR439	M	C277814				5.8																			
Area_24_E_Sump	10/13/2022 15:00	BEN620	M	C280837				7.0																			
Area_24_E_Sump	10/21/2022 12:00	BFD225	M	C283172				10.6																			
Area_24_E_Sump	10/26/2022 14:25	BFS036	M	C285038				5.5																			
Area_24_E_Sump	11/3/2022 15:20	BGJ746	M	C287759				4.3																			
Area_24_E_Sump	11/8/2022 12:30	BGT302	M	C289111				4.67																			
Area_24_E_Sump	11/15/2022 12:25	BHD953	M	C290817				<1.0																			
Area_24_E_Sump	11/23/2022 14:20	BHR242	M	C292918				1.6																			
Area_24_E_Sump	11/30/2022 12:30	BID445	M	C294835				<1.0																			
Area_24_W_Sump	7/10/2022 14:55	AWZ489	M	C249617				20.8																			
Area_24_W_Sump	7/13/2022 15:55	AXH418	M	C250934				1.5																			
Area_24_W_Sump	7/24/2022 15:00	AYC681	M	C254290				7.88																			
Area_24_W_Sump	7/27/2022 15:45	AYK065	M	C255556				4.0																			
Area_25_Pond	3/17/2022 14:30	AQH806	M	C217776				367																			
Area_30_EOP	2/10/2022 15:30	AOM665	M	C208923	6.82	307	200	12.8	143	153	54.0	<1.0	65.9	<1.0	<1.0	1.70	0.121	0.027	92.1			0.058	<0.010	0.24	0.24	0.0128	3.44
Area_30_EOP	3/20/2022 16:05	AQJ915	M	C218219	7.73	885	680	4.44	489	455	53.4	<1.0	65.2	<1.0	<1.0	7.10	0.142	0.125	384			0.287	<0.010	0.21	0.21	0.0050	5.56
Area_30_EOP	4/2/2022 15:00	ARB521	M	C222000	7.21	918	688	3.0	498	455	63.6	<1.0	77.6	<1.0	<1.0	12.1	0.087	0.156	430			0.035	<0.010	<0.050	<0.050	<0.0030	3.33
Area_30_EOP	4/23/2022 13:30	ARZ187	M	C226855	7.10	1290	1040	1.7	749	740	113	<1.0	138	<1.0	<1.0	25.4	0.142	0.284	579			0.039	<0.010	<0.010	<0.010	<0.0030	5.04
Area_30_EOP	5/1/2022 13:00	ASL428	M	C229493	7.85	731	496	6.38	379	361	72.6	<1.0	88.5	<1.0	<1.0	19.0	0.162	0.254	277			0.033	0.012	0.27	0.29	0.0041	3.89
Area_30_EOP	5/4/2022 14:15	ASP680	M	C230320	8.00	971	724	5.9	530	501	101	<1.0	123	<1.0	<1.0	18.4	0.153	0.208	391			0.023	<0.010	<0.050	<0.050	<0.0030	8.70
Area_30_EOP	5/7/2022 12:30	ASS944	M	C230886	7.90	877	636	2.5	459	454	74.7	<1.0	91.1	<1.0	<1.0	19.1	0.153	0.245	328			0.029	<0.010	0.10	0.10	<0.0030	4.80
Area_30_EOP	5/10/2022 12:50	ASX005	M	C231638	7.95	936	680	1.7	498	469	76.1	<1.0	92.9	<1.0	<1.0	17.7	0.203	0.319	386			0.023	<0.010	<0.050	<0.050	<0.0030	6.02
Area_30_EOP	5/30/2022 13:45	ATZ470	M	C236894	7.18	1110	848	2.7	591	616	85.1	<1.0	104	<1.0	<1.0	10.4	0.505	0.138	518			0.029	<0.010	<0.010	<0.010	<0.0030	7.86
Area_30_EOP	6/20/2022 11:55	AVO967	M	C243664	7.50	1310	1110	3.8	774	710	78.2	<1.0	95.4	<1.0	<1.0	15.5	0.498	0.241	702			0.024	<0.010	<0.050	<0.050	<0.0030	4.27

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
Area_30_EOP	8/5/2022 12:00	AYY785	M	C257846	7.92	1980	1970	4.0	1220	1320	64.7	<1.0	78.9	<1.0	<1.0	14.9	0.510	0.11	1200			0.034	<0.0050	<0.020	<0.020	<0.0030	4.92
Area_30_EOP	9/17/2022 14:45	BCF754	M	C272259	7.63	2680	2850	3.6	2430	1810	53.3	<1.0	65.1	<1.0	<1.0	20.5	0.550	0.14	1640			<0.015	<0.0050	0.033	0.033	<0.0030	4.55
Area_30_SP	1/25/2022 14:05	ANP166	M	C204905	6.46	205	116	2.7	95.3	88.0	28.5	<1.0	34.8	<1.0	<1.0	0.54	0.066	0.032	66.0			0.077	<0.010	0.26	0.26	0.0316	3.05
Area_30_SP	4/18/2022 15:35	ARU249	M	C225693	7.58	2320	2240	12.1	1510	1430	168	<1.0	205	<1.0	<1.0	47.2	0.087	0.417	1310			0.330	<0.010	<0.050	<0.050	<0.0030	9.17
Area_30_SP	4/27/2022 15:30	ASH198	M	C228648	7.96	1390	1100	5.58	747	791	105	<1.0	128	<1.0	<1.0	28.9	0.182	0.330	676			0.025	<0.010	<0.050	<0.050	<0.0030	8.57
Area_30_SP	5/4/2022 14:25	ASP681	M	C230320	8.04	977	716	14.4	531	503	98.9	<1.0	121	<1.0	<1.0	17.9	0.178	0.202	397			0.022	<0.010	<0.10	<0.10	<0.0030	10.3
Area_30_SP	5/4/2022 14:35	ASP682	M	C230320	8.07	981	728	12.8	550	508	96.9	<1.0	118	<1.0	<1.0	17.8	0.154	0.201	392			0.023	<0.010	<0.050	<0.050	<0.0030	10.9
Area_30_SP	5/24/2022 14:30	ATR511	M	C235358	8.00	1290	1010	1.25	732	721	107	<1.0	131	<1.0	<1.0	22.0	0.423	0.241	579			0.047	<0.010	<0.050	<0.050	<0.0030	10.3
Area_30_SP	6/16/2022 13:40	AVK125	M	C242788	7.52	1760	1550	3.4	1080	1210	79.6	<1.0	97.1	<1.0	<1.0	13.9	0.586	0.277	1010			<0.015	<0.010	<0.050	<0.050	<0.0030	7.20
Area_30_SP	6/25/2022 14:15	AVZ709	M	C245512	7.63	1720	1540	<0.98	1070	1020	72.8	<1.0	88.8	<1.0	<1.0	14.7	0.481	0.276	1020			<0.015	<0.010	<0.050	<0.050	<0.0030	5.55
Area_30_SP	7/3/2022 12:30	AWM047	M	C247492	7.56	2010	1860	4.48	1270	1220	61.6	<1.0	75.1	<1.0	<1.0	19.2	0.532	0.255	1240			<0.015	<0.010	<0.050	<0.050	<0.0030	8.39
Area_30_SP	7/11/2022 13:20	AXC660	M	C250105	7.38	2410	2350	2.5	1710	1650	69.3	<1.0	84.6	<1.0	<1.0	18.8	0.533	0.27	1450			0.016	<0.010	<0.050	<0.050	0.0037	6.51
Area_30_SP	7/30/2022 15:00	AYP674	M	C256352	7.86	3430	3940	6.4	2440	2730	60.7	<1.0	74.0	<1.0	<1.0	44.9	0.650	0.16	2470			0.060	<0.0050	0.032	0.032	<0.0030	8.43
Area_30_SP	9/9/2022 11:45	BBS004	M	C269764	7.50	2880	3090	10.4	1930	1840	68.0	<1.0	83.0	<1.0	<1.0	22.5	0.620	0.12	1840			<0.015	<0.0050	<0.020	<0.020	<0.0030	5.06
Area_30_SP	10/1/2022 11:20	BDL253	M	C276877	7.82	2740	2850	3.5	1780	1840	107	<1.0	130	<1.0	<1.0	22.5	0.572	0.295	1760			<0.015	<0.010	<0.050	<0.050	<0.0030	4.24
Area_30_SP	10/6/2022 13:35	BDZ975	M	C278888	7.26	2810	2830	<1.0	1950	1900	107	<1.0	131	<1.0	<1.0	23.3	0.465	0.299	1790			0.043	<0.010	<0.10	<0.10	<0.0030	7.62
Area_30_SP	10/22/2022 13:20	BFI046	M	C283756	7.80	2910	2910	<0.99	2030	2010	108	<1.0	132	<1.0	<1.0	25.5	0.510	0.142	1890			<0.015	<0.0050	<0.020	<0.020	<0.0030	4.01
Area_52_Sump	6/12/2022 9:30	AVD505	M	C241814	8.29	1980	1630	2.1	798	782	63.1	<1.0	77.0	<1.0	<1.0	8.28	1.46	0.340	1150			<0.015	<0.010	0.13	0.13	<0.0030	5.05
Area_A_N_Ditch	1/25/2022 14:40	ANP165	M	C204905	7.41	317	148	3.9	160	149	133	<1.0	162	<1.0	<1.0	3.80	0.141	0.058	22.0			0.073	<0.010	0.29	0.29	0.0047	3.13
Area_A_N_Ditch	3/21/2022 13:20	AQL270	M	C218465	8.01	386	204	11.5	205	193	145	<1.0	177	<1.0	<1.0	4.99	0.073	0.054	31.2			0.183	<0.010	0.41	0.41	0.0031	2.77
Area_A_N_Ditch	5/3/2022 13:00	ASO449	M	C230063	7.93	400	236	3.2	213	197	162	<1.0	198	<1.0	<1.0	3.38	0.162	<0.050	34.5			0.245	<0.010	0.55	0.55	<0.0030	2.26
Area_A_N_Ditch	5/30/2022 14:55	ATZ471	M	C236894	7.67	384	204	<1.0	202	194	159	<1.0	194	<1.0	<1.0	4.42	0.199	0.045	40.9			<0.015	<0.010	0.41	0.41	<0.0030	2.37
Area_A_N_Ditch	8/1/2022 13:55	AYR823	M	C256691				5.2																			
Area_A_N_Ditch	12/7/2022 14:10	BIR868	M	C297052	7.76	504	328	<1.0	265	270	195	<1.0	238	<1.0	<1.0	7.10	0.190	0.017	67.7			<0.015	<0.010	0.89	0.89	0.0086	1.68
Area_A_NE_Sump	3/9/2022 17:00	APZ006	M	C215885	7.87	1010	608	3.0	403	376	370	<1.0	451	<1.0	<1.0	17.1	0.065	0.163	167			0.102	<0.010	0.47	0.47	<0.0030	1.50
Area_A_NE_Sump	5/11/2022 11:00	ASZ427	M	C232133				15.3																			
Area_A_NE_Sump	5/22/2022 13:10	ATO539	M	C234788				4.90																			
Area_A_NE_Sump	5/26/2022 10:15	ATV286	M	C236083				4.8																			
Area_A_NE_Sump	5/30/2022 14:20	ATZ472	M	C236894				1.9																			
Area_A_NE_Sump	6/4/2022 11:40	AUL726	M	C238905				38.5																			
Area_A_NE_Sump	6/11/2022 11:30	AUY739	M	C241062																							
Area_A_NE_Sump	6/18/2022 13:15	AVL992	M	C243162				11.1																			
Area_A_NE_Sump	6/24/2022 16:45	AVZ718	M	C245512				9.3																			
Area_A_NE_Sump	7/3/2022 13:30	AWM051	M	C247492				5.1																			
Area_A_NE_Sump	7/6/2022 11:05	AWV912	M	C249077				5.07																			
Area_A_NE_Sump	7/12/2022 13:00	AXE622	M	C250400				55.5																			
Area_A_NE_Sump	7/24/2022 14:40	AYC680	M	C254290				7.58																			
Area_A_NE_Sump	8/7/2022 13:55	AZC302	M	C258444				12.8																			
Area_A_NE_Sump	8/14/2022 16:00	AZR297	M	C260829				72.0																			
Area_A_NE_Sump	8/15/2022 16:00	AZW326	M	C261663	8.10	646	436	100	372	345	280	<1.0	342	<1.0	<1.0	9.81	0.150	0.114	46.0			0.031	<0.0050	0.557	0.557	0.0065	2.54
Area_A_NE_Sump	8/27/2022 13:30	BAR930	M	C265307				28.8																			
Area_A_NE_Sump	9/4/2022 16:00	BBI410	M	C268301				11.6																			
Area_A_NE_Sump	9/8/2022 10:30	BBO450	M	C269143				7.6																			
Area_A_NE_Sump	9/22/2022 16:20	BCR621	M	C273969				44.0																			
Dewatering_Pond	6/1/2022 14:30	AUE685	M	C237797	7.89	673	420	5.3	265	271	141	<1.0	171	<1.0	<1.0	3.91	0.260	0.093	213			0.034	0.013	0.30	0.31	0.0043	10.7
Earthfill_Dam_DS_OUT	1/1/2022 13:45	FJ2200029-004	M	FJ2200029	8.05	375	214	<1.0	178	181		<1.0				1.98	0.113	<0.050	49.2			<0.0050	<0.0010	0.107		0.0036	1.46
Earthfill_Dam_DS_OUT	1/5/2022 12:10	FJ2200018-001	M	FJ2200018	8.03	442	274	<1.0	189	152	182	<1.0	222	<1.0	<1.0	2.69	0.146	<0.050	61.2			<0.0050	<0.0010	0.106		0.0037	1.49
Earthfill_Dam_DS_OUT	1/13/2022 13:00	FJ2200098-001	M	FJ2200098	8.21	307	198	<1.0	154	154	131	<1.0	160	<1.0	<1.0	1.38	0.098	<0.050	35.8			<0.0050	<0.0010	0.102	0.102	0.0034	1.53
Earthfill_Dam_DS_OUT	1/19/2022 11:00	FJ2200185-002	M	FJ2200185	8.22	414	254	<1.0	219	171	184	<1.0	224	<1.0	<1.0	2.51	0.124	<0.050	54.4			<0.0050	0.0014	0.103	0.104	0.0037	1.72
Earthfill_Dam_DS_OUT	1/26/2022 14:30	ANQ896	M	C205279	8.09	354	220	<1.0	170	161	136	<1.0	166	<1.0	<1.0	2.00	0.067	0.018	45.5			0.027	<0.010	0.11	0.11	0.0044	1.23
Earthfill_Dam_DS_OUT	2/3/2022 15:00	AOC179	M	C207302	7.96	406	260	<1.0	214	173	152	<1.0	186	<1.0	<1.0	2.77	0.134	0.036	64.2			0.017	<0.010	0.12	0.12	0.0049	1.29
Earthfill_Dam_DS_OUT	2/8/2022 12:00	AOI292	M	C208265	8.06	492	284	<0.99	217	217	171	<1.0	209	<1.0	<1.0	3.75	0.065	0.038	72.4			0.019	<0.010	0.15	0.15	0.0043	1.38
Earthfill_Dam_DS_OUT	2/16/2022 12:00	AOU843	M	C210450	8.02	394	220	<1.0	174	174	151	<1.0	184	<1.0	<1.0	2.51	0.115	0.032	58.1			0.030	<0.010	0.20	0.20	0.0046	1.48
Earthfill_Dam_DS_OUT	2/24/2022	APF946	M	C212235	7.82	222	180	<0.99	132	232	95.5	<1.0	117	<1.0	<1.0	<0.50	0.059	<0.010	18.9			0.020	<0.010	0.097	0.097	0.0046	1.70
Earthfill_Dam_DS_OUT	3/2/2022 12:20	APO715	M	C213881	7.90	489	304	<1.0	268	242	174	<1.0	212	<1.0	<1.0	5.09	0.133	0.078	86.1			<0.015	<0.010	0.23	0.23	0.0037	1.04
Earthfill_Dam_DS_OUT	3/10/2022 10:30	APZ004	M	C215884	7.73	212	104	<1.0	118	113	98.0	<1.0	120	<1.0	<1.0	<0.50	<0.050	<0.010	19.0			0.189	<0.010	0.080	0.080	0.0052	1.42
Earthfill_Dam_DS_OUT	3/10/2022 10:40	APZ005	D	C215884	7.93	456	272	<1.0	232	219	160	<1.0	195	<1.0	<1.0	4.56	<0.050	0.065	74.5			0.047	<0.010	0.18	0.18	0.0041	1.48
Earthfill_Dam_DS_OUT	3/17/2022 15:00	AQH799	M	C217776	8.01	450	316	1.8	188	193	137	<1.0	168	<1.0	<1.0	5.11	0.060	0.067	84.5			<0.015	<0.010	0.26	0.26	0.0046	1.04
Earthfill_Dam_E_BT	3/23/2022 12:30	AQP256	M	C219363	8.02	509	284	<1.0	234	215	149	<1.0	182	<1.0	<1.0	5.86	<0.050	0.128	94.6			0.021	<0.010	0.29	0.29	0.0041	1.01
Earthfill_Dam_E_BT	3/30/2022 13:05	AQX834	M	C221206	8.12	571	348	5.4	228	235	164	<1.0	200	<1.0	<1.0	8.12	0.060	0.171	118			0.027	<0.010	0.32	0.32	0.0042	0.83
Earthfill_Dam_E_BT	4/7/2022 15:30	ARI194	M	C223271	8.07	580	308	10.3	275	239	167	<1.0	204	<1.0	<1.0	9.50	0.070	0.172	122			<0.015	<0.010	0.26	0.26	0.0037	1.04
Earthfill_Dam_E_BT	4/13/2022 14:10	ARP728	M	C224775	8.07	547	316	3.9	225	225	166	<1.0	202	<1.0	<1.0	8.67	0.057	0.108	113			0.034	<0.010	0.20	0.20	0.0040	0.75
Earthfill_Dam_E_BT	4/20/2022 11:40	ARW670	M	C226267	7.73	560	348	<1.0	269	227	169	<1.0	206	<1.0	<1.0	9.53	<0.050	0.175	114			0.023	<0.010	0.23	0.23	0.0054	1.44
Earthfill_Dam_E_BT	4/28/2022 13:00	ASH220	M	C228650	8.13	521	320	<1.0	223	220	157	<1.0	192	<1.0	<1.0	7.34	0.055	0.086	97.8			<0.015	<0.010	0.21	0.21	0.0044	1.13
Earthfill_Dam_E_BT	5/4/2022 11:20	ASP678	M	C230320	8.01	548	336	1.7	235	247	154	<1.0	188	<1.0	<1.0	10.1	<0.050	0.148	106			0.022	<0.010	0.26	0.26	0.0041	0.91
Earthfill_Dam_E_BT	5/11/2022 13:50	ASZ426	M	C232133	7.90	569	360	<1.0	248	250	159	<1.0	194	<1.0	<1.0	12.3	0.055	0.167	112			0.556	<0.010	0.35	0.35	0.0041	<0.50
GC-Debris-US	1/23/2022 18:15	FJ2200194-005	M	FJ2200194	7.74		874	237																		0.0037	
GC-Debris-US	2/9/2022 18:00	AOK264	M	C208577				1660																			
GC-Debris-US	2/15/2022 10:55	AOS725	M	C210043				15.9																			

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
GC-Debris-US	3/17/2022 13:40	AQH804	M	C217776				3260																			
GC-Debris-US	3/19/2022 17:05	AQJ977	M	C218236				1320																			
GC-Debris-US	3/22/2022 10:40	AQN718	M	C218958				2120																			
GC-Debris-US	3/26/2022 17:55	AQS241	M	C219944				1610																			
GC-Debris-US	3/31/2022 17:00	AQY800	M	C221428				9110																			
GC-Debris-US	4/9/2022 11:40	ARK010	M	C223638				2540																			
GC-Debris-US	4/15/2022 11:00	ARQ205	M	C224832				128																			
GC-Debris-US	4/30/2022 14:00	ASL382	M	C229488																							
GC-Debris-US	5/4/2022 16:50	ASP684	M	C230320				17400																			
GC-Debris-US	5/10/2022 17:00	ASX008	M	C231638				12700																			
GC-Debris-US	5/21/2022 14:30	ATN143	M	C234510				1190																			
GC-Debris-US	5/27/2022 10:10	ATV304	M	C236089				3030																			
GC-Debris-US	5/28/2022 11:00	ATX756	M	C236620				68700																			
GC-Debris-US	6/1/2022 16:10	AUE686	M	C237797				4700																			
GC-Debris-US	6/11/2022 12:20	AUY741	M	C241062																							
GC-Debris-US	6/17/2022 16:40	AVK726	M	C242942				2540																			
GC-Debris-US	6/23/2022 14:45	AVV601	M	C244839				3410																			
GC-Debris-US	7/3/2022 15:30	AWM052	M	C247492				116																			
GC-Debris-US	7/6/2022 16:35	AWV914	M	C249077				496																			
GC-Debris-US	7/24/2022 16:00	AYC683	M	C254290				<0.96																			
GC-Debris-US	7/31/2022 15:40	AYO877	M	C256301				68.0																			
GC-Debris-US	8/4/2022 13:30	AYY908	M	C257848				1280																			
GC-Debris-US	8/14/2022 17:10	AZR299	M	C260829				2.4																			
L3-DC-DS	2/10/2022 18:45	AOM670	M	C208923				61.4																			
L3-DC-DS	3/17/2022 20:10	AQH808	M	C217776				143																			
L3-DC-DS	3/19/2022 18:55	AQJ980	M	C218236				81.4																			
L3-DC-DS	3/22/2022 16:50	AQN721	M	C218958				202																			
L3-DC-DS	3/24/2022 15:30	AQP986	M	C219524				39.6																			
L3-DC-DS	3/29/2022 17:50	AQV268	M	C220606				20.3																			
L3-DC-DS	4/9/2022 10:20	ARK008	M	C223638				7.11																			
L3-DC-DS	4/23/2022 17:55	ARZ191	M	C226855				10.0																			
L3-DC-DS	4/27/2022 19:00	ASH201	M	C228648				17.6																			
L3-DC-DS	5/5/2022 15:10	ASR011	M	C230531				1.5																			
L3-DC-DS	5/8/2022 17:20	ASS889	M	C230861				5.96																			
L3-DC-DS	5/12/2022 10:10	ATA819	M	C232369				5.7																			
L3-DC-DS	5/21/2022 16:40	ATN141	M	C234510				2.4																			
L3-DC-DS	5/28/2022 19:05	ATX750	M	C236620				461																			
L3-DC-DS	6/11/2022 15:00	AUY743	M	C241062																							
L3-DC-US	2/10/2022 18:00	AOM669	M	C208923				81.5																			
L3-DC-US	3/17/2022 20:00	AQH807	M	C217776				131																			
L3-DC-US	3/19/2022 18:45	AQJ979	M	C218236				76.3																			
L3-DC-US	3/22/2022 16:40	AQN720	M	C218958				247																			
L3-DC-US	3/24/2022 15:20	AQP985	M	C219524				34.1																			
L3-DC-US	3/29/2022 17:40	AQV267	M	C220606				23.5																			
L3-DC-US	4/9/2022 10:40	ARK007	M	C223638				7.6																			
L3-DC-US	4/23/2022 17:45	ARZ190	M	C226855				20.8																			
L3-DC-US	4/27/2022 18:50	ASH200	M	C228648				12.8																			
L3-DC-US	5/5/2022 15:00	ASR010	M	C230531				3.03																			
L3-DC-US	5/8/2022 17:10	ASS888	M	C230861				8.59																			
L3-DC-US	5/12/2022 10:00	ATA818	M	C232369				18.6																			
L3-DC-US	5/21/2022 16:20	ATN140	M	C234510				4.0																			
L3-DC-US	5/28/2022 18:55	ATX749	M	C236620				510																			
L3-DC-US	6/11/2022 15:20	AUY742	M	C241062																							
L3-W-DC-EOP	2/9/2022 18:30	AOK265	M	C208577				131																			
L3-W-DC-EOP	2/12/2022 17:45	AOP219	M	C209346				36.4																			
L3-W-DC-EOP	3/17/2022 20:20	AQH809	M	C217776				124																			
L3-W-DC-EOP	3/19/2022 18:30	AQJ978	M	C218236				180																			
L3-W-DC-EOP	3/22/2022 16:35	AQN722	M	C218958				659																			
L3-W-DC-EOP	3/24/2022 15:10	AQP984	M	C219524				75.9																			
L3-W-DC-EOP	3/29/2022 17:25	AQV266	M	C220606				110																			
L3-W-DC-EOP	4/9/2022 10:30	ARK009	M	C223638				10.7																			
L3-W-DC-EOP	4/16/2022 17:40	ARR881	M	C225206				3.1																			
L3-W-DC-EOP	4/22/2022 15:55	ARZ192	M	C226855				207																			
L3-W-DC-EOP	4/23/2022 17:30	ARZ189	M	C226855				17.9																			
L3-W-DC-EOP	4/24/2022 14:50	ASA419	M	C227083				25.1																			
L3-W-DC-EOP	4/27/2022 19:10	ASH202	M	C228648				35.9																			
L3-W-DC-EOP	5/5/2022 14:50	ASR009	M	C230531				9.67																			
L3-W-DC-EOP	5/8/2022 17:00	ASS887	M	C230861				19.7																			
L3-W-DC-EOP	5/12/2022 9:50	ATA817	M	C232369				29.2																			

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
L3-W-DC-EOP	5/21/2022 16:00	ATN142	M	C234510				20.8																			
L3-W-DC-EOP	5/28/2022 18:45	ATX748	M	C236620				299																			
L3-W-DC-EOP	6/17/2022 17:45	AVK728	M	C242942				8.8																			
L3-W-DC-Sump	6/11/2022 15:30	AUY744	M	C241062																							
L3-W-DC-Sump	7/3/2022 16:40	AWM054	M	C247492				4.70																			
LBEX_B1	1/22/2022 10:30	FJ2200193-002	M	FJ2200193	7.66	438	295	525	267	211	62.3	<1.0	76.0	<1.0	<1.0	1.90	0.106	<0.050	153			0.156	0.0202	1.33	1.35	0.0028	13.9
LBGC-OUT	1/23/2022 15:50	FJ2200194-004	M	FJ2200194	6.56		444	48.7																		<0.0010	
LBGC-OUT	2/9/2022 17:50	AOK263	M	C208577				3560																			
LBGC-OUT	3/17/2022 13:30	AQH805	M	C217776				2920																			
LBGC-OUT	3/19/2022 15:15	AQJ976	M	C218236				475																			
LBGC-OUT	3/22/2022 10:50	AQN719	M	C218958				1710																			
LBGC-OUT	3/26/2022 17:15	AQS240	M	C219944				67.7																			
LBGC-OUT	3/31/2022 18:00	AQY801	M	C221428				7000																			
LBGC-OUT	4/9/2022 11:50	ARK011	M	C223638				2560																			
LBGC-OUT	4/15/2022 11:50	ARQ206	M	C224832				141																			
LBGC-OUT	4/21/2022 11:45	ARX708	M	C226546				67.3																			
LBGC-OUT	4/30/2022 14:00	ASL381	M	C229488																							
LBGC-OUT	5/4/2022 16:40	ASP683	M	C230320				14500																			
LBGC-OUT	5/10/2022 16:20	ASX007	M	C231638				13700																			
LBGC-OUT	5/21/2022 14:50	ATN144	M	C234510				1180																			
LBGC-OUT	5/27/2022 11:05	ATV305	M	C236089				2200																			
LBGC-OUT	5/28/2022 10:45	ATX755	M	C236620				78800																			
LBGC-OUT	6/1/2022 16:45	AUE687	M	C237797				3810																			
LBGC-OUT	6/11/2022 12:00	AUY740	M	C241062																							
LBGC-OUT	6/17/2022 17:25	AVK727	M	C242942				999																			
LBGC-OUT	6/23/2022 14:05	AVV600	M	C244839				2130																			
LBGC-OUT	7/3/2022 15:50	AWM053	M	C247492				122																			
LBGC-OUT	7/6/2022 16:00	AWV913	M	C249077				40.0																			
LBGC-OUT	7/24/2022 15:50	AYC682	M	C254290				1.24																			
LBGC-OUT	7/31/2022 15:30	AYO876	M	C256301				2.0																			
LBGC-OUT	8/4/2022 14:25	AYY909	M	C257848				4540																			
LBGC-OUT	8/14/2022 17:00	AZR298	M	C260829				4.0																			
LBGC-OUT	10/25/2022 15:55	BFP710	M	C284665				9.68																			
MWTF-CELL-1-PIPE	1/12/2022 8:45	AMY185	M	C201826				410																			
MWTF-CELL-1-PIPE	1/19/2022 8:45	ANG681	M	C203398				350																			
MWTF-CELL-1-PIPE	1/26/2022 9:00	ANP082	M	C204889				300																			
MWTF-CELL-1-PIPE	2/2/2022 9:15	ANZ527	M	C206699				310																			
MWTF-CELL-1-PIPE	2/9/2022 8:50	AOI319	M	C208269				210																			
MWTF-CELL-1-PIPE	2/16/2022 8:50	AOS652	M	C210024				160																			
MWTF-CELL-1-PIPE	2/23/2022 9:00	APC513	M	C211586				110																			
MWTF-CELL-1-PIPE	3/2/2022 9:30	APM689	M	C213453				970																			
MWTF-CELL-1-PIPE	3/9/2022 8:45	APW000	M	C215209				260																			
MWTF-CELL-1-PIPE	3/16/2022 8:50	AQE363	M	C217028				340																			
MWTF-CELL-1-PIPE	3/23/2022 9:30	AQN282	M	C218879				220																			
MWTF-CELL-1-PIPE	3/30/2022 9:30	AQV055	M	C220559				220																			
MWTF-CELL-1-PIPE	4/6/2022 8:50	ARE618	M	C222526				240																			
MWTF-CELL-1-PIPE	4/13/2022 8:45	ARN240	M	C224394				250																			
MWTF-CELL-1-PIPE	4/20/2022 9:10	ARV016	M	C225896				290																			
MWTF-CELL-1-PIPE	4/27/2022 9:30	ASD263	M	C227745				100																			
MWTF-CELL-1-PIPE	5/3/2022 8:50	ASK914	M	C229394				160																			
MWTF-CELL-1-PIPE	5/11/2022 8:50	ASW835	M	C231613				83																			
MWTF-CELL-1-PIPE	5/18/2022 9:05	ATH374	M	C233574				160																			
MWTF-CELL-1-PIPE	5/25/2022 9:15	ATQ476	M	C235131				280																			
MWTF-CELL-1-PIPE	6/1/2022 8:50	AUC440	M	C237402				270																			
MWTF-CELL-1-PIPE	6/8/2022 8:50	AUR914	M	C239868				62																			
MWTF-CELL-1-PIPE	6/29/2022 8:50	AWE580	M	C246283				150																			
MWTF-CELL-1-PIPE	7/11/2022 11:35	AXC956	M	C250181	8.58	1460	956	363	521	239	52.1	4.5	52.7	5.3	<1.0	78.6	0.255	1.45	511			0.151	0.063	1.4	1.5	<0.0030	2.93
MWTF-CELL-1-PIPE	7/28/2022 11:45	AYM157	M	C255903	9.11	1110	592	335	410	89.9	77.9	8.8	73.6	10.5	<1.0	95.1	0.250	1.61	285			0.085	0.0382	0.827	0.865	<0.0030	4.25
MWTF-CELL-3	1/5/2022 11:00	AMR869	M	C200496	6.50			6.0	140	137																	
MWTF-CELL-3	1/10/2022 9:30	FJ2200044-001	M	FJ2200044	6.85	656	406	3.4	152	144	143	<1.0	175	<1.0	<1.0	33.4	0.200	0.369	142			0.129	0.0274	0.411	0.438	<0.0010	2.79
MWTF-CELL-3	1/12/2022 8:55	AMY187	M	C201826	7.19			3.9	155	143																	
MWTF-CELL-3	1/19/2022 8:55	ANG683	M	C203398	6.59			7.1	153	148																	
MWTF-CELL-3	1/26/2022 9:10	ANP081	M	C204889	7.16			14	139	134																	
MWTF-CELL-3	2/2/2022 9:10	ANZ526	M	C206699	7.23			6.1	190	177																	
MWTF-CELL-3	2/9/2022 8:55	AOI318	M	C208269	6.37			5.3	215	232																	
MWTF-CELL-3	2/16/2022 8:55	AOS651	M	C210024	6.35			4.3	186	180																	
MWTF-CELL-3	2/23/2022 9:05	APC512	M	C211586	7.19			18	167	158																	
MWTF-CELL-3	3/2/2022 9:15	APM688	M	C213453	6.36			1.9	181	175																	
MWTF-CELL-3	3/9/2022 8:55	APV999	M	C215209	7.14			5.9	121	121																	

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
MWTF-CELL-3	3/16/2022 9:00	AQE362	M	C217028	6.77			8.0	123	122																	
MWTF-CELL-3	3/23/2022 9:10	AQN281	M	C218879	6.91			13	151	144																	
MWTF-CELL-3	3/30/2022 9:00	AQV054	M	C220559	7.01			12	147	150																	
MWTF-CELL-3	4/6/2022 8:55	ARE617	M	C222526	7.12			5.8	148	136																	
MWTF-CELL-3	4/13/2022 8:55	ARN239	M	C224394	6.60			5.1	148	139																	
MWTF-CELL-3	4/20/2022 9:05	ARV015	M	C225896	6.71			12	169	153																	
MWTF-CELL-3	4/27/2022 9:15	ASD262	M	C227745	7.63			6.0	127	119																	
MWTF-CELL-3	5/3/2022 8:55	ASK913	M	C229394	7.06			3.3	290	277																	
MWTF-CELL-3	5/11/2022 8:55	ASW834	M	C231613	7.48			4.1	191	197																	
MWTF-CELL-3	5/18/2022 9:05	ATH373	M	C233574	7.53			1.7	147	160																	
MWTF-CELL-3	5/25/2022 9:10	ATQ475	M	C235131	7.58			22	146	155																	
MWTF-CELL-3	6/1/2022 8:55	AUC439	M	C237402	7.77			2.8	261	247																	
MWTF-CELL-3	6/8/2022 8:55	AUR913	M	C239868	7.69			2.3	175	176																	
MWTF-CELL-3	6/18/2022 10:00	AVL920	M	C243145	6.73	1500	1040	4.1	282	303	63.1	<1.0	77.0	<1.0	<1.0	49.8	0.458	1.08	582			0.110	0.083	1.6	1.7	0.0034	2.82
MWTF-CELL-3	6/19/2022 7:00	AVL891	M	C243135	6.69	1440	1000	4.1	292	315	55.0	<1.0	67.1	<1.0	<1.0	44.0	0.449	1.02	598			0.096	0.078	1.8	1.9	0.0032	2.84
MWTF-CELL-3	6/20/2022 11:05	AVO877	M	C243649	6.63	1380	984	4.01	334	317	44.7	<1.0	54.6	<1.0	<1.0	39.6	0.460	0.853	608			0.128	0.074	2.0	2.1	<0.0030	3.13
MWTF-CELL-3	6/22/2022 9:30	AVQ401	M	C243950	7.28			3.0	375	319																	
MWTF-CELL-3	6/29/2022 8:55	AWE579	M	C246283	7.07			2.8	196	199																	
MWTF-CELL-3	7/11/2022 12:00	AXC957	M	C250181	6.44	1320	876	1.87	217	214	60.7	<1.0	74.0	<1.0	<1.0	71.3	0.298	1.33	460			0.076	0.039	1.1	1.1	<0.0030	3.21
MWTF-CELL-3	7/19/2022 12:50	AXQ710	M	C252510	7.51	1210	804	1.6	175	170	98.8	<1.0	121	<1.0	<1.0	76.2	0.210	1.46	339			0.096	0.031	0.87	0.90	<0.0030	1.97
MWTF-CELL-3	7/28/2022 12:10	AYM158	M	C255903	7.78	1040	664	<2.8	157	141	104	<1.0	126	<1.0	<1.0	76.0	0.230	1.29	264			0.053	0.0118	0.479	0.490	<0.0030	2.09
MWTF-CELL-3	8/3/2022 11:10	AYX384	M	C257672	8.07	971	590	6.8	103	98.8	81.2	<1.0	99.1	<1.0	<1.0	78.4	0.240	1.44	243			0.068	0.0275	0.590	0.618	<0.0030	2.52
MWTF-CELL-3	8/22/2022 15:00	BAG922	M	C263407	8.16	1030	634	1.6	81.8	83.4	113	<1.0	138	<1.0	<1.0	69.8	0.300	1.50	265			0.056	0.0370	0.657	0.694	<0.0030	2.03
MWTF-CELL-3	9/4/2022 15:30	BBI408	M	C268301	8.48	1010	616	<1.0	74.3	74.0	119	2.4	140	2.9	<1.0	66.8	0.310	1.32	227			0.058	0.0334	0.508	0.542	<0.0030	3.50
MWTF-CELL-3	9/8/2022 12:15	BBO448	M	C269143	7.98	980	614	2.8	80.1	79.4	110	<1.0	135	<1.0	<1.0	63.0	0.300	1.29	243			0.062	0.0463	0.559	0.606	<0.0030	2.51
MWTF-CELL-3	9/17/2022 12:20	BCF753	M	C272259	7.65	1510	978	2.0	165	158	98.5	<1.0	120	<1.0	<1.0	66.6	0.250	1.23	448			0.033	0.0134	0.326	0.339	<0.0030	3.72
MWTF-CELL-3	9/22/2022 13:00	BCR618	M	C273969	7.78	1200	792	2.4	239	236	61.8	<1.0	75.4	<1.0	<1.0	44.3	0.290	0.871	428			0.060	0.0176	0.351	0.369	<0.0030	2.49
MWTF-CELL-3	9/30/2022 11:40	BDH546	M	C276348	6.65	1020	644	2.5	181	173	80.8	<1.0	98.6	<1.0	<1.0	54.6	0.239	0.960	341			0.082	0.016	0.45	0.47	<0.0030	2.49
MWTF-CELL-3	10/6/2022 12:25	BDZ974	M	C278888	7.24	1030	692	7.3	263	244	148	<1.0	180	<1.0	<1.0	54.7	0.206	0.958	300			0.055	0.021	0.52	0.54	<0.0030	1.62
MWTF-CELL-3	10/19/2022 11:35	BFA350	M	C282741	7.82	1030	596	24.7	337	331	219	<1.0	268	<1.0	<1.0	33.6	0.223	0.596	269			0.118	0.021	0.79	0.81	<0.0030	1.78
MWTF-CELL-3	10/29/2022 15:25	BFZ656	M	C286199	8.22	688	484	6.23	268	252	191	<1.0	233	<1.0	<1.0	17.5	0.206	0.369	146			0.058	<0.010	0.652	0.652	0.0032	2.15
MWTF-CELL-3	11/3/2022 13:00	BGJ745	M	C287759	7.64	560	308	12.4	237	225	173	<1.0	211	<1.0	<1.0	10.2	0.153	0.175	106			0.024	0.011	0.93	0.94	<0.0030	2.08
MWTF-CELL-3	11/9/2022 11:30	BGW285	M	C289508	7.79	505	304	1.26	213	206	155	<1.0	190	<1.0	<1.0	7.58	0.157	0.132	86.0			0.018	<0.010	0.67	0.67	0.0036	2.00
MWTF-CELL-3	11/19/2022 12:50	BHL413	M	C291899	7.85	465	308	5.4	208	196	158	<1.0	193	<1.0	<1.0	6.11	0.160	0.147	80.8			0.062	<0.010	0.49	0.49	<0.0030	1.94
MWTF-CELL-3	11/23/2022 13:15	BHR241	M	C292918	7.89	456	260	10.5	220	194	158	<1.0	192	<1.0	<1.0	6.18	0.134	0.114	76.3			<0.015	<0.010	0.41	0.41	<0.0030	1.21
MWTF-CELL-3	12/2/2022 11:30	BIF819	M	C295193	8.00	459	272	2.30	211	212	164	<1.0	200	<1.0	<1.0	2.77	0.068	<1.0	78.5			<0.015	<0.010	0.41	0.41	0.0049	1.45
MWTF-CELL-3	12/17/2022 11:30	BJL793	M	C299939	7.95	513	292	4.4	227	223	172	<1.0	209	<1.0	<1.0	6.30	0.201	0.200	87.0			0.017	<0.010	0.46	0.46	0.0049	1.26
MWTF-CELL-3	12/20/2022 11:20	BJP135	M	C2A0603	8.03	493	308	6.1	217	216	169	<1.0	206	<1.0	<1.0	5.88	0.192	0.066	79.3			<0.015	<0.010	0.47	0.47	0.0038	1.16
MWTF-CELL-3	12/29/2022 13:00	BJT906	M	C2A1753	7.72	504	304	<1.0	222	207	177	<1.0	216	<1.0	<1.0	10.4	0.211	0.235	75.2			0.030	<0.010	0.43	0.43	0.0046	2.04
MWTF-PAG-POND	1/12/2022 8:50	AMY186	M	C201826	7.68			65	326	306																	
MWTF-PAG-POND	1/19/2022 8:50	ANG682	M	C203398	7.45			12	267	264																	
MWTF-PAG-POND	1/26/2022 9:30	ANP080	M	C204889	7.82			46	364	331																	
MWTF-PAG-POND	2/2/2022 9:00	ANZ525	M	C206699	8.28			21	294	254																	
MWTF-PAG-POND	2/9/2022 8:45	AOI317	M	C208269	7.71			15	342	357																	
MWTF-PAG-POND	2/16/2022 8:45	AOS650	M	C210024	8.59			19	292	254																	
MWTF-PAG-POND	2/23/2022 9:00	APC511	M	C211586	8.09			11	239	234																	
MWTF-PAG-POND	3/2/2022 9:00	APM687	M	C213453	8.30			140	245	214																	
MWTF-PAG-POND	3/9/2022 8:50	APV998	M	C215209	8.38			26	251	252																	
MWTF-PAG-POND	3/16/2022 8:55	AQE361	M	C217028	8.14			10	279	278																	
MWTF-PAG-POND	3/23/2022 9:00	AQN280	M	C218879	8.22			37	245	223																	
MWTF-PAG-POND	3/30/2022 9:20	AQV053	M	C220559	8.00			29	315	279																	
MWTF-PAG-POND	4/6/2022 8:45	ARE616	M	C222526	8.32			8.1	266	225																	
MWTF-PAG-POND	4/13/2022 8:00	ARN238	M	C224394	8.19			4.3	294	303																	
MWTF-PAG-POND	4/20/2022 9:00	ARV014	M	C225896	8.37			31	250	232																	
MWTF-PAG-POND	4/27/2022 9:00	ASD261	M	C227745	8.32			120	238	194																	
MWTF-PAG-POND	5/3/2022 8:45	ASK912	M	C229394	7.94			11	302	298																	
MWTF-PAG-POND	5/11/2022 8:45	ASW833	M	C231613	8.07			16	327	309																	
MWTF-PAG-POND	5/18/2022 9:05	ATH372	M	C233574	7.89			9.7	238	255																	
MWTF-PAG-POND	5/25/2022 9:00	ATQ474	M	C235131	8.23			10	302	257																	
MWTF-PAG-POND	6/1/2022 8:45	AUC438	M	C237402	8.29			7.9	301	279																	
MWTF-PAG-POND	6/8/2022 8:45	AUR912	M	C239868	8.52			31	182	155																	
MWTF-PAG-POND	6/12/2022 11:30	AUY704	M	C241043	8.36	1840	1300	10.5	573	519	150	1.6	179	2.0	<1.0	44.8	0.794	1.07	809			0.123	0.083	0.89	0.98	0.0031	3.30
MWTF-PAG-POND	6/22/2022 9:45	AVQ400	M	C243950	8.46			17	386	329																	
MWTF-PAG-POND	6/29/2022 8:45	AWE578	M	C246283	8.15			38	280	257																	
MWTF-PAG-POND	7/11/2022 23:25	AXC955	M	C250181	8.09	1640	1100	36.4	405	391	194	<1.0	237	<1.0	<1.0	79.6	0.286	1.43	494			0.134	0.063	1.4	1.4	<0.0030	2.67
MWTF-PAG-POND	7/28/2022 11:20	AYM156	M	C255903	8.35	1310	860	5.6	236	220	215	1.6	259	2.0	<1.0	93.4	0.290	1.63	292			0.166	0.0394	0.862	0.901	<0.0030	3.42
MWTF-PAG-POND	8/3/2022 10:40	AYX383	M	C257672	8.38	911	586	39.6	209	202	179	2.1	214	2.5	<1.0	52.8	0.210	0.919	196			0.058	0.0524	0.713	0.766	<0.0030	2.72
MWTF-PAG-POND	8/22/2022 14:30	BAG921	M	C263407	8.37	1210	772	15.2	195	174	223	1.9	268	2.3	<1.0	77.3	0.330	1.46	268			0.183	0.0518	0.772	0.824	<0.0030	2.64
MWTF-PAG-POND	9/4/2022 15:00	BBI406	M	C268301	8.36	1100	710	16.8	177	170	207	1.6	249	2.0	<1.0	61.9	0.300	1.22	227			0.148	0.0581	0.620	0.678	<0.0030	3.16

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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	mg/L
MWTF-PAG-POND	9/8/2022 12:45	BBO449	M	C269143	8.35	1560	1060	28.4	260	256	200	2.4	238	2.8	<1.0	63.1	0.300	1.05	446			0.108	0.0516	0.485	0.537	0.0033	2.88
MWTF-PAG-POND	9/17/2022 12:00	BCF752	M	C272259	8.18	1140	764	46.8	295	270	173	<1.0	211	<1.0	<1.0	45.2	0.270	0.823	309			0.117	0.0357	0.476	0.511	<0.0030	2.78
MWTF-PAG-POND	9/22/2022 12:45	BCR617	M	C273969	8.29	1310	898	14.0	372	372	157	<1.0	191	<1.0	<1.0	42.9	0.350	0.865	441			0.077	0.0197	0.366	0.385	<0.0030	3.25
MWTF-PAG-POND	9/30/2022 11:25	BDH547	M	C276348	8.20	1060	688	7.4	229	228	172	<1.0	209	<1.0	<1.0	58.0	0.234	0.982	297			0.152	0.022	0.60	0.62	<0.0030	2.08
PRHP-WTF-INFLUENT-PIPE	6/13/2022 12:30	AVD895	M	C241931	8.43	1690	1170	16.3	443	304	164	3.9	191	4.7	<1.0	51.9	0.634	1.17	676			0.088	0.078	0.96	1.0	0.0068	3.30
PRHP-WTF-INFLUENT-PIPE	6/14/2022 16:05	AVD461	M	C241802						499																	
PRHP-WTF-INFLUENT-PIPE	6/17/2022 18:20	AVK706	M	C242936						422																	
PRHP-WTF-INFLUENT-PIPE	6/18/2022 10:35	AVL921	M	C243145						485																	
PRHP-WTF-REACTOR-EOP	6/13/2022 16:00	AVD896	M	C241931						269																	
PRHP-WTF-REACTOR-EOP	6/14/2022 15:50	AVD460	M	C241802						314																	
PRHP-WTF-REACTOR-EOP	6/17/2022 18:30	AVK707	M	C242936						360																	
PRHP-WTF-REACTOR-EOP	6/18/2022 10:50	AVL922	M	C243145						449																	
PR-IDZ	1/1/2022 11:45	FJ2200029-005	M	FJ2200029	7.93	187	110	1.6	95.4	77.3		<1.0				0.17	0.035	<0.050	14.3			<0.0050	<0.0010	0.0771		<0.0010	2.97
PR-IDZ	1/5/2022 13:25	FJ2200018-002	M	FJ2200018	8.05	200	110	2.1	105	104	88.2	<1.0	108	<1.0	<1.0	0.22	0.039	<0.050	15.5			0.0080	<0.0010	0.0814		<0.0010	3.06
PR-IDZ	1/13/2022 14:00	FJ2200098-002	M	FJ2200098	8.12	191	120	2.1	98.8	99.4	88.2	<1.0	108	<1.0	<1.0	<0.50	0.046	<0.050	15.3			<0.0050	<0.0010	0.0822	0.0822	<0.0010	3.06
PR-IDZ	1/19/2022 13:00	FJ2200185-003	M	FJ2200185	8.12	200	115	2.8	110	102	85.8	<1.0	105	<1.0	<1.0	<0.50	0.043	<0.050	15.6			<0.0050	<0.0010	0.0828	0.0828	<0.0010	3.10
PR-IDZ	1/19/2022 13:30	FJ2200185-004	D	FJ2200185	8.14	197	112	1.9	110	100	88.9	<1.0	108	<1.0	<1.0	<0.50	0.042	<0.050	15.6			<0.0050	<0.0010	0.0828	0.0828	<0.0010	2.85
PR-IDZ	1/26/2022 13:30	ANQ897	M	C205279	7.93	202	152	2.3	101	95.6	87.4	<1.0	107	<1.0	<1.0	<0.50	<0.050	<0.010	15.8			0.024	<0.010	0.081	0.081	<0.0030	2.07
PR-IDZ	2/3/2022 14:00	AOC178	M	C207302	7.25	200	116	3.5	104	93.1	89.9	<1.0	110	<1.0	<1.0	<0.50	<0.050	<0.010	16.0			0.064	<0.010	0.072	0.072	<0.0030	2.14
PR-IDZ	2/8/2022 14:10	AOI291	M	C208265	7.97	200	116	2.3	100	93.2	83.0	<1.0	101	<1.0	<1.0	<0.50	<0.050	<0.010	16.1			0.023	<0.010	0.076	0.076	<0.0030	3.44
PR-IDZ	2/16/2022 13:00	AOU841	M	C210450	7.99	199	96	2.2	101	95.9	86.2	<1.0	105	<1.0	<1.0	<0.50	<0.050	<0.010	17.5			<0.015	<0.010	0.075	0.075	<0.0030	1.98
PR-IDZ	2/24/2022 14:00	APF948	M	C212235	7.81	194	108	3.16	100	98.9	84.9	<1.0	104	<1.0	<1.0	<0.50	<0.050	<0.010	16.1			0.026	<0.010	0.082	0.082	<0.0030	2.27
PR-IDZ	3/2/2022 14:25	APO716	M	C213881	7.85	194	136	1.3	113	104	87.0	<1.0	106	<1.0	<1.0	<0.50	<0.050	<0.010	17.1			0.028	<0.010	0.078	0.078	<0.0030	2.12
PR-IDZ	3/10/2022 11:55	APZ001	M	C215884	7.77	191	96	3.9	105	102	82.5	<1.0	101	<1.0	<1.0	<0.50	<0.050	<0.010	17.3			0.023	<0.010	0.082	0.082	<0.0030	1.60
PR-IDZ	3/17/2022 17:00	AQH798	M	C217776	7.91	193	112	4.14	105	101	81.2	<1.0	99.1	<1.0	<1.0	0.82	<0.050	<0.010	18.3			0.031	<0.010	0.083	0.083	<0.0030	1.88
PR-IDZ	3/23/2022 16:15	AQP258	M	C219363	8.03	193	88	2.5	107	94.9	74.0	<1.0	90.3	<1.0	<1.0	<0.50	<0.050	<0.010	15.9			<0.015	<0.010	0.073	0.073	0.0031	2.14
PR-IDZ	3/30/2022 13:40	AQX833	M	C221206	7.83	195	116	3.2	88.4	93.1	85.9	<1.0	105	<1.0	<1.0	<0.50	<0.050	<0.010	16.5			0.081	<0.010	0.069	0.069	0.0031	2.18
PR-IDZ	4/7/2022 15:00	ARI196	M	C223271	7.57	198	108	3.09	109	95.5	92.9	<1.0	113	<1.0	<1.0	<0.50	<0.050	<0.010	17.5			0.023	<0.010	0.072	0.072	<0.0030	2.18
PR-IDZ	4/13/2022 15:00	ARP727	M	C224775	7.47	194	96	2.4	93.8	91.0	93.5	<1.0	114	<1.0	<1.0	<0.50	<0.050	<0.010	15.6			<0.015	<0.010	0.062	0.062	<0.0030	1.84
PR-IDZ	4/20/2022 13:30	ARW669	M	C226267	7.30	193	128	3.7	108	97.4	92.3	<1.0	113	<1.0	<1.0	<0.50	<0.050	<0.050	15.6			0.051	<0.010	0.071	0.071	<0.0030	2.21
PR-IDZ	4/28/2022 11:30	ASH218	M	C228650	8.04	188	112	18.7	102	95.4	79.0	<1.0	96.3	<1.0	<1.0	<0.50	<0.050	<0.010	16.7			0.020	<0.010	0.071	0.071	<0.0030	2.78
PR-IDZ	5/4/2022 13:10	ASP677	M	C230320	7.95	196	124	73.5	106	91.5	78.0	<1.0	95.2	<1.0	<1.0	<0.50	<0.050	<0.010	17.4			0.024	<0.010	0.14	0.14	0.0032	3.91
PR-IDZ	5/11/2022 14:15	ASZ425	M	C232133	7.83	202	136	131	113	105	79.6	<1.0	97.1	<1.0	<1.0	<0.50	<0.050	<0.010	19.4			0.211	<0.010	0.073	0.073	0.0038	3.15
PR-IDZ	5/19/2022 14:00	ATL912	M	C234314	7.81	202	164	41.9	106	100	86.8	<1.0	106	<1.0	<1.0	0.66	0.050	<0.010	18.1			0.024	<0.010	0.075	0.075	0.0031	4.20
PR-US-R5A	1/1/2022 10:00	FJ2200029-006	M	FJ2200029	7.94	197	118	2.3	109	104		<1.0				0.17	0.036	<0.050	15.3			<0.0050	<0.0010	0.0818		0.0010	3.12
PR-US-R5A	1/13/2022 15:00	FJ2200098-003	M	FJ2200098	8.11	189	120	<1.0	95.2	98.2	87.4	<1.0	107	<1.0	<1.0	<0.50	0.046	<0.050	15.0			<0.0050	<0.0010	0.0815	0.0815	<0.0010	3.25
PR-US-R5A	1/26/2022 12:45	ANQ898	M	C205279	7.98	199	128	5.2	98.3	94.4	87.2	<1.0	106	<1.0	<1.0	<0.50	<0.050	<0.010	15.1			0.032	<0.010	0.082	0.082	<0.0030	2.18
PR-US-R5A	2/16/2022 16:00	AOU842	M	C210450	7.99	197	92	5.72	104	96.7	85.1	<1.0	104	<1.0	<1.0	<0.50	<0.050	<0.010	16.9			0.018	<0.010	0.071	0.071	<0.0030	2.12
PR-US-R5A	2/24/2022 14:00	APF949	M	C212235	7.80	193	100	1.7	98.5	94.9	83.4	<1.0	102	<1.0	<1.0	<0.50	<0.050	<0.010	15.9			<0.015	<0.010	0.072	0.072	<0.0030	2.01
PR-US-R5A	3/10/2022 15:20	APZ002	M	C215884	7.71	190	100	2.6	109	101	84.9	<1.0	104	<1.0	<1.0	<0.50	<0.050	<0.010	17.1			0.127	<0.010	0.074	0.074	<0.0030	1.95
PR-US-R5A	3/17/2022 18:30	AQH800	M	C217776	7.91	188	116	5.1	93.2	98.6	79.0	<1.0	96.4	<1.0	<1.0	0.61	<0.050	<0.010	17.2			0.032	<0.010	0.074	0.074	<0.0030	1.81
PR-US-R5A	3/23/2022 16:15	AQP262	M	C219363	8.04	191	88	7.8	104	94.5	74.0	<1.0	90.3	<1.0	<1.0	<0.50	<0.050	<0.010	15.3			<0.015	<0.010	0.072	0.072	<0.0030	2.14
PR-US-R5A	4/7/2022 11:00	ARI197	M	C223271	7.55	197	120	2.7	115	97.2	90.2	<1.0	110	<1.0	<1.0	<0.50	<0.050	<0.010	17.0			0.020	<0.010	0.067	0.067	<0.0030	2.26
PR-US-R5A	4/28/2022 15:00	ASH219	M	C228650	8.03	187	120	11.1	97.5	94.1	78.3	<1.0	95.5	<1.0	<1.0	<0.50	<0.050	<0.010	16.6			0.018	<0.010	0.079	0.079	<0.0030	2.39
PR-US-R5A	5/4/2022 16:00	ASP679	M	C230320	7.93	201	112	19.3	103	93.8	77.0	<1.0	93.9	<1.0	<1.0	0.90	<0.050	<0.010	21.0			<0.015	<0.010	0.071	0.071	0.0045	2.54
PR-US-R5A	5/19/2022 15:30	ATL913	M	C234314	7.79	239	168	22.7	122	116	98.2	<1.0	120	<1.0	<1.0	0.71	<0.050	<0.010	27.7			0.038	<0.010	0.076	0.076	<0.0030	3.69
QAQC_Curing_Tanks	6/23/2022 15:40	AVV602	M	C244839	9.03	2020	1290	6.5	41.7	37.9	666	74.6	631	89.5	<1.0	16.9	0.675	0.581	193			<0.015	<0.010	0.086	0.086	<0.0030	2.71
RBAC-Sump-BT	1/22/2022 12:45	FJ2200193-003	M	FJ2200193	8.17	948	561	46.2	166	151	278	<1.0	339	<1.0	<1.0	45.3	0.390	0.659	160			0.309	0.0275	0.553	0.580	0.0018	2.69
RSEM-L5E-P2-EOP	1/23/2022 17:35	FJ2200194-003	M	FJ2200194	7.78	320	209	36.4	152	153	67.1	<1.0	81.9	<1.0	<1.0	1.11	0.119	<0.050	85.3			0.0847	0.0088	0.573	0.582	0.0022	3.99
RSEM-L5E-P2-EOP	2/11/2022 12:10	AOM647	M	C208915	7.02	766	532	12.2	361	327	75.5	<1.0	92.1	<1.0	<1.0	13.0	0.235	<0.050	290			0.180	0.034	3.6	3.6	0.0031	4.74
RSEM-L5E-P2-EOP	3/23/2022 17:55	AQP259	M	C219363	7.73	707	464	14.9	341	310	79.5	<1.0	97.0	<1.0	<1.0	11.9	0.103	0.115	261			0.352	0.052	2.2	2.3	0.0125	4.58
RSEM-L5E-P2-EOP	3/24/2022 17:20	AQP982	M	C219524	7.65	582	420	6.5	255	241	62.1	<1.0	75.7	<1.0	<1.0	7.84	0.068	0.094	204			0.158	0.043	1.6	1.7	0.0031	3.54
RSEM-L5E-P2-EOP	3/25/2022 13:40	AQP918	M	C219519	7.67	547	356	7.4	241	217	59.6	<1.0	72.7	<1.0	<1.0	7.08	0.056	0.100	192			0.152	0.038	1.5	1.5	0.0032	3.03
RSEM-L5E-P2-EOP	4/12/2022 17:15	ARN335	M	C224402	7.77	671	424	3.4	267	262	110	<1.0	135	<1.0	<1.0	10.1	0.095	0.109	227			0.130	0.040	1.4	1.5	<0.0030	2.37
RSEM-L5E-P2-EOP	4/13/2022 10:45	ARP730	M	C224775	7.79	698	428	8.3	280	269	111	<1.0	135	<1.0	<1.0	10.7	0.102	<0.050	242			0.111	0.040	1.5	1.6	<0.0030	2.47
RSEM-L5E-P2-EOP	4/14/2022 11:35	ARQ066	M	C224815	7.27	709	436	2.1	205	201	73.3	<1.0	89.4	<1.0	<1.0	8.10	0.086	<0.050	278			0.099	0.021	1.5	1.5	<0.0030	2.11
RSEM-L5E-P2-EOP	4/15/2022 11:30	ARQ202	M	C224832	7.65	703	482	3.2	203	210	70.3	<1.0	85.8	<1.0	<1.0	8.59	0.170	0.244	216			0.023	0.0200	1.71	1.73	<0.0030	1.80
RSEM-L5E-P2-EOP	4/16/2022 11:30	ARR880	M	C225206	7.16	702	436	2.01	234	206	68.1	<1.0	83.1	<1.0	<1.0	7.94	0.067	0.312	262			0.082	0.022	1.6	1.7	<0.0030	1.98
RSEM-L5E-P2-EOP	4/20/2022 10:40	ARW671	M	C226267	7.46	781	504	9.9	274	238	110	<1.0	134	<1.0	<1.0	9.49	<0.050	<0.050	291			0.073	0.016	1.6	1.6	<0.0030	1.87
RSEM-L5E-P2-EOP	5/28/2022 10:10	ATX754	M	C236620	8.07	1300	1040	5.0	614	605	88.7	<1.0	108	<1.0	<1.0	18.3	0.239	0.896	568			0.041	0.055	6.6	6.7	<0.0030	3.47
RSEM-L5E-P2-EOP	5/29/2022 14:30	ATW970	M	C236421	7.87	1850	1400	2.70	578	539	148	<1.0	180	<1.0	<1.0	30.4	0.221	0.547	839			0.038	0.031	5.3	5.3	<0.0030	2.92
RSEM-L5E-P2-EOP	5/30/2022 11:10	ATZ467	M	C236894	7.88	1920	1430	2.9	537	560	153	<1.0	187	<1.0	<1.0	30.4	0.239	0.613	831			0.063	0.032	5.4	5.4	<0.0030	2.39
RSEM-L5E-P2-SP	1/24/2022 15:00	FJ2200237-003	M	FJ2200237	7.62	452	300	20.1	232	195	45.6	<1.0	55.6	<1.0	<1.0	2.20	0.188	<0.050	164			0.146	0.0185	1.14	1.16	0.0014	5.93
RSEM-L5E-P2-SP	2/7/2022 6:30	AOE530	M	C207636	6.59	909	648	9.9	438	442	75.5	<1.0	92.1	<1.0	<1.0	7.43	0.240	0.063	379			0.188	0.038	4.4	4.5	<0.0030	4.37
RSEM-L5E-P2-SP	2/10/2022 12:55	AOM666	M	C208923	6.93	746	524	40.5	361	317	75.0	<1.0	91.5	<1.0	<1.0	13.1	0.224	<0.050	280			0.185	0.033	3.2	3.2	<0.0030	4.60
RSEM-L5E-P2-SP	2/12/2022 11:10	AOP213	M	C209346	7.50	785	476	6.4	358	343	71.4	<1.0	87.1	<1.0	<1.0	13.1	0.134	<0.050	307			0.163	0.034	3.2	3.2	<0.0030	4.14
RSEM-L5E-P2-SP	2/14/2022 10:45	AOQ980	M	C209670	7.53	777	540	13.1	364	345	69.7	<1.0	85.1	<1.0	<1.0	12.8	0.125	0.041	301			0.153	0.035	3.2	3.3	<0.0030	2.76
RSEM-L5E-P2-SP	3/17/2022 17:00	AQH801	M	C217776	7.57	726	468	19.0	366	354	69.6	<1.0	84.9	<1.0	<1.0	8.60	0.081	0.062	279			0.551	0.049	2.8	2.8	<0.0030	6.80
RSEM-L5E-P2-SP	3/18/2022 6:30	AQH795	M	C217775	7.72	641	424	17.9	325	296	64.3	<1.0	78.4	<1.0	<1.0	6.76	0.096	<0.050	231			0.232	0.045	2.0	2.1	<0.0030	7.33

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
RSEM-L5E-P2-SP	3/19/2022 15:30	AQJ972	M	C218236	7.80	634	316	17.8	285	276	66.8	<1.0	81.5	<1.0	<1.0	9.77	0.104	0.050	222			0.241	0.042	1.9	1.9	<0.0030	6.92
RSEM-L5E-P2-SP	3/20/2022 18:00	AQJ916	M	C218219	7.77	686	456	19.3	322	296	82.0	<1.0	100	<1.0	<1.0	10.7	0.214	0.071	249			0.235	0.041	2.1	2.1	<0.0030	6.24
RSEM-L5E-P2-SP	3/21/2022 10:30	AQL267	M	C218465	7.81	710	460	12.8	323	310	77.8	<1.0	94.9	<1.0	<1.0	11.1	0.105	0.081	245			0.212	0.042	1.9	2.0	0.0034	5.41
RSEM-L5E-P2-SP	3/22/2022 17:40	AQN716	M	C218958	7.68	695	440	10.7	300	300	70.6	<1.0	86.1	<1.0	<1.0	11.5	0.083	0.090	249			0.238	0.041	2.1	2.1	<0.0030	4.66
RSEM-L5E-P2-SP	3/26/2022 18:15	AQS238	M	C219944	7.69	687	472	6.3	295	296	85.6	<1.0	104	<1.0	<1.0	11.7	0.095	0.082	243			0.194	0.054	2.1	2.1	<0.0030	3.77
RSEM-L5E-P2-SP	3/27/2022 16:10	AQS344	M	C219976	7.67	689	472	5.2	298	314	85.0	<1.0	104	<1.0	<1.0	11.5	0.099	0.100	243			0.196	0.056	2.0	2.0	<0.0030	4.14
RSEM-L5E-P2-SP	3/28/2022 17:20	AQU419	M	C220399	7.71	672	424	4.48	276	297	87.7	<1.0	107	<1.0	<1.0	11.1	0.119	0.052	231			0.181	0.053	1.9	2.0	<0.0030	3.62
RSEM-L5E-P2-SP	3/29/2022 16:35	AQV264	M	C220606	7.58	562	372	1.4	232	239	68.2	<1.0	83.2	<1.0	<1.0	9.02	0.075	0.043	183			0.320	0.040	1.6	1.6	<0.0030	2.93
RSEM-L5E-P2-SP	3/30/2022 14:20	AQX837	M	C221206	7.53	567	332	2.2	216	224	102	<1.0	125	<1.0	<1.0	9.01	0.100	0.084	187			0.301	0.043	1.6	1.6	<0.0030	3.13
RSEM-L5E-P2-SP	3/31/2022 17:20	AQY796	M	C221428	7.59	653	404	4.34	253	261	90.9	<1.0	111	<1.0	<1.0	10.9	0.094	0.095	225			0.167	0.054	1.8	1.8	<0.0030	3.69
RSEM-L5E-P2-SP	3/31/2022 17:30	AQY797	D	C221428	7.57	651	452	4.4	265	264	92.6	<1.0	113	<1.0	<1.0	10.5	0.115	0.073	226			0.175	0.054	1.7	1.7	<0.0030	3.18
RSEM-L5E-P2-SP	4/1/2022 13:20	AQY728	M	C221415	7.46	616	392	3.42	243	252	86.6	<1.0	106	<1.0	<1.0	10.1	0.096	0.076	212			0.149	0.051	1.7	1.7	<0.0030	2.78
RSEM-L5E-P2-SP	4/2/2022 12:35	ARB516	M	C222000	7.34	575	336	5.1	223	222	79.9	<1.0	97.5	<1.0	<1.0	9.56	0.069	<0.050	208			0.277	0.047	1.4	1.5	<0.0030	2.71
RSEM-L5E-P2-SP	4/2/2022 12:45	ARB517	D	C222000	7.27	597	388	1.84	275	238	81.4	<1.0	99.4	<1.0	<1.0	10.0	0.079	<0.050	218			0.141	0.050	1.6	1.6	<0.0030	3.55
RSEM-L5E-P2-SP	4/3/2022 11:10	ARB460	M	C221989	7.35	528	288	3.1	199	195	64.6	<1.0	78.8	<1.0	<1.0	7.61	0.086	0.070	176			0.130	0.042	1.4	1.4	<0.0030	2.74
RSEM-L5E-P2-SP	4/4/2022 10:45	ARB189	M	C221904	7.23	520	296	4.3	203	198	78.9	<1.0	96.2	<1.0	<1.0	7.79	0.084	<0.050	178			0.120	0.036	1.3	1.3	<0.0030	2.67
RSEM-L5E-P2-SP	4/6/2022 17:30	ARI190	M	C223269	7.35	557	300	3.75	276	218	77.8	<1.0	94.9	<1.0	<1.0	8.73	0.088	0.198	189			0.124	0.038	1.5	1.5	<0.0030	2.43
RSEM-L5E-P2-SP	4/8/2022 10:30	ARI200	M	C223273	7.46	615	420	3.9	299	251	93.0	<1.0	113	<1.0	<1.0	9.67	0.080	0.124	211			0.134	0.047	1.5	1.6	<0.0030	2.70
RSEM-L5E-P2-SP	4/10/2022 10:30	ARK078	M	C223661	6.42	642	432	9.8	256	261	71.5	<1.0	87.2	<1.0	<1.0	9.99	0.092	0.098	223			0.198	0.043	1.5	1.6	<0.0030	2.29
RSEM-L5E-P2-SP	4/19/2022 12:00	ARV036	M	C225905	7.43	747	492	<1.0	261	203	76.3	<1.0	93.1	<1.0	<1.0	8.94	<0.050	0.049	275			0.361	<0.010	2.0	2.0	<0.0030	2.43
RSEM-L5E-P2-SP	4/21/2022 11:15	ARX709	M	C226546	7.31	761	448	2.40	245	216	75.9	<1.0	92.6	<1.0	<1.0	9.40	<0.050	<0.050	281			0.082	0.019	1.6	1.6	<0.0030	2.36
RSEM-L5E-P2-SP	5/5/2022 13:45	ASR007	M	C230531	8.17	1250	872	1.2	423	405	120	<1.0	146	<1.0	<1.0	17.7	0.089	0.121	448			0.366	0.013	2.8	2.8	<0.0030	2.53
RSEM-L5E-P2-SP	5/6/2022 13:15	ASR076	M	C230545	8.27	1210	896	4.1	547	576	128	<1.0	156	<1.0	<1.0	15.5	0.107	<0.10	450			0.046	0.026	4.9	5.0	<0.0030	3.35
RSEM-L5E-P2-SP	5/9/2022 10:35	ASV293	M	C231306	8.10	1260	952	2.2	479	605	124	<1.0	151	<1.0	<1.0	16.5	0.278	0.143	490			0.043	0.028	6.0	6.0	<0.0030	3.11
RSEM-L5E-P2-SP	5/12/2022 11:15	ATA815	M	C232369	8.15	1280	944	1.75	582	589	130	<1.0	159	<1.0	<1.0	17.0	0.230	0.181	491			0.121	0.033	6.4	6.5	<0.0030	3.01
RSEM-L5E-P2-SP	5/22/2022 15:30	ATO537	M	C234788	8.25	1330	1020	<0.99	659	643	100	<1.0	122	<1.0	<1.0	17.6	0.244	0.253	630			0.045	0.047	6.9	6.9	<0.0030	3.16
RSEM-L5E-P2-SP	5/25/2022 13:10	ATT371	M	C235730	8.24	1300	988	<1.0	599	617	86.2	<1.0	105	<1.0	<1.0	18.5	0.210	0.320	577			0.127	0.048	6.6	6.6	<0.0030	3.32
RSEM-L5E-P2-SP	5/27/2022 10:55	ATV303	M	C236089	8.32	1320	984	<0.97	592	592	80.3	<1.0	98.0	<1.0	<1.0	18.5	0.226	0.589	582			0.025	0.050	6.6	6.7	<0.0030	4.08
RSEM-L5E-P2-SP	5/31/2022 15:50	AUC341	M	C237377	7.17	1700	1400	2.2	826	811	95.3	<1.0	116	<1.0	<1.0	10.7	0.282	0.410	917			0.179	0.037	8.8	8.9	<0.0030	2.06
RSEM-L5E-P2-SP	6/2/2022 13:35	AUH702	M	C238258	7.51	1740	1420	1.91	853	766	88.3	<1.0	108	<1.0	<1.0	10.9	0.292	0.62	863			0.072	0.042	9.1	9.2	<0.0030	2.74
RSEM-L5E-P2-SP	6/5/2022 13:40	AUM445	M	C238986	8.06	1760	1440	<0.97	912	880	84.9	<1.0	104	<1.0	<1.0	12.3	0.285	0.262	860			0.022	0.048	8.7	8.7	<0.0030	2.87
RSEM-L5E-P2-SP	6/11/2022 12:30	AUY736	M	C241062	8.41	1740	1470	2.1	854	883	76.3	1.7	89.0	2.0	<1.0	12.2	0.290	0.226	930			<0.015	0.073	8.0	8.1	<0.0030	3.44
RSEM-L5E-P2-SP	6/20/2022 13:35	AVO968	M	C243664	8.32	1710	1470	1.8	906	812	81.3	<1.0	99.2	<1.0	<1.0	13.0	0.348	0.265	930			0.115	0.079	5.8	5.9	<0.0030	3.57
RSEM-L5E-P2-SP	6/22/2022 12:05	AVT155	M	C244412	8.35	1800	1530	1.68	834	918	85.3	1.1	101	1.3	<1.0	16.3	0.334	0.296	993			0.074	0.072	5.5	5.6	<0.0030	3.45
RSEM-L5E-P2-SP	7/3/2022 16:00	AWM049	M	C247492	7.91	2010	1580	<0.96	842	796	99.8	<1.0	122	<1.0	<1.0	23.5	0.337	0.411	1080			0.114	0.065	3.6	3.6	<0.0030	5.29
RSEM-L5E-P2-SP	7/12/2022 14:40	AXE620	M	C250400	8.02	2460	1860	<1.0	781	763	126	<1.0	154	<1.0	<1.0	36.0	0.291	4.0	1190			0.079	0.038	2.0	2.0	<0.0030	4.77
RSEM-L5E-P2-SP	8/4/2022 14:00	AYY906	M	C257848	7.95	2580	1740	3.2	731	719	63.5	<1.0	77.5	<1.0	<1.0	42.0	0.360	0.51	1300			0.076	0.0071	0.096	0.103	<0.0030	6.03
RSEM-L5E-P2-SP	8/27/2022 15:00	BAR928	M	C265307	7.99	2420	1980	2.0	838	847	77.4	<1.0	94.4	<1.0	<1.0	31.9	0.440	0.36	1280			0.036	<0.0050	<0.020	<0.020	<0.0030	5.11
RSEM-L5W-P2-EOP	3/25/2022 13:25	AQP917	M	C219519	6.11	462	272	2.9	185	169	25.4	<1.0	30.9	<1.0	<1.0	4.43	0.058	0.098	160			0.118	0.023	1.2	1.3	0.0030	2.59
RSEM-L5W-P2-EOP	3/26/2022 18:35	AQS239	M	C219944	7.27	476	284	2.0	182	181	54.3	<1.0	66.3	<1.0	<1.0	4.16	0.062	0.074	165			0.125	0.021	1.3	1.3	<0.0030	2.38
RSEM-L5W-P2-EOP	5/29/2022 14:10	ATW972	M	C236421	7.93	1920	1430	1.45	541	551	162	<1.0	198	<1.0	<1.0	33.4	0.215	0.602	836			0.036	0.030	4.9	4.9	<0.0030	2.53
RSEM-L5W-P2-EOP	5/30/2022 11:30	ATZ468	M	C236894	8.05	1970	1440	<1.0	507	521	172	<1.0	210	<1.0	<1.0	34.5	0.234	0.684	836			0.064	0.031	4.9	4.9	<0.0030	2.50
RSEM-L5W-P2-SP	2/7/2022 6:00	AOE529	M	C207636	6.70	735	504	6.0	354	343	73.9	<1.0	90.1	<1.0	<1.0	4.06	0.194	0.047	289			0.170	0.029	2.9	2.9	<0.0030	3.79
RSEM-L5W-P2-SP	2/10/2022 13:00	AOM667	M	C208923	6.65	392	260	64.3	159	143	47.8	<1.0	58.3	<1.0	<1.0	2.33	0.120	<0.050	135			0.107	0.016	0.98	1.0	0.0037	2.46
RSEM-L5W-P2-SP	2/14/2022 10:55	AOQ981	M	C209670	7.25	581	412	14.8	251	234	54.2	<1.0	66.2	<1.0	<1.0	3.57	0.152	0.038	225			0.155	0.023	1.8	1.8	<0.0030	3.39
RSEM-L5W-P2-SP	3/19/2022 16:30	AQJ973	M	C218236	7.79	633	436	9.5	283	264	60.4	<1.0	73.6	<1.0	<1.0	5.88	0.096	<0.050	227			0.218	0.035	1.8	1.9	<0.0030	5.38
RSEM-L5W-P2-SP	3/20/2022 18:30	AQJ917	M	C218219	7.65	530	328	5.6	238	213	63.3	<1.0	77.3	<1.0	<1.0	4.60	0.177	<0.050	197			0.190	0.029	1.5	1.5	<0.0030	4.55
RSEM-L5W-P2-SP	3/21/2022 10:10	AQL266	M	C218465	7.70	531	328	5.7	227	212	54.6	<1.0	66.6	<1.0	<1.0	4.44	0.073	0.052	189			0.143	0.030	1.4	1.4	<0.0030	3.64
RSEM-L5W-P2-SP	3/22/2022 17:50	AQN717	M	C218958	7.55	467	188	2.6	179	176	46.8	<1.0	57.1	<1.0	<1.0	3.74	0.058	0.091	158			0.170	0.022	1.3	1.3	<0.0030	2.76
RSEM-L5W-P2-SP	3/23/2022 18:15	AQP260	M	C219363	7.59	488	296	3.3	193	177	46.5	<1.0	56.7	<1.0	<1.0	4.23	0.052	0.095	173			0.133	0.022	1.4	1.4	0.0034	3.15
RSEM-L5W-P2-SP	3/24/2022 17:35	AQP983	M	C219524	7.51	459	336	2.0	185	169	42.3	<1.0	51.6	<1.0	<1.0	3.65	<0.050	0.098	160			0.115	0.025	1.2	1.3	<0.0030	2.77
RSEM-L5W-P2-SP	3/27/2022 16:30	AQS347	M	C219976	7.35	485	308	<1.0	192	186	49.9	<1.0	60.9	<1.0	<1.0	3.88	0.075	0.078	173			0.123	0.022	1.4	1.4	<0.0030	2.50
RSEM-L5W-P2-SP	3/28/2022 17:40	AQU420	M	C220399	7.24	457	324	1.7	165	170	53.5	<1.0	65.3	<1.0	<1.0	3.73	0.082	0.038	155			0.104	0.018	1.2	1.2	0.0036	2.09
RSEM-L5W-P2-SP	3/29/2022 16:55	AQV265	M	C220606	7.17	444	276	<1.0	155	163	49.5	<1.0	60.4	<1.0	<1.0	3.81	0.066	0.046	150			0.105	0.019	1.2	1.3	<0.0030	1.83
RSEM-L5W-P2-SP	3/30/2022 14:50	AQX838	M	C221206	7.10	436	264	1.0	142	142	48.6	<1.0	59.3	<1.0	<1.0	3.82	0.061	0.027	149			0.113	0.018	1.1	1.1	<0.0030	1.35
RSEM-L5W-P2-SP	3/31/2022 17:40	AQY798	M	C221428	6.94	314	192	2.5	108	104	39.3	<1.0	48.0	<1.0	<1.0	2.73	0.052	0.072	112			0.867	0.014	0.94	0.96	<0.0030	1.68
RSEM-L5W-P2-SP	4/1/2022 13:30	AQY729	M	C221415	7.00	412	228	3.1	135	136	47.9	<1.0	58.4	<1.0	<1.0	3.56	0.065	0.077	147			0.132	0.017	1.1	1.1	<0.0030	2.17
RSEM-L5W-P2-SP	4/2/2022 12:55	ARB518	M	C222000	7.00	434	244	3.9	159	139	52.3	<1.0	63.8	<1.0	<1.0	3.87	0.058	<0.050	158			0.088	0.019	1.1	1.1	<0.0030	1.86
RSEM-L5W-P2-SP	4/3/2022 11:05	ARB461	M	C221989	6.96	409	236	1.7	128	128	46.1	<1.0	56.3	<1.0	<1.0	3.02	0.064	0.091	139			0.085	0.019	1.3	1.3	<0.0030	1.79
RSEM-L5W-P2-SP	4/4/2022 11:00	ARB190	M	C221904	6.80	389	232	3.6	141	120	42.2	<1.0	51.4	<1.0	<1.0	3.15	<0.050	<0.050	142			0.079	0.015	1.0	1.1	0.0031	1.51
RSEM-L5W-P2-SP	4/6/2022 18:00	ARI191	M	C223269	6.85	445	276	2.7	188	144	52.1	<1.0	63.6	<1.0	<1.0	3.58	0.094	0.192	167			0.089	0.016	1.2	1.2	0.0039	1.67
RSEM-L5W-P2-SP	4/8/2022 11:00	ARI201	M	C223273	7.04	557	364	3.1	200	175	65.9	<1.0	80.4	<1.0	<1.0	5.74	0.062	0.173	206			0.133	0.022	1.4	1.4	<0.0030	1.95
RSEM-L5W-P2-SP	4/10/2022 11:00	ARK079	M	C223661	6.24	629	420	4.5	194	193	47.8	<1.0	58.3	<1.0	<1.0	6.26	0.075	0.132	235			0.091	0.020	1.6	1.6	<0.0030	2.47
RSEM-L5W-P2-SP	4/12/2022 17:30	ARN336	M	C224402	7.33	698	452	2.3	202	199	67.7	<1.0	82.7	<1.0	<1.0	7.79	0.082	0.126	260			0.094	0.019	1.5	1.5	<0.0030	1.57
RSEM-L5W-P2-SP	5/5/2022 13:55	ASR008	M	C230531	8.27	1170	848	3.5	520	491	131	<1.0	159	<1.0	<1.0	15.5	0.094	0.088	437			0.040	0.023	4.1	4.1	<0.0030	3.34
RSEM-L5W-P2-SP	5/9/2022 10:45	ASV294	M	C231306	8.07	1410	1050	4.1	450	458	124	<1.0	151	<1.0	<1.0	22.0	0.243	0.268	539			0.798	0.014	3.5	3.5	<0.0030	2.69
RSEM-L5W-P2-SP	5/12/2022 11:30	ATA816	M	C232369	8.14	1440	1020	<0.99	446	462	133	<1.0	163	<1.0	<1.0	22.6	0.198	0.200	551			0.035	0.017	4.0	4.0	<0.0030	3.04
RSEM-L5W-P2-SP	5/22/2022 16:00	ATO538	M	C234788	8.27	1990	1430	1.3	526	516	170	<1.0	207	<1.0	<1.0	36.5	0.223	0.460	868			0.036	0.034	5.1	5.2	<0.0030	2.81
RSEM-L5W-P2-SP	5/25/2022 13:25	ATT372	M	C235730	8.20	2060	1600	<1.0	554	560	176	<1.0	215	<1.0	<1.0	38.8	0.205	0.601	924			0.038	0.034	5.1	5.2	<0.0030	2.94

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
RSEM-L5W-P2-SP	5/27/2022 10:40	ATV302	M	C236089	8.30	2150	1580	<1.0	541	559	184	<1.0	224	<1.0	<1.0	40.6	0.212	0.250	927			0.057	0.034	5.2	5.2	<0.0030	2.94
RSEM-L5W-P2-SP	5/28/2022 9:45	ATX753	M	C236620	8.14	1980	1550	<0.97	540	554	168	<1.0	205	<1.0	<1.0	36.8	0.218	0.406	858			0.058	0.032	5.3	5.4	0.0160	3.49
RSEM-L5W-P2-SP	5/31/2022 15:35	AUC342	M	C237377	8.03	2160	1620	6.18	595	576	177	<1.0	216	<1.0	<1.0	35.8	0.260	0.631	1020			0.080	0.032	5.4	5.4	<0.0030	1.92
RSEM-L5W-P2-SP	6/2/2022 13:50	AUH703	M	C238258	7.98	2000	1530	<0.97	783	635	141	<1.0	172	<1.0	<1.0	26.2	0.257	0.94	943			0.047	0.037	7.1	7.1	<0.0030	2.38
RSEM-L5W-P2-SP	6/5/2022 14:00	AUM446	M	C238986	8.17	2180	1640	<1.0	762	689	158	<1.0	193	<1.0	<1.0	31.9	0.253	0.417	932			0.069	0.044	6.9	6.9	<0.0030	2.13
RSEM-L5W-P2-SP	6/11/2022 13:00	AUY737	M	C241062	8.11	2430	1900	1.0	674	691	177	<1.0	216	<1.0	<1.0	36.3	0.271	0.678	1150			0.074	0.048	6.6	6.6	<0.0030	2.53
RSEM-L5W-P2-SP	6/22/2022 12:15	AVT156	M	C244412	8.23	2740	2150	1.71	749	738	182	<1.0	222	<1.0	<1.0	50.9	0.281	0.804	1320			0.122	0.053	5.9	6.0	<0.0030	2.28
RSEM-L5W-P2-SP	7/3/2022 16:30	AWM050	M	C247492	8.22	3080	2340	2.76	679	634	189	<1.0	231	<1.0	<1.0	58.1	0.269	0.935	1460			0.020	0.061	5.4	5.4	<0.0030	4.03
RSEM-L5W-P2-SP	7/12/2022 14:55	AXE621	M	C250400	8.13	3430	2590	2.6	692	692	184	<1.0	224	<1.0	<1.0	63.5	0.223	38.2	1530			0.025	0.066	4.6	4.6	<0.0030	4.79
RSEM-L5W-P2-SP	8/4/2022 14:10	AYY907	M	C257848	8.14	3670	2770	12.8	559	580	75.9	<1.0	92.6	<1.0	<1.0	75.9	0.260	1.00	1700			<0.015	0.0312	1.26	1.29	<0.0030	5.38
RSEM-L5W-P2-SP	8/27/2022 15:30	BAR929	M	C265307	8.18	3960	3870	6.8	631	599	88.4	<1.0	108	<1.0	<1.0	81.5	0.290	1.09	1950			<0.015	<0.0050	<0.020	<0.020	<0.0030	8.26
RSEM-L6-EOP	4/24/2022 10:30	ASA414	M	C227083	7.31	497	272	<1.0	176	172	66.4	<1.0	81.1	<1.0	<1.0	42.4	0.071	0.216	99.7			0.116	0.015	0.44	0.45	<0.0030	1.67
RSEM-L6-EOP	5/17/2022 12:30	ATH852	M	C233625	7.69	691	428	1.7	285	256	68.1	<1.0	83.1	<1.0	<1.0	45.4	0.188	0.387	200			0.043	<0.010	0.24	0.24	<0.0030	2.19
RSEM-L6-EOP	5/18/2022 12:30	ATJ926	M	C234012	7.84	718	428	<1.0	265	261	68.0	<1.0	83.0	<1.0	<1.0	47.0	0.171	0.400	212			0.039	<0.010	0.23	0.23	<0.0030	2.33
RSEM-L6-EOP	6/5/2022 11:20	AUM442	M	C238986	7.66	586	336	1.3	230	215	61.1	<1.0	74.6	<1.0	<1.0	53.9	0.188	0.615	153			0.034	<0.010	0.14	0.14	<0.0030	1.65
RSEM-L6-SP	3/19/2022 12:50	AQJ975	M	C218236	7.80	437	252	7.0	149	136	61.3	<1.0	74.8	<1.0	<1.0	56.0	0.069	0.173	53.3			0.280	0.034	0.60	0.64	<0.0030	4.25
RSEM-L6-SP	3/21/2022 11:45	AQL271	M	C218465	7.86	453	232	6.0	146	139	58.9	<1.0	71.8	<1.0	<1.0	55.2	0.067	0.212	57.7			0.260	0.035	0.57	0.60	0.0036	3.88
RSEM-L6-SP	4/19/2022 12:50	ARV037	M	C225905	7.31	476	264	1.2	139	155	66.5	<1.0	81.1	<1.0	<1.0	43.8	<0.050	0.269	93.5			0.126	0.016	0.45	0.46	<0.0030	2.08
RSEM-L6-SP	4/21/2022 12:20	ARX710	M	C226546	7.17	476	256	<1.0	187	161	67.4	<1.0	82.3	<1.0	<1.0	45.0	<0.050	0.258	95.5			0.315	0.017	0.42	0.43	<0.0030	2.38
RSEM-L6-SP	4/23/2022 15:40	ARZ188	M	C226855	7.17	487	272	<1.0	174	170	76.2	<1.0	93.0	<1.0	<1.0	44.1	0.102	0.252	97.7			0.116	0.014	0.41	0.42	<0.0030	1.47
RSEM-L6-SP	5/7/2022 10:15	ASS945	M	C230886	7.93	686	444	5.39	269	256	74.3	<1.0	90.7	<1.0	<1.0	47.7	0.062	0.384	176			0.040	<0.010	0.47	0.47	0.0032	2.39
RSEM-L6-SP	5/31/2022 10:50	AUC337	M	C237377	7.17	577	344	2.7	233	217	72.2	<1.0	88.1	<1.0	<1.0	48.2	0.235	0.573	140			0.040	0.013	0.48	0.50	<0.0030	1.47
RSEM-L6-SP	6/4/2022 10:00	AUL722	M	C238905	7.53	588	332	5.3	226	215	61.9	<1.0	75.5	<1.0	<1.0	48.5	0.189	0.608	154			<0.015	<0.010	0.20	0.20	<0.0030	1.91
RSEM-L6-SP	10/7/2022 12:20	BEA027	M	C278893	6.96	1130	768	2.01	457	451	66.1	<1.0	80.6	<1.0	<1.0	84.4	0.324	0.995	378			0.050	<0.010	0.15	0.15	<0.0030	5.37
RSEM-L6-SP	10/22/2022 10:25	BFI045	M	C283756	7.72	1200	808	1.58	489	488	57.5	<1.0	70.2	<1.0	<1.0	88.2	0.368	1.08	432			<0.015	<0.0050	<0.020	<0.020	0.0039	5.55
RSEM-R5A-P2-A-EOP	3/21/2022 14:25	AQL268	M	C218465	7.62	349	224	7.53	109	107	42.1	<1.0	51.4	<1.0	<1.0	1.95	0.058	0.052	110			0.305	0.029	0.92	0.95	0.0045	1.34
RSEM-R5A-P2-A-EOP	3/22/2022 18:20	AQN714	M	C218958	7.21	596	368	18.1	197	191	32.0	<1.0	39.1	<1.0	<1.0	2.59	0.082	0.091	248			0.197	0.019	0.87	0.89	<0.0030	1.02
RSEM-R5A-P2-A-EOP	3/23/2022 17:15	AQP261	M	C219363	7.82	379	364	10.1	152	142	64.2	<1.0	78.3	<1.0	<1.0	0.77	<0.050	0.067	117			0.062	<0.010	0.53	0.53	<0.0030	1.61
RSEM-R5A-P2-A-EOP	3/24/2022 14:25	AQP980	M	C219524	7.78	376	264	5.00	156	141	63.3	<1.0	77.2	<1.0	<1.0	0.94	<0.050	0.069	113			0.076	<0.010	0.49	0.49	<0.0030	1.98
RSEM-R5A-P2-A-EOP	3/25/2022 12:20	AQP913	M	C219519	7.87	368	260	14.3	155	136	61.4	<1.0	75.0	<1.0	<1.0	1.09	<0.050	0.062	110			0.083	<0.010	0.48	0.48	<0.0030	2.01
RSEM-R5A-P2-A-EOP	5/17/2022 16:30	ATH853	M	C233625	8.01	2400	1850	13.3	626	576	107	<1.0	131	<1.0	<1.0	29.1	0.691	28.6	1140			0.610	0.098	3.4	3.5	0.0034	2.39
RSEM-R5A-P2-A-EOP	5/19/2022 16:00	ATL915	M	C234314	7.79	2150	1520	15.1	399	410	112	<1.0	136	<1.0	<1.0	33.9	0.491	0.553	955			0.635	0.14	2.2	2.3	<0.0030	1.81
RSEM-R5A-P2-A-EOP	5/20/2022 11:00	ATL360	M	C234241	7.81	2070	1460	10.1	327	318	114	<1.0	139	<1.0	<1.0	38.8	0.488	0.524	911			0.785	0.15	1.7	1.8	<0.0030	2.03
RSEM-R5A-P2-A-EOP	5/21/2022 13:30	ATN139	M	C234510	7.93	2060	1390	18.4	301	305	109	<1.0	133	<1.0	<1.0	27.5	0.560	0.541	983			0.796	0.168	1.90	2.06	<0.0030	2.88
RSEM-R5A-P2-A-EOP	5/29/2022 18:40	ATW971	M	C236421	7.06	1630	1090	25.6	226	226	89.1	<1.0	109	<1.0	<1.0	58.1	0.478	0.845	631			0.837	0.041	0.71	0.75	<0.0030	2.46
RSEM-R5A-P2-A-EOP	5/30/2022 12:30	ATZ469	M	C236894	7.32	1850	1200	10.6	268	270	125	<1.0	153	<1.0	<1.0	58.5	0.556	0.857	702			0.885	0.037	0.42	0.46	<0.0030	1.71
RSEM-R5A-P2-A-EOP	5/31/2022 13:40	AUC338	M	C237377	7.42	1850	1250	9.04	302	278	136	<1.0	166	<1.0	<1.0	56.2	0.614	0.69	713			0.365	0.037	0.63	0.67	0.0034	1.19
RSEM-R5A-P2-A-EOP	6/2/2022 13:50	AUH704	M	C238258	7.93	1800	1200	7.17	299	268	148	<1.0	180	<1.0	<1.0	53.9	0.594	0.782	618			0.618	0.042	0.72	0.77	<0.0030	2.00
RSEM-R5A-P2-A-EOP	6/3/2022 13:20	AUH663	M	C238247	8.05	1700	1140	9.1	282	253	158	<1.0	193	<1.0	<1.0	54.0	0.564	0.839	615			0.513	0.043	0.75	0.79	<0.0030	1.54
RSEM-R5A-P2-A-EOP	6/4/2022 14:25	AUL723	M	C238905	8.32	1600	1040	12.0	264	245	160	<1.0	195	<1.0	<1.0	53.4	0.502	0.810	486			0.348	0.043	0.72	0.77	<0.0030	1.51
RSEM-R5A-P2-A-EOP	6/5/2022 11:55	AUM444	M	C238986	8.32	1480	952	13.2	253	236	160	<1.0	196	<1.0	<1.0	50.5	0.483	0.765	430			0.322	0.048	0.70	0.75	<0.0030	1.63
RSEM-R5A-P2-A-EOP	6/6/2022 11:30	AUO791	M	C239365	8.32	1300	844	13.0	225	228	172	<1.0	210	<1.0	<1.0	44.4	0.421	0.749	420			0.273	0.050	0.79	0.84	<0.0030	1.25
RSEM-R5A-P2-A-EOP	6/13/2022 17:20	AVO969	M	C243664	8.40	1280	824	8.68	197	185	150	2.0	178	2.4	<1.0	47.9	0.435	0.690	407			0.062	0.028	0.51	0.54	<0.0030	2.03
RSEM-R5A-P2-A-EOP	6/14/2022 11:30	AVD544	M	C241829	8.38	1130	720	8.9	196	195	184	2.2	220	2.6	<1.0	48.5	0.364	0.710	310			0.109	0.054	0.90	0.96	<0.0030	1.51
RSEM-R5A-P2-A-EOP	6/15/2022 14:40	AVG249	M	C242252	8.35	1120	712	11.3	194	190	190	2.0	228	2.3	<1.0	46.6	0.358	0.683	297			0.100	0.052	0.89	0.95	0.0031	1.46
RSEM-R5A-P2-A-EOP	6/16/2022 14:00	AVK124	M	C242788	8.33	1110	704	18.7	188	196	185	<1.0	225	<1.0	<1.0	47.0	0.387	0.697	297			0.224	0.048	0.88	0.93	<0.0030	1.88
RSEM-R5A-P2-A-EOP	6/17/2022 13:10	AVK725	M	C242942	8.32	885	556	42.0	265	253	154	<1.0	188	<1.0	<1.0	60.1	0.260	1.00	196			0.112	0.0262	0.933	0.960	<0.0030	1.30
RSEM-R5A-P2-A-EOP	6/18/2022 14:35	AVL990	M	C243162	8.21	1520	968	13.7	255	264	165	<1.0	201	<1.0	<1.0	52.1	0.387	0.819	471			0.457	0.059	0.86	0.92	0.0032	1.31
RSEM-R5A-P2-A-EOP	6/19/2022 13:35	AVM020	M	C243177	8.28	1560	1020	13.4	260	246	169	<1.0	206	<1.0	<1.0	52.6	0.409	0.855	496			0.408	0.069	0.86	0.93	0.0034	1.44
RSEM-R5A-P2-A-EOP	6/20/2022 12:45	AVO966	M	C243664	8.28	1490	1010	13.3	226	195	160	<1.0	195	<1.0	<1.0	52.6	0.394	0.798	491			0.245	0.061	0.82	0.88	<0.0030	1.69
RSEM-R5A-P2-A-EOP	6/21/2022 13:00	AVQ612	M	C244010	8.17	819	524	20.7	270	241	159	<1.0	194	<1.0	<1.0	44.8	0.266	0.679	189			0.087	0.029	0.92	0.95	<0.0030	1.52
RSEM-R5A-P2-A-EOP	6/23/2022 13:00	AVV598	M	C244839	8.22	1460	948	13.3	248	234	148	<1.0	180	<1.0	<1.0	45.5	0.401	0.702	485			0.041	<0.010	0.019	0.019	<0.0030	1.59
RSEM-R5A-P2-A-EOP	6/24/2022 12:00	AVV587	M	C244835	8.11	1520	1060	8.05	281	272	135	<1.0	164	<1.0	<1.0	42.5	0.396	0.684	542			0.059	0.031	0.59	0.62	<0.0030	1.68
RSEM-R5A-P2-A-EOP	6/26/2022 12:15	AVZ578	M	C245500	8.29	1090	700	7.50	167	163	188	<1.0	230	<1.0	<1.0	44.1	0.346	0.639	290			0.142	0.053	0.81	0.86	<0.0030	1.19
RSEM-R5A-P2-A-EOP	6/27/2022 11:20	AVY534	M	C245274	7.84	1070	684	7.63	165	159	197	<1.0	240	<1.0	<1.0	42.3	0.348	0.623	277			0.148	0.063	0.75	0.81	<0.0030	1.05
RSEM-R5A-P2-A-EOP	7/10/2022 15:55	AWZ488	M	C249617	8.10	1060	672	16.5	178	165	226	<1.0	276	<1.0	<1.0	46.0	0.466	0.590	240			0.194	0.058	0.77	0.82	<0.0030	1.52
RSEM-R5A-P2-A-EOP	7/12/2022 10:25	AXE617	M	C250400	8.21	1080	684	11.7	170	162	220	<1.0	269	<1.0	<1.0	48.5	0.381	0.636	250			0.084	0.050	0.77	0.82	0.0035	1.96
RSEM-R5A-P2-A-EOP	7/15/2022 13:30	AXJ366	M	C251330	7.79	1160	768	11.0	201	195	163	<1.0	198	<1.0	<1.0	54.9	0.362	0.889	337			0.094	0.040	0.80	0.84	<0.0030	3.11
RSEM-R5A-P2-A-EOP	7/16/2022 13:20	AXN332	M	C251927	7.67	1170	760	23.5	202	201	151	<1.0	184	<1.0	<1.0	51.8	0.358	0.982	341			0.096	0.036	0.86	0.89	<0.0030	6.96
RSEM-R5A-P2-A-EOP	7/17/2022 11:55	AXN588	M	C251966	7.58	1190	748	16.6	193	196	139	<1.0	169	<1.0	<1.0	54.6	0.364	1.00	348			0.097	0.034	0.83	0.87	<0.0030	4.02
RSEM-R5A-P2-A-EOP	7/28/2022 14:30	AYM154	M	C255903	8.46	1040	680	8.9	140	135	193	3.7	227	4.4	<1.0	45.2	0.450	0.62	229			0.074	0.0357	0.714	0.750	<0.0030	1.22
RSEM-R5A-P2-A-EOP	7/29/2022 11:45	AYM049	M	C255900	8.26	1160	814	13.6	179	182	141	<1.0	171	<1.0	<1.0	63.6	0.370	1.07	329			0.031	0.0220	0.489	0.511	<0.0030	2.96
RSEM-R5A-P2-A-EOP	8/3/2022 13:10	AYX382	M	C257672	8.19	1340	906	9.6	273	271	131	<1.0	159	<1.0	<1.0	92.3	0.610	1.37	404			0.154	0.0471	0.691	0.739	<0.0030	1.64
RSEM-R5A-P2-A-EOP	8/4/2022 11:45	AYY905	M	C257848	8.30	1340	654	12.0	263	253	137	<1.0	167	<1.0	<1.0	79.5	0.690	1.06	416			0.127	0.0432	0.581	0.624	<0.0030	2.14
RSEM-R5A-P2-A-EOP	8/18/2022 15:30	BAA276	M	C262439	8.16	1330	938	14.4	197	191	145	<1.0	177	<1.0	<1.0	65.8	0.590	0.92	416			0.110	0.0335	0.401	0.435	<0.0030	2.17
RSEM-R5A-P2-A-EOP	8/19/2022 11:00	BAA262	M	C262436	8.20	1290	910	14.4	202	192	150	<1.0	184	<1.0	<1.0	64.2	0.570	0.87	394			0.117	0.0355	0.401	0.436	<0.0030	2.16
RSEM-R5A-P2-A-EOP	9/9/2022 12:35	BBS003	M	C269764	8.09	546	350	12.0	105	102	120	<1.0	147	<1.0	<1.0	18.3	0.240	0.256	111			0.040	0.0165	0.154	0.170	<0.0030	2.34
RSEM-R5A-P2-A-EOP	9/10/2022 14:00	BBR902	M	C269730	8.38	1130	680	10.4	123	131	170	1.7	203	2.1	<1.0	58.4	0.480	0.996	271			<0.015	0.0222	0.326	0.348	<0.0030	2.81
RSEM-R5A-P2-A-EOP	9/11/2022 16:20	BBR961	M	C269754	8.33	1080	700	16.0	125	123	149	1.0	180	1.2	<1.0	59.7	0.400	1.08	265			0.063	0.0210	0.303	0.324	<0.0030	3.09

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
RSEM-R5A-P2-A-EOP	9/18/2022 14:30	BCF724	M	C272251	8.18	1440	922	25.6	249	239	158	<1.0	193	<1.0	<1.0	120	0.440	2.06	334			0.150	0.0237	0.368	0.391	<0.0030	3.21
RSEM-R5A-P2-A-EOP	9/19/2022 10:20	BCI770	M	C272683	7.87	1340	856	6.4	177	181	138	<1.0	169	<1.0	<1.0	90.8	0.370	1.75	348			0.081	0.0254	0.296	0.322	<0.0030	2.64
RSEM-R5A-P2-A-EOP	9/30/2022 12:20	BDH545	M	C276348	7.39	1270	816	10.3	194	196	136	<1.0	165	<1.0	<1.0	59.1	0.322	0.901	426			0.055	<0.010	0.15	0.15	<0.0030	2.41
RSEM-R5A-P2-A-EOP	10/1/2022 13:30	BDL250	M	C276877	7.07	1270	840	16.6	191	190	150	<1.0	183	<1.0	<1.0	58.5	0.389	0.889	387			0.059	<0.010	0.15	0.15	<0.0030	2.47
RSEM-R5A-P2-A-EOP	10/19/2022 15:30	BFA347	M	C282741	8.30	876	576	2.0	206	192	194	<1.0	236	<1.0	<1.0	32.8	0.359	0.481	210			0.028	<0.010	0.28	0.28	<0.0030	3.00
RSEM-R5A-P2-A-EOP	10/28/2022 10:00	BFU723	M	C285458	8.21	980	592	11.0	232	242	199	<1.0	243	<1.0	<1.0	37.0	0.280	0.626	245			0.060	<0.010	0.504	0.504	<0.0030	2.44
RSEM-R5A-P2-A-EOP	10/29/2022 10:35	BFZ655	M	C286199	8.27	925	624	5.7	239	230	201	<1.0	245	<1.0	<1.0	35.0	0.270	0.51	226			0.035	<0.010	0.501	0.501	0.0032	1.39
RSEM-R5A-P2-A-SP	3/17/2022 19:00	AQH802	M	C217776	7.45	177	120	248	98.3	61.0	41.1	<1.0	50.1	<1.0	<1.0	1.26	<0.050	<0.010	42.5			0.135	0.037	0.50	0.53	0.0085	0.95
RSEM-R5A-P2-A-SP	3/20/2022 11:20	AQJ911	M	C218219	7.43	322	196	1.3	108	99.5	36.2	<1.0	44.2	<1.0	<1.0	1.81	0.051	<0.050	98.7			0.142	0.030	0.80	0.83	<0.0030	1.54
RSEM-R5A-P2-A-SP	4/29/2022 11:00	ASH018	M	C228622	7.72	2400	1700	23.2	263	250	145	<1.0	176	<1.0	<1.0	79.2	0.393	0.624	974			1.28	0.11	0.045	0.15	<0.0030	3.50
RSEM-R5A-P2-A-SP	5/6/2022 12:05	ASR073	M	C230545	8.00	2440	1760	59.6	370	338	128	<1.0	156	<1.0	<1.0	63.6	0.318	0.554	1070			0.979	0.22	0.55	0.77	<0.0030	2.20
RSEM-R5A-P2-A-SP	5/18/2022 16:30	ATJ928	M	C234012	8.04	2450	1810	3.91	644	591	108	<1.0	132	<1.0	<1.0	30.1	0.582	0.539	1140			0.270	0.11	3.5	3.6	<0.0030	2.98
RSEM-R5A-P2-A-SP	5/28/2022 12:45	ATX752	M	C236620	7.81	1350	900	19.9	366	362	150	<1.0	183	<1.0	<1.0	128	0.358	1.80	372			0.492	0.027	0.87	0.90	<0.0030	1.97
RSEM-R5A-P2-A-SP	6/1/2022 13:20	AUE683	M	C237797	7.69	1810	1250	4.5	306	271	137	<1.0	167	<1.0	<1.0	54.6	0.580	0.975	669			0.732	0.043	0.69	0.74	<0.0030	1.45
RSEM-R5A-P2-A-SP	6/7/2022 13:00	AUT414	M	C240162	8.37	1260	832	6.2	224	225	174	2.0	208	2.4	<1.0	41.4	0.434	0.701	394			0.175	0.049	0.81	0.86	0.0083	2.28
RSEM-R5A-P2-A-SP	6/8/2022 16:00	AUT296	M	C240147	8.34	1270	824	5.5	231	222	168	<1.0	205	<1.0	<1.0	41.2	0.436	0.731	392			0.146	0.046	0.79	0.84	<0.0030	1.89
RSEM-R5A-P2-A-SP	6/10/2022 11:30	AUV212	M	C240508	8.32	1230	812	3.88	223	212	160	<1.0	195	<1.0	<1.0	41.5	0.421	0.702	382			0.067	0.041	0.82	0.86	<0.0030	1.51
RSEM-R5A-P2-A-SP	6/22/2022 13:10	AVT154	M	C244412	8.41	1300	860	9.7	191	184	174	2.7	205	3.2	<1.0	49.3	0.389	0.748	397			0.098	0.064	0.83	0.89	0.0032	1.70
RSEM-R5A-P2-A-SP	6/25/2022 11:50	AVZ708	M	C245512	8.11	1550	1060	5.39	288	268	124	<1.0	152	<1.0	<1.0	40.0	0.367	0.716	561			0.059	0.026	0.52	0.55	<0.0030	1.44
RSEM-R5A-P2-A-SP	6/28/2022 14:00	AWH754	M	C246896	8.12	1100	712	5.79	198	174	213	<1.0	259	<1.0	<1.0	45.8	0.395	0.639	274			0.182	0.057	0.83	0.89	<0.0030	1.74
RSEM-R5A-P2-A-SP	7/9/2022 13:15	AWZ516	M	C249625	8.30	1030	628	7.5	167	160	225	<1.0	274	<1.0	<1.0	45.0	0.459	0.650	233			0.169	0.058	0.76	0.82	<0.0030	1.56
RSEM-R5A-P2-A-SP	7/11/2022 15:25	AXC659	M	C250105	8.11	1070	668	18.6	183	163	236	<1.0	287	<1.0	<1.0	46.9	0.432	0.656	243			0.158	0.055	0.83	0.88	<0.0030	1.61
RSEM-R5A-P2-A-SP	7/13/2022 14:05	AXH416	M	C250934	8.16	1070	680	39.2	164	154	220	<1.0	268	<1.0	<1.0	49.6	0.456	0.642	243			0.147	0.069	0.85	0.92	<0.0030	1.29
RSEM-R5A-P2-A-SP	7/14/2022 11:10	AXJ118	M	C251290	7.96	1170	760	11.1	206	208	151	<1.0	185	<1.0	<1.0	54.3	0.432	0.909	343			0.094	0.042	0.82	0.86	<0.0030	2.76
RSEM-R5A-P2-A-SP	7/30/2022 14:00	AYP673	M	C256352	8.51	1100	698	20.8	140	137	204	4.3	239	5.2	<1.0	66.3	0.530	0.56	279			0.089	0.0317	0.616	0.647	<0.0030	1.68
RSEM-R5A-P2-A-SP	8/6/2022 15:10	AZA355	M	C258076	8.24	1200	828	12.4	226	218	122	<1.0	149	<1.0	<1.0	63.7	0.630	0.89	383			0.101	0.0377	0.549	0.587	<0.0030	1.83
RSEM-R5A-P2-A-SP	8/17/2022 12:30	BAA265	M	C262437	8.22	1300	926	41.6	212	206	141	<1.0	172	<1.0	<1.0	63.4	0.580	0.89	409			0.099	0.0274	0.459	0.487	<0.0030	2.34
RSEM-R5A-P2-A-SP	8/20/2022 16:30	BAD642	M	C262969	8.32	1300	712	1.2	200	194	142	1.5	170	1.8	<1.0	64.4	0.580	1.01	371			0.057	0.0176	0.357	0.375	<0.0030	2.17
RSEM-R5A-P2-A-SP	8/21/2022 16:40	BAD603	M	C262959	8.33	1260	798	50.7	187	179	175	1.8	209	2.1	<1.0	60.5	0.580	0.910	353			0.140	0.0284	0.341	0.369	<0.0030	2.22
RSEM-R5A-P2-A-SP	8/22/2022 17:00	BAG920	M	C263407	8.25	1240	792	10.0	192	189	172	<1.0	210	<1.0	<1.0	58.8	0.570	0.86	352			0.104	0.0259	0.343	0.369	<0.0030	2.23
RSEM-R5A-P2-A-SP	9/29/2022 17:30	BDH542	M	C276348	7.10	1300	876	9.1	169	159	190	<1.0	232	<1.0	<1.0	64.8	0.488	0.872	373			0.091	0.017	0.18	0.20	<0.0030	2.29
RSEM-R5A-P2-A-SP	10/14/2022 15:45	BER009	M	C281389	8.19	1240	856	10.5	163	160	218	<1.0	266	<1.0	<1.0	53.2	0.486	0.836	277			0.103	0.019	0.32	0.34	<0.0030	3.12
RSEM-R5A-P2-A-SP	10/15/2022 17:30	BER010	M	C281389	7.87	1250	860	51.8	164	164	245	<1.0	299	<1.0	<1.0	51.9	0.495	0.803	279			0.099	0.017	0.27	0.29	<0.0030	1.45
RSEM-R5A-P2-A-SP	10/16/2022 17:30	BER096	M	C281399	7.44	1260	748	2.7	155	164	239	<1.0	292	<1.0	<1.0	52.4	0.479	0.815	279			0.076	0.019	0.29	0.31	<0.0030	2.23
RSEM-R5A-P2-A-SP	10/17/2022 9:30	BER152	M	C281421	6.97	1260	796	4.5	160	162	239	<1.0	292	<1.0	<1.0	52.2	0.479	0.790	305			0.074	0.017	0.26	0.28	0.0036	1.82
RSEM-R5A-P2-A-SP	10/18/2022 13:45	BEX621	M	C282315	7.30	1220	804	11.0	162	161	231	<1.0	282	<1.0	<1.0	54.2	0.486	0.784	311			0.061	0.017	0.26	0.28	0.0037	1.88
RSEM-R5A-P2-A-SP	10/30/2022 13:20	BFZ647	M	C286196	8.19	1100	692	4.34	184	184	225	<1.0	274	<1.0	<1.0	44.5	0.384	0.544	280			0.080	<0.0050	0.545	0.545	0.0031	1.34
RSEM-R5A-P2-B-EOP	3/20/2022 11:40	AQJ913	M	C218219	7.47	372	244	9.1	122	114	31.7	<1.0	38.7	<1.0	<1.0	2.41	0.073	<0.050	138			0.172	0.029	0.79	0.82	0.0034	1.23
RSEM-R5A-P2-B-EOP	3/21/2022 14:55	AQL269	M	C218465	7.26	591	364	9.27	196	182	26.9	<1.0	32.8	<1.0	<1.0	2.36	0.120	0.063	237			0.166	0.020	0.83	0.85	0.0031	0.69
RSEM-R5A-P2-B-SP	3/17/2022 19:30	AQH803	M	C217776	7.06	177	120	158	73.5	52.8	36.6	<1.0	44.7	<1.0	<1.0	3.94	<0.050	0.019	43.5			0.185	0.033	0.50	0.53	0.0074	4.3
RSEM-R5A-P2-B-SP	3/19/2022 16:05	AQJ974	M	C218236	7.55	261	176	2.89	84.0	79.6	31.2	<1.0	38.0	<1.0	<1.0	1.59	<0.050	<0.050	73.9			0.157	0.031	0.63	0.66	<0.0030	1.59
RSEM-R5A-P2-B-SP	5/6/2022 12:15	ASR074	M	C230545	7.92	2550	1970	9.5	718	701	92.9	<1.0	113	<1.0	<1.0	42.8	0.537	0.542	1210			0.577	0.057	3.5	3.6	<0.0030	2.90
RSEM-R5A-P2-B-SP	5/31/2022 13:55	AUC339	M	C237377	7.84	2050	1490	4.28	523	485	109	<1.0	133	<1.0	<1.0	36.5	0.648	0.719	968			0.854	0.051	1.7	1.8	<0.0030	2.20
RSEM-R5A-P2-B-SP	6/4/2022 14:25	AUL724	M	C238905	8.13	1850	1270	6.5	351	344	133	<1.0	162	<1.0	<1.0	49.3	0.591	0.822	626			0.170	0.050	1.0	1.1	<0.0030	1.67
RSEM-R5A-P2-B-SP	6/19/2022 14:00	AVM018	M	C243177	8.04	1560	1060	5.20	337	324	109	<1.0	133	<1.0	<1.0	39.6	0.404	0.682	615			0.052	0.030	0.82	0.85	<0.0030	1.26
RSEM-R5A-P2-C-SP	3/20/2022 12:25	AQJ914	M	C218219	6.98	285	188	4.93	97.7	93.1	26.5	<1.0	32.3	<1.0	<1.0	1.67	0.113	<0.050	94.4			0.211	0.019	0.45	0.47	<0.0030	1.68
RSEM-R5A-P2-C-SP	5/6/2022 12:30	ASR075	M	C230545	7.97	1950	1320	3.6	253	254	129	<1.0	157	<1.0	<1.0	54.5	0.261	0.532	803			1.16	0.15	0.47	0.61	<0.0030	2.15
RSEM-R5A-P2-C-SP	5/31/2022 13:55	AUC340	M	C237377	7.14	2110	1560	4.5	533	518	55.9	<1.0	68.2	<1.0	<1.0	14.9	0.774	0.463	1110			0.058	0.041	2.5	2.5	<0.0030	1.28
RSEM-R5A-P2-C-SP	6/4/2022 14:25	AUL725	M	C238905	7.70	2120	1540	3.64	534	530	83.3	<1.0	102	<1.0	<1.0	27.9	0.748	0.554	912			1.04	0.049	2.2	2.2	<0.0030	1.78
RSEM-R5A-P2-D-SP	5/7/2022 14:35	ASS947	M	C230886	7.54	2410	1880	8.7	772	730	60.4	<1.0	73.7	<1.0	<1.0	30.1	0.839	0.458	1240			0.830	0.059	2.6	2.6	0.0034	2.40
RSEM-R5A-P2-D-SP	6/1/2022 13:45	AUE684	M	C237797	3.34	4110	3650	4.36	1990	1720	<1.0	<1.0	<1.0	<1.0	<1.0	6.64	1.49	0.31	2690			1.05	<0.010	0.026	0.026	0.0032	1.37
RSEM-R5B-P2-Sump	3/21/2022 16:30	AQL264	M	C218465	7.77	647	396	4.3	195	195	46.1	<1.0	56.2	<1.0	<1.0	18.0	0.459	0.276	226			0.399	0.060	0.43	0.49	0.0048	3.47
RSEM-R5B-P2-Sump	3/30/2022 11:55	AQX831	M	C221206	7.78	737	472	2.50	210	207	93.8	<1.0	114	<1.0	<1.0	21.6	0.175	0.294	244			0.489	0.068	0.44	0.51	0.0033	2.51
RSEM-R5B-P2-Sump	4/6/2022 16:20	ARI189	M	C223269	7.50	702	396	7.0	206	176	110	<1.0	134	<1.0	<1.0	20.8	0.260	0.301	237			0.470	0.052	0.44	0.50	<0.0030	1.90
RSEM-R5B-P2-Sump	4/13/2022 16:35	ARP729	M	C224775	7.88	743	444	3.4	173	167	115	<1.0	140	<1.0	<1.0	23.2	0.208	0.365	230			0.428	0.052	0.45	0.50	<0.0030	1.45
RSEM-R5B-P2-Sump	4/19/2022 16:00	ARV038	M	C225905	7.82	724	460	10.5	153	160	115	<1.0	141	<1.0	<1.0	22.7	0.058	0.334	212			0.352	0.039	0.45	0.49	<0.0030	1.52
RSEM-R5B-P2-Sump	5/3/2022 10:30	ASO450	M	C230063	7.76	1610	1110	2.8	261	249	104	<1.0	127	<1.0	<1.0	70.3	0.540	0.518	627			0.826	0.037	0.062	0.099	<0.0030	1.81
RSEM-R5B-P2-Sump	5/7/2022 13:55	ASS946	M	C230886	7.70	1810	1280	36.4	305	295	111	<1.0	136	<1.0	<1.0	64.5	0.371	0.606	698			0.905	0.052	0.16	0.21	<0.0030	1.72
RSEM-R5B-P2-Sump	5/10/2022 13:45	ASX009	M	C231638	7.92	1860	1270	5.5	302	278	132	<1.0	161	<1.0	<1.0	64.0	0.377	0.474	710			1.03	0.049	0.26	0.31	<0.0030	1.69
RSEM-R5B-P2-Sump	5/13/2022 12:55	ATB016	M	C232410	8.05	1770	1240	3.36	283	273	151	<1.0	185	<1.0	<1.0	61.7	0.533	0.458	626			0.928	0.046	0.43	0.47	0.0031	1.16
RSEM-R5B-P2-Sump	5/16/2022 10:55	ATC673	M	C232726	8.13	1690	1160	15.7	253	274	165	<1.0	201	<1.0	<1.0	55.4	0.923	0.625	675			0.100	0.046	0.48	0.52	<0.0030	1.53
RSEM-R5B-P2-Sump	5/19/2022 16:30	ATL914	M	C234314	7.87	1800	1230	7.6	314	291	151	<1.0	184	<1.0	<1.0	56.4	0.571	0.813	718			1.06	0.050	0.63	0.68	0.0031	1.40
RSEM-R5B-P2-Sump	5/22/2022 12:00	ATO536	M	C234788	8.23	1710	1130	7.3	277	269	167	<1.0	203	<1.0	<1.0	59.6	0.550	0.761	604			0.761	0.045	0.65	0.70	<0.0030	1.48
RSEM-R5B-P2-Sump	5/25/2022 12:00	ATT370	M	C235730	8.10	1610	1100	2.91	259	287	171	<1.0	208	<1.0	<1.0	57.6	0.472	0.774	565			0.646	0.044	0.75	0.80	<0.0030	1.60
RSEM-R5B-P2-Sump	5/28/2022 14:10	ATX751	M	C236620	7.90	1660	1130	28.8	282	270	143	<1.0	175	<1.0	<1.0	71.2	0.411	1.03	556			0.757	0.038	0.74	0.78	<0.0030	1.93
RSEM-R5B-P2-Sump	5/29/2022 15:30	ATW987	M	C236421	7.38	1860	1250	4.4	279	276	117	<1.0	143	<1.0	<1.0	61.2	0.569	0.926	732			1.46	0.034	0.61	0.64	<0.0030	1.81
RSEM-R5B-P2-Sump	6/1/2022 12:45	AUE682	M	C237797	8.26	1760	1170	14.5	290	266	157	<1.0	191	<1.0	<1.0	54.8	0.561	0.782	622			0.714	0.044	0.75	0.80	<0.0030	1.44
RSEM-R5B-P2-Sump	6/5/2022 12:25	AUM443	M	C238986	8.37	1340	860	99.5	253	236	173	2.8	204	3.3	<1.0	47.7	0.438	0.709	408			0.320	0.040	0.73	0.77	<0.0030	1.53
RSEM-R5B-P2-Sump	6/11/2022 13:00	AUY738	M	C241062	8.27	1150	728	13.2	210	208	186	<1.0	227	<1.0	<1.0	44.7	0.354	0.792	325			0.217	0.058	0.91	0.96	<0.0030	1.80

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
RSEM-R5B-P2-Sump	6/15/2022 14:10	AVG250	M	C242252	8.22	1090	700	13.7	188	191	183	<1.0	223	<1.0	<1.0	46.5	0.356	0.678	292			0.136	0.052	0.89	0.94	<0.0030	1.66
RSEM-R5B-P2-Sump	6/18/2022 14:00	AVL991	M	C243162	8.13	1510	996	14.7	246	254	161	<1.0	197	<1.0	<1.0	52.7	0.404	0.756	492			0.443	0.059	0.83	0.89	0.0030	1.88
RSEM-R5B-P2-Sump	6/23/2022 13:45	AVV599	M	C244839	8.31	1070	640	21.5	163	163	197	<1.0	240	<1.0	<1.0	41.5	0.392	0.615	290			0.078	<0.010	4.0	4.0	<0.0030	1.80
RSEM-R5B-P2-Sump	6/26/2022 11:55	AVZ579	M	C245500	8.34	1060	664	10.9	166	156	193	1.4	232	1.7	<1.0	40.8	0.341	0.623	275			0.163	0.061	0.84	0.90	0.0033	1.43
RSEM-R5B-P2-Sump	7/3/2022 15:00	AWM048	M	C247492	8.30	1010	620	10.5	159	146	208	<1.0	254	<1.0	<1.0	46.3	0.407	0.624	235			0.176	0.051	0.78	0.83	0.0031	1.94
RSEM-R5B-P2-Sump	7/5/2022 13:30	AWR508	M	C248315	8.26	999	608	4.41	156	157	207	<1.0	252	<1.0	<1.0	42.3	0.335	0.642	244			0.154	0.055	0.71	0.77	0.0031	1.49
RSEM-R5B-P2-Sump	7/8/2022 12:35	AWW524	M	C249170	8.30	1030	636	8.5	166	149	225	<1.0	274	<1.0	<1.0	45.8	0.412	0.592	234			0.201	0.057	0.76	0.81	0.0030	2.20
RSEM-R5B-P2-Sump	7/13/2022 13:35	AXH417	M	C250934	8.07	1040	668	66.5	164	153	232	<1.0	283	<1.0	<1.0	49.1	0.453	0.639	226			0.218	0.069	0.82	0.89	0.0033	1.66
RSEM-R5B-P2-Sump	7/16/2022 12:50	AXN333	M	C251927	8.29	982	620	87.4	147	124	213	<1.0	260	<1.0	<1.0	47.6	0.375	0.773	226			0.220	0.053	0.80	0.85	<0.0030	6.00
RSEM-R5B-P2-Sump	7/23/2022 13:00	AYB215	M	C254120	8.51	1080	660	12.7	138	126	221	6.5	254	7.8	<1.0	48.9	0.468	0.632	244			0.109	0.049	0.86	0.91	0.0037	1.81
RSEM-R5B-P2-Sump	7/28/2022 14:00	AYM155	M	C255903	8.53	1030	662	11.1	140	127	192	4.5	223	5.4	<1.0	45.1	0.490	0.66	221			0.074	0.0359	0.693	0.728	<0.0030	2.62
RSEM-R5B-P2-Sump	8/2/2022 13:05	AYU377	M	C257067	8.35	1250	816	7.2	249	242	127	1.0	153	1.2	<1.0	108	0.400	1.47	300			0.162	0.0374	0.738	0.775	<0.0030	2.44
RSEM-R5B-P2-Sump	8/6/2022 14:45	AZA358	M	C258076	8.13	1550	1080	11.6	267	260	112	<1.0	137	<1.0	<1.0	85.1	0.650	1.32	535			0.233	0.0708	0.696	0.767	<0.0030	2.20
RSEM-R5B-P2-Sump	8/14/2022 16:30	AZR294	M	C260829	8.01	1300	892	17.6	192	197	126	<1.0	153	<1.0	<1.0	63.9	0.580	0.93	370			0.089	0.0196	0.302	0.322	<0.0030	2.97
RSEM-R5B-P2-Sump	8/27/2022 14:30	BAR927	M	C265307	8.53	1170	738	58.0	150	136	189	4.2	221	5.0	<1.0	50.8	0.620	0.713	316			0.077	0.0470	0.182	0.229	<0.0030	2.21
RSEM-R5B-P2-Sump	9/5/2022 16:00	BBI329	M	C268286	8.58	1270	884	43.2	151	142	212	5.8	244	7.0	<1.0	54.7	0.640	0.823	312			0.101	0.0551	0.305	0.360	<0.0030	2.30
RSEM-R5B-P2-Sump	9/8/2022 11:55	BBO447	M	C269143	8.44	1260	854	24.8	148	150	210	4.0	246	4.8	<1.0	55.3	0.640	0.819	311			0.119	0.0594	0.306	0.366	<0.0030	2.51
RSEM-R5B-P2-Sump	9/15/2022 14:35	BCC126	M	C271667	8.55	1220	768	32.0	149	145	218	5.2	253	6.2	<1.0	56.6	0.540	0.731	280			0.078	0.0206	0.161	0.181	<0.0030	1.53
RSEM-R5B-P2-Sump	9/24/2022 12:20	BCV562	M	C274577	8.50	1360	862	43.6	158	155	177	3.7	206	4.5	<1.0	66.7	0.550	0.90	361			0.084	0.0582	0.153	0.211	<0.0030	2.22
RSEM-R5B-P2-Sump	9/28/2022 15:40	BDE182	M	C276033	8.42	1280	826	30.4	157	153	195	2.6	231	3.1	<1.0	59.2	0.490	0.805	310			0.083	0.0306	0.175	0.206	<0.0030	2.00
RSEM-R5B-P2-Sump	10/4/2022 11:50	BDR440	M	C277814	8.01	1180	852	29.9	178	163	235	<1.0	286	<1.0	<1.0	54.9	0.427	0.782	298			0.184	0.016	0.26	0.28	<0.0030	2.63
RSEM-R5B-P2-Sump	10/9/2022 11:45	BED927	M	C279394	8.17	1190	740	2.76	139	151	215	<1.0	262	<1.0	<1.0	54.1	0.417	0.733	280			0.129	0.012	0.18	0.19	<0.0030	2.08
RSEM-R5B-P2-Sump	10/13/2022 16:40	BEN621	M	C280837	7.91	1190	812	10.0	144	150	216	<1.0	264	<1.0	<1.0	53.4	0.472	0.689	276			0.105	0.017	0.26	0.28	0.0031	3.06
RSEM-R5B-P2-Sump	10/20/2022 12:15	BFD238	M	C283174	8.52	1190	824	30.7	156	143	229	5.7	266	6.8	<1.0	46.9	0.500	0.747	294			0.086	0.024	0.36	0.39	<0.0030	2.10
RSEM-R5B-P2-Sump	10/25/2022 14:35	BFP709	M	C284665	8.37	1110	736	10.2	168	159	227	2.0	272	2.4	<1.0	43.6	0.406	0.582	271			0.147	<0.010	0.402	0.402	0.0035	1.87
RSEM-R6E-EOP	1/23/2022 11:15	FJ2200194-002	M	FJ2200194	7.98	374	214	24.2	108	103	100	<1.0	122	<1.0	<1.0	16.3	0.116	0.179	63.9			0.0602	0.0140	0.277	0.291	0.0036	4.03
RSEM-R6E-EOP	2/8/2022 11:35	AOI289	M	C208265	8.02	520	296	21.7	176	172	116	<1.0	142	<1.0	<1.0	42.3	0.066	0.333	72.9			0.201	0.037	0.76	0.80	<0.0030	4.44
RSEM-R6E-EOP	2/12/2022 13:50	AOP216	M	C209346	7.02	548	296	8.1	175	172	60.9	<1.0	74.3	<1.0	<1.0	34.6	0.113	0.263	153			0.192	0.041	1.0	1.1	<0.0030	3.11
RSEM-R6E-EOP	2/13/2022 10:35	AOP245	M	C209355	7.68	437	264	3.6	146	139	67.7	<1.0	82.6	<1.0	<1.0	50.0	0.144	0.343	65.9			0.219	0.028	0.45	0.48	<0.0030	3.09
RSEM-R6E-EOP	2/14/2022 13:00	AOQ978	M	C209670	7.68	454	220	2.9	153	146	65.0	<1.0	79.3	<1.0	<1.0	52.2	0.141	0.410	69.1			0.211	0.027	0.48	0.50	<0.0030	3.38
RSEM-R6E-EOP	2/15/2022 15:45	AOS723	M	C210043	7.92	481	300	17.7	156	163	70.0	<1.0	85.3	<1.0	<1.0	55.0	0.243	0.420	72.5			0.193	0.029	0.51	0.54	<0.0030	2.73
RSEM-R6E-EOP	2/16/2022 10:30	AOU839	M	C210450	7.84	487	268	3.2	163	154	75.9	<1.0	92.7	<1.0	<1.0	55.5	0.255	0.403	73.3			0.186	0.026	0.53	0.55	<0.0030	2.60
RSEM-R6E-EOP	3/16/2022 7:00	AQE821	M	C217156	7.63	578	384	4.6	126	131	99.5	<1.0	121	<1.0	<1.0	25.4	0.078	0.277	126			0.197	0.020	0.85	0.87	<0.0030	2.58
RSEM-R6E-EOP	3/17/2022 16:30	AQH796	M	C217776	7.74	507	340	629	260	199	56.9	<1.0	69.4	<1.0	<1.0	51.8	0.196	0.564	110			0.332	0.052	0.50	0.56	0.0064	2.77
RSEM-R6E-EOP	3/18/2022 5:00	AQH793	M	C217775	7.88	663	360	3.8	251	247	124	<1.0	151	<1.0	<1.0	62.2	0.305	0.605	113			0.413	0.049	0.59	0.63	<0.0030	4.06
RSEM-R6E-EOP	4/6/2022 12:30	ARI187	M	C223269	7.56	421	268	5.3	176	155	99.6	<1.0	121	<1.0	<1.0	17.2	0.108	0.235	94.2			0.202	0.013	0.27	0.28	<0.0030	1.22
RSEM-R6E-EOP	4/8/2022 12:30	ARI202	M	C223273	7.78	513	316	11.1	224	191	117	<1.0	143	<1.0	<1.0	21.9	0.118	0.300	122			0.215	0.018	0.30	0.32	<0.0030	1.36
RSEM-R6E-EOP	4/10/2022 12:30	ARK076	M	C223661	6.52	625	388	8.5	221	231	107	<1.0	131	<1.0	<1.0	34.5	0.135	0.347	153			0.235	0.019	0.45	0.47	<0.0030	2.19
RSEM-R6E-EOP	4/11/2022 9:30	ARK111	M	C223675	7.87	629	396	4.7	221	226	113	<1.0	138	<1.0	<1.0	34.9	0.137	0.500	153			0.233	0.019	0.44	0.45	<0.0030	2.28
RSEM-R6E-EOP	4/12/2022 10:20	ARN333	M	C224402	7.92	636	404	3.0	225	232	118	<1.0	144	<1.0	<1.0	36.1	0.134	0.571	147			0.249	0.018	0.48	0.50	0.0088	1.48
RSEM-R6E-EOP	4/13/2022 12:00	ARP725	M	C224775	7.94	632	420	3.78	230	242	127	<1.0	155	<1.0	<1.0	36.3	0.121	0.528	147			0.215	0.020	0.52	0.54	<0.0030	1.33
RSEM-R6E-EOP	4/14/2022 9:25	ARQ064	M	C224815	7.92	635	368	1.51	232	240	130	<1.0	158	<1.0	<1.0	36.1	0.128	0.527	145			0.209	0.020	0.53	0.55	<0.0030	1.64
RSEM-R6E-EOP	4/15/2022 13:35	ARQ198	M	C224832	7.98	638	402	4.4	233	246	129	<1.0	157	<1.0	<1.0	35.7	0.250	0.459	147			0.226	0.0191	0.558	0.578	<0.0030	1.59
RSEM-R6E-EOP	4/15/2022 13:45	ARQ199	D	C224832	8.03	636	396	4.8	237	242	129	<1.0	157	<1.0	<1.0	36.5	0.250	0.455	148			0.202	0.0213	0.548	0.570	<0.0030	1.44
RSEM-R6E-EOP	4/16/2022 13:35	ARR878	M	C225206	7.78	649	376	1.9	240	249	136	<1.0	166	<1.0	<1.0	35.9	0.057	0.500	142			0.245	0.023	0.62	0.65	<0.0030	1.77
RSEM-R6E-EOP	4/17/2022 16:55	ARR903	M	C225213	7.70	658	372	1.5	276	250	135	<1.0	165	<1.0	<1.0	35.5	0.060	0.501	140			0.209	0.023	0.65	0.67	<0.0030	1.79
RSEM-R6E-EOP	4/18/2022 13:45	ARU247	M	C225693	7.90	654	428	1.4	262	233	140	<1.0	171	<1.0	<1.0	34.9	0.053	0.510	138			0.324	0.021	0.65	0.67	<0.0030	2.05
RSEM-R6E-EOP	4/19/2022 13:30	ARV034	M	C225905	7.94	646	400	1.0	288	238	136	<1.0	166	<1.0	<1.0	34.8	0.072	0.486	138			0.380	0.021	0.66	0.68	<0.0030	1.83
RSEM-R6E-EOP	4/20/2022 12:25	ARW667	M	C226267	7.83	646	416	1.4	276	244	156	<1.0	191	<1.0	<1.0	34.0	<0.050	0.444	137			0.187	0.021	0.68	0.70	0.0038	1.55
RSEM-R6E-EOP	4/21/2022 13:15	ARX706	M	C226546	7.88	640	444	<1.0	297	256	149	<1.0	182	<1.0	<1.0	32.9	<0.050	0.432	134			0.190	0.021	0.66	0.68	0.0038	1.91
RSEM-R6E-EOP	4/22/2022 11:25	ARX719	M	C226550	7.71	628	396	2.0	284	261	142	<1.0	173	<1.0	<1.0	31.5	0.239	0.383	129			0.189	0.021	0.68	0.70	0.0032	2.06
RSEM-R6E-EOP	4/22/2022 11:35	ARX720	D	C226550	7.68	630	380	<1.0	282	243	160	<1.0	195	<1.0	<1.0	31.3	0.241	0.383	129			0.170	0.021	0.66	0.68	0.0031	2.72
RSEM-R6E-EOP	4/23/2022 15:20	ARZ185	M	C226855	7.97	654	416	5.1	261	252	149	<1.0	182	<1.0	<1.0	32.5	0.130	0.446	130			0.398	0.018	0.60	0.62	<0.0030	1.57
RSEM-R6E-EOP	4/24/2022 11:10	ASA415	M	C227083	7.97	627	364	1.38	250	243	147	<1.0	180	<1.0	<1.0	30.3	0.115	0.407	128			0.178	0.018	0.61	0.63	<0.0030	0.92
RSEM-R6E-EOP	4/24/2022 11:20	ASA416	D	C227083	7.97	627	372	3.1	254	244	140	<1.0	171	<1.0	<1.0	30.5	0.115	0.403	129			0.229	0.021	0.60	0.62	<0.0030	1.58
RSEM-R6E-EOP	4/25/2022 11:10	ASA412	M	C227083	7.95	614	356	1.6	240	237	144	<1.0	176	<1.0	<1.0	29.7	0.112	0.381	125			0.140	0.017	0.60	0.61	<0.0030	1.79
RSEM-R6E-EOP	4/26/2022 11:30	ASD456	M	C227799	8.07	618	396	7.99	241	235	155	<1.0	189	<1.0	<1.0	30.3	0.123	0.391	130			0.131	0.017	0.60	0.61	<0.0030	1.72
RSEM-R6E-EOP	4/27/2022 11:30	ASH196	M	C228648	8.15	612	368	5.26	243	237	136	<1.0	166	<1.0	<1.0	29.9	0.109	0.372	120			0.118	0.015	0.58	0.60	<0.0030	1.76
RSEM-R6E-EOP	4/28/2022 12:00	ASH216	M	C228650	8.13	630	364	19.3	256	239	136	<1.0	166	<1.0	<1.0	41.2	0.101	0.548	121			0.244	0.019	0.68	0.70	0.0030	1.91
RSEM-R6E-EOP	4/29/2022 9:30	ASH016	M	C228622	8.11	672	408	14.9	264	257	115	<1.0	140	<1.0	<1.0	54.5	0.140	0.741	137			0.192	0.025	0.96	0.99	<0.0030	1.74
RSEM-R6E-EOP	4/30/2022 11:30	ASL379	M	C229488	7.92	737	424	7.1	289	286	103	<1.0	126	<1.0	<1.0	53.9	0.231	0.742	188			0.200	0.026	0.90	0.93	<0.0030	1.58
RSEM-R6E-EOP	5/1/2022 10:30	ASL426	M	C229493	7.91	817	520	4.47	352	326	99.4	<1.0	121	<1.0	<1.0	52.1	0.278	0.702	237			0.211	0.025	0.92	0.95	<0.0030	1.51
RSEM-R6E-EOP	5/2/2022 10:30	ASL339	M	C229475	7.90	835	532	3.55	350	335	104	<1.0	127	<1.0	<1.0	51.3	0.479	0.609	243			0.197	0.025	0.96	0.98	<0.0030	1.43
RSEM-R6E-EOP	5/3/2022 14:15	ASO447	M	C230063	8.00	876	572	7.0	370	335	105	<1.0	129	<1.0	<1.0	50.8	0.450	0.667	274			0.308	0.023	0.81	0.83	0.0030	1.84
RSEM-R6E-EOP	5/4/2022 12:10	ASP675	M	C230320	8.02	899	580	6.9	362	336	112	<1.0	137	<1.0	<1.0	50.1	0.255	0.675	273			0.177	0.023	0.87	0.89	<0.0030	1.62
RSEM-R6E-EOP	5/5/2022 11:05	ASR003	M	C230531	8.15	898	568	2.27	346	340	112	<1.0	137	<1.0	<1.0	49.5	0.252	0.639	260			0.165	0.022	0.84	0.86	0.0076	1.67
RSEM-R6E-EOP	5/5/2022 11:15	ASR004	D	C230531	8.14	902	580	4.03	355	350	117	<1.0	143	<1.0	<1.0	49.3	0.236	0.647	257			0.410	0.022	0.81	0.84	<0.0030	1.60
RSEM-R6E-EOP	5/6/2022 10:20	ASR071	M	C230545	8.10	896	588	5.5	364	364	120	<1.0	147	<1.0	<1.0	48.9	0.239	0.615	260			0.227	0.023	0.97	0.99	<0.0030	1.72
RSEM-R6E-EOP	5/7/2022 11:15	ASS942	M	C230886	8.15	900	564	5.71	362	342	122	<1.0	149	<1.0	<1.0	54.2	0.217	0.697	240			0.153	0.025	0.98	1.0	0.0031	1.69

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
RSEM-R6E-EOP	5/8/2022 14:35	ASS883	M	C230861	8.10	892	560	4.2	349	344	126	<1.0	153	<1.0	<1.0	55.8	0.214	0.672	244			0.132	0.027	1.1	1.1	0.0033	1.35
RSEM-R6E-EOP	5/9/2022 13:40	ASV291	M	C231306	7.95	898	588	5.0	345	339	122	<1.0	149	<1.0	<1.0	60.0	0.484	0.769	231			0.124	0.028	1.3	1.3	<0.0030	1.74
RSEM-R6E-EOP	5/10/2022 10:50	ASX003	M	C231638	8.04	912	592	2.89	338	331	124	<1.0	151	<1.0	<1.0	60.3	0.242	0.789	242			0.120	0.026	1.3	1.3	<0.0030	1.74
RSEM-R6E-EOP	5/11/2022 12:15	ASZ423	M	C232133	8.03	931	600	4.3	344	390	130	<1.0	158	<1.0	<1.0	63.2	0.316	0.759	246			0.124	0.026	1.3	1.3	<0.0030	1.49
RSEM-R6E-EOP	5/12/2022 13:55	ATA813	M	C232369	8.11	952	604	2.1	343	362	136	<1.0	166	<1.0	<1.0	62.9	0.476	0.773	250			0.113	0.025	1.3	1.3	<0.0030	1.47
RSEM-R6E-EOP	5/13/2022 11:00	ATB011	M	C232410	8.14	955	616	3.3	354	341	135	<1.0	165	<1.0	<1.0	63.1	0.476	0.791	248			0.095	0.025	1.4	1.4	0.0040	1.75
RSEM-R6E-EOP	5/14/2022 14:25	ATD058	M	C232817	8.19	974	620	2.43	332	358	137	<1.0	168	<1.0	<1.0	61.9	0.854	0.771	251			0.232	0.023	1.3	1.3	<0.0030	1.44
RSEM-R6E-EOP	5/15/2022 11:30	ATD050	M	C232812	8.18	988	596	3.0	338	366	142	<1.0	173	<1.0	<1.0	61.9	0.870	0.764	271			0.267	0.022	1.3	1.3	<0.0030	1.60
RSEM-R6E-EOP	5/16/2022 10:00	ATC671	M	C232726	8.22	996	644	2.2	347	378	144	<1.0	175	<1.0	<1.0	61.2	0.883	0.788	279			0.251	0.023	1.3	1.4	<0.0030	1.60
RSEM-R6E-EOP	5/17/2022 11:30	ATH850	M	C233625	8.21	1060	684	2.6	442	391	155	<1.0	189	<1.0	<1.0	81.6	0.596	1.13	252			0.212	0.019	1.2	1.2	<0.0030	1.71
RSEM-R6E-EOP	5/18/2022 11:30	ATJ924	M	C234012	8.19	1190	732	3.0	478	459	156	<1.0	190	<1.0	<1.0	116	0.493	1.78	243			0.051	0.020	1.2	1.3	<0.0030	1.67
RSEM-R6E-EOP	5/19/2022 12:30	ATL910	M	C234314	8.09	1250	756	2.5	521	483	156	<1.0	190	<1.0	<1.0	155	0.448	2.27	250			0.611	0.019	1.4	1.4	<0.0030	1.82
RSEM-R6E-EOP	5/20/2022 10:00	ATL358	M	C234241	8.12	1210	740	2.9	482	476	161	<1.0	197	<1.0	<1.0	143	0.433	1.78	241			0.049	0.018	1.3	1.3	<0.0030	1.18
RSEM-R6E-EOP	5/21/2022 10:00	ATN137	M	C234510	8.11	1120	722	26.8	437	430	154	<1.0	188	<1.0	<1.0	131	0.450	1.89	218			0.049	0.0177	1.28	1.30	<0.0030	1.73
RSEM-R6E-EOP	5/22/2022 14:30	ATO534	M	C234788	8.12	1010	624	6.01	399	379	170	<1.0	207	<1.0	<1.0	111	0.334	1.46	185			0.483	0.016	1.3	1.3	<0.0030	1.72
RSEM-R6E-EOP	5/23/2022 10:30	ATO583	M	C234797	8.12	958	556	3.91	385	377	173	<1.0	211	<1.0	<1.0	98.2	0.308	1.32	169			0.047	0.014	1.1	1.1	<0.0030	1.39
RSEM-R6E-EOP	5/24/2022 10:30	ATR509	M	C235358	8.08	906	532	3.3	383	361	180	<1.0	220	<1.0	<1.0	90.0	0.285	1.20	154			0.042	0.014	1.2	1.3	0.0039	3.53
RSEM-R6E-EOP	5/25/2022 15:15	ATT368	M	C235730	8.10	835	404	3.54	376	350	180	<1.0	220	<1.0	<1.0	83.7	0.226	1.10	132			0.043	0.013	0.98	0.99	<0.0030	1.17
RSEM-R6E-EOP	5/26/2022 15:10	ATV282	M	C236083	8.14	804	484	7.1	348	363	183	<1.0	223	<1.0	<1.0	76.8	0.220	0.993	117			0.135	0.015	0.97	0.99	<0.0030	1.25
RSEM-R6E-EOP	5/26/2022 15:20	ATV283	D	C236083	8.11	810	488	5.2	361	340	185	<1.0	226	<1.0	<1.0	76.5	0.217	0.990	125			0.144	0.015	0.88	0.90	<0.0030	1.40
RSEM-R6E-EOP	5/27/2022 13:25	ATV300	M	C236089	8.12	779	460	2.3	343	325	184	<1.0	225	<1.0	<1.0	73.3	0.214	0.932	109			0.032	0.012	0.89	0.90	<0.0030	1.46
RSEM-R6E-EOP	5/28/2022 16:15	ATX746	M	C236620	7.83	1110	676	9.80	447	451	126	<1.0	154	<1.0	<1.0	185	0.306	2.77	153			0.110	0.018	0.83	0.85	<0.0030	1.52
RSEM-R6E-EOP	5/29/2022 17:30	ATW968	M	C236421	7.46	1060	684	4.74	421	428	90.2	<1.0	110	<1.0	<1.0	136	0.496	1.91	248			0.187	0.018	0.81	0.83	<0.0030	1.61
RSEM-R6E-EOP	5/30/2022 16:10	ATZ465	M	C236894	7.76	1020	632	5.39	364	382	119	<1.0	145	<1.0	<1.0	96.9	0.520	1.26	263			0.161	0.017	0.47	0.48	<0.0030	1.50
RSEM-R6E-EOP	5/31/2022 11:10	AUC335	M	C237377	7.67	1020	660	3.4	376	350	133	<1.0	162	<1.0	<1.0	85.8	0.493	1.15	266			0.192	0.017	0.93	0.95	<0.0030	1.27
RSEM-R6E-EOP	6/1/2022 11:10	AUE680	M	C237797	8.20	1010	632	3.59	373	336	160	<1.0	195	<1.0	<1.0	79.3	0.440	0.987	246			0.103	0.018	0.95	0.96	<0.0030	1.17
RSEM-R6E-EOP	6/2/2022 10:30	AUH700	M	C238258	8.21	922	576	3.57	338	321	179	<1.0	218	<1.0	<1.0	73.8	0.337	0.923	130			0.070	0.014	1.2	1.2	<0.0030	1.44
RSEM-R6E-EOP	6/3/2022 11:55	AUH661	M	C238247	8.08	855	520	5.72	344	323	178	<1.0	218	<1.0	<1.0	73.6	0.257	0.964	155			0.095	0.013	1.1	1.1	<0.0030	1.44
RSEM-R6E-EOP	6/4/2022 10:25	AUL720	M	C238905	8.11	821	484	5.26	399	321	184	<1.0	225	<1.0	<1.0	71.6	0.245	1.01	137			<0.015	0.012	1.2	1.2	<0.0030	1.09
RSEM-R6E-EOP	6/5/2022 11:45	AUM440	M	C238986	8.16	774	448	5.53	329	305	184	<1.0	224	<1.0	<1.0	67.7	0.211	0.977	93.0			0.024	0.012	1.2	1.2	<0.0030	1.07
RSEM-R6E-EOP	6/6/2022 10:40	AUO789	M	C239365	8.03	741	444	3.12	306	308	188	<1.0	229	<1.0	<1.0	58.5	0.194	0.851	105			<0.015	0.012	1.0	1.0	<0.0030	1.08
RSEM-R6E-EOP	6/7/2022 11:30	AUT412	M	C240162	8.17	713	428	6.71	292	292	180	<1.0	220	<1.0	<1.0	56.9	0.215	0.874	94.4			<0.015	0.011	1.1	1.1	<0.0030	1.64
RSEM-R6E-EOP	6/8/2022 12:30	AUT294	M	C240147	8.19	724	432	6.38	314	299	186	<1.0	227	<1.0	<1.0	56.8	0.211	0.889	96.0			0.044	0.011	1.1	1.1	<0.0030	1.63
RSEM-R6E-EOP	6/9/2022 13:00	AUV205	M	C240504	8.05	698	412	4.2	315	292	173	<1.0	211	<1.0	<1.0	64.1	0.198	0.924	91.9			<0.015	0.012	1.0	1.0	<0.0030	1.56
RSEM-R6E-EOP	6/10/2022 10:30	AUV210	M	C240508	8.04	696	420	3.1	314	297	171	<1.0	208	<1.0	<1.0	60.2	0.203	0.959	93.4			0.023	0.015	1.0	1.0	0.0038	1.53
RSEM-R6E-EOP	6/11/2022 9:30	AUY734	M	C241062	8.04	690	408	2.70	308	296	173	<1.0	211	<1.0	<1.0	62.7	0.195	0.922	97.1			<0.015	0.012	0.88	0.90	<0.0030	1.26
RSEM-R6E-EOP	6/12/2022 10:00	AUY702	M	C241043	8.04	673	392	2.11	294	294	169	<1.0	206	<1.0	<1.0	59.9	0.181	0.842	96.3			<0.015	0.017	0.96	0.98	<0.0030	1.46
RSEM-R6E-EOP	6/13/2022 11:30	AVD503	M	C241814	8.13	660	384	4.19	280	273	170	<1.0	208	<1.0	<1.0	55.9	0.175	0.759	93.6			<0.015	0.014	0.99	1.0	0.0041	1.33
RSEM-R6E-EOP	6/14/2022 10:00	AVD542	M	C241829	8.14	648	388	2.32	267	271	167	<1.0	203	<1.0	<1.0	53.0	0.184	0.718	92.6			<0.015	0.012	0.83	0.85	<0.0030	1.12
RSEM-R6E-EOP	6/15/2022 11:45	AVG247	M	C242252	8.11	632	380	1.1	259	271	168	<1.0	206	<1.0	<1.0	49.1	0.175	0.700	87.9			0.016	0.011	0.84	0.85	0.0046	1.40
RSEM-R6E-EOP	6/16/2022 12:35	AVK122	M	C242788	8.21	621	376	5.00	258	294	166	<1.0	203	<1.0	<1.0	46.5	0.184	0.641	90.8			0.126	0.012	0.96	0.97	<0.0030	1.50
RSEM-R6E-EOP	6/17/2022 11:25	AVK723	M	C242942	8.30	678	406	15.6	301	280	148	<1.0	180	<1.0	<1.0	64.6	0.190	1.04	101			0.024	0.0118	0.986	0.998	<0.0030	1.52
RSEM-R6E-EOP	6/18/2022 12:35	AVL988	M	C243162	8.07	672	396	3.44	338	321	144	<1.0	176	<1.0	<1.0	68.0	0.226	1.08	90.5			0.032	0.016	0.98	1.0	0.0034	1.18
RSEM-R6E-EOP	6/19/2022 11:30	AVM016	M	C243177	8.13	665	384	2.24	328	335	151	<1.0	185	<1.0	<1.0	63.4	0.233	0.939	98.6			0.051	0.016	0.98	0.99	<0.0030	1.59
RSEM-R6E-EOP	6/19/2022 11:40	AVM017	D	C243177	8.12	665	384	2.63	331	335	151	<1.0	185	<1.0	<1.0	62.0	0.228	0.933	95.8			0.022	0.015	0.91	0.92	0.0033	1.23
RSEM-R6E-EOP	6/20/2022 10:40	AVO964	M	C243664	8.08	650	400	4.29	294	264	156	<1.0	191	<1.0	<1.0	52.3	0.235	0.753	95.9			0.040	0.012	0.86	0.87	<0.0030	1.97
RSEM-R6E-EOP	6/21/2022 11:25	AVQ610	M	C244010	7.99	629	368	4.37	306	260	155	<1.0	189	<1.0	<1.0	45.1	0.225	0.691	95.6			<0.015	0.012	0.88	0.89	<0.0030	1.61
RSEM-R6E-EOP	6/22/2022 10:55	AVT152	M	C244412	8.13	615	384	3.85	283	263	155	<1.0	189	<1.0	<1.0	43.6	0.206	0.640	103			0.016	0.011	0.91	0.92	<0.0030	1.62
RSEM-R6E-EOP	6/23/2022 11:05	AVV596	M	C244839	8.14	610	356	3.2	258	264	161	<1.0	196	<1.0	<1.0	40.0	0.203	0.598	96.7			0.032	<0.010	0.075	0.075	<0.0030	1.26
RSEM-R6E-EOP	6/24/2022 10:50	AVV585	M	C244835	7.91	605	380	2.70	265	268	159	<1.0	194	<1.0	<1.0	40.8	0.182	0.589	99.2			0.036	0.010	0.81	0.83	<0.0030	1.42
RSEM-R6E-EOP	6/24/2022 11:00	AVV586	D	C244835	8.08	609	356	2.85	261	263	160	<1.0	195	<1.0	<1.0	40.6	0.188	0.584	98.1			<0.015	0.010	0.85	0.86	<0.0030	1.24
RSEM-R6E-EOP	6/25/2022 10:30	AVZ706	M	C245512	7.91	598	356	2.5	256	263	149	<1.0	182	<1.0	<1.0	37.5	0.174	0.566	99.9			0.052	<0.010	0.82	0.82	<0.0030	1.78
RSEM-R6E-EOP	6/26/2022 9:55	AVZ576	M	C245500	8.05	593	360	3.8	264	248	166	<1.0	202	<1.0	<1.0	36.8	0.174	0.542	98.5			0.059	<0.010	0.79	0.79	<0.0030	1.05
RSEM-R6E-EOP	6/26/2022 10:05	AVZ577	D	C245500	8.10	592	364	4.2	256	255	151	<1.0	184	<1.0	<1.0	36.9	0.178	0.537	105			0.088	<0.010	0.80	0.80	<0.0030	1.67
RSEM-R6E-EOP	6/27/2022 10:15	AVY532	M	C245274	8.11	590	364	3.36	252	251	150	<1.0	183	<1.0	<1.0	35.2	0.181	0.512	99.1			0.033	0.010	0.69	0.70	<0.0030	0.90
RSEM-R6E-EOP	6/28/2022 12:30	AWH752	M	C246896	7.79	573	372	6.3	269	246	152	<1.0	185	<1.0	<1.0	35.8	0.186	0.470	97.2			0.076	<0.010	0.65	0.65	<0.0030	1.73
RSEM-R6E-EOP	6/29/2022 14:30	AWH757	M	C246898	7.97	569	352	3.75	272	247	158	<1.0	193	<1.0	<1.0	33.8	0.200	0.498	90.8			0.030	0.013	0.77	0.79	<0.0030	1.84
RSEM-R6E-EOP	6/30/2022 12:30	AWH755	M	C246897	7.64	562	340	6.1	279	244	152	<1.0	186	<1.0	<1.0	33.4	0.194	0.484	88.3			0.025	0.012	0.77	0.78	<0.0030	1.57
RSEM-R6E-EOP	7/1/2022 12:30	AWJ893	M	C247203	8.17	572	370	2.4	240	246	149	<1.0	182	<1.0	<1.0	31.5	0.230	0.474	96.7			0.021	0.0106	0.733	0.744	<0.0030	1.40
RSEM-R6E-EOP	7/2/2022 12:00	AWJ848	M	C247196	8.21	573	380	<1.0	248	244	151	<1.0	185	<1.0	<1.0	32.3	0.230	0.434	95.7			<0.015	0.0126	0.697	0.709	<0.0030	1.48
RSEM-R6E-EOP	7/3/2022 11:00	AWM045	M	C247492	8.03	562	352	2.53	265	283	156	<1.0	190	<1.0	<1.0	33.1	0.181	0.429	90.7			0.021	0.010	0.80	0.81	<0.0030	1.68
RSEM-R6E-EOP	7/4/2022 10:00	AWM515	M	C247552	8.03	565	340	1.97	261	265	157	<1.0	192	<1.0	<1.0	32.5	0.181	0.456	95.2			0.042	0.011	0.78	0.79	0.0032	1.68
RSEM-R6E-EOP	7/5/2022 10:00	AWR506	M	C248315	7.98	567	364	2.11	266	274	159	<1.0	194	<1.0	<1.0	29.3	0.146	0.461	95.0			0.066	0.012	0.74	0.76	0.0030	1.56
RSEM-R6E-EOP	7/6/2022 14:05	AWV908	M	C249077	8.08	578	336	1.23	256	256	159	<1.0	193	<1.0	<1.0	32.5	0.178	0.530	97.5			0.020	0.012	0.66	0.67	<0.0030	2.31
RSEM-R6E-EOP	7/6/2022 14:15	AWV909	D	C249077	8.07	578	344	1.59	255	247	157	<1.0	191	<1.0	<1.0	32.8	0.179	0.508	94.6			<0.015	0.012	0.65	0.66	0.0042	2.00
RSEM-R6E-EOP	7/7/2022 11:45	AWW342	M	C249139	7.98	579	364	<0.98	261	244	155	<1.0	190	<1.0	<1.0	32.5	0.175	0.499	99.3			<0.015	0.010	0.65	0.66	<0.0030	1.86
RSEM-R6E-EOP	7/8/2022 11:35	AWW521	M	C249170	8.09	578	352	1.12	274	241	160	<1.0	195	<1.0	<1.0	31.6	0.165	0.443	97.5			<0.015	0.011	0.63	0.64	<0.0030	1.84
RSEM-R6E-EOP	7/9/2022 10:30	AWZ514	M	C249625	8.08	573	328	1.12	252	252	155	<1.0	189	<1.0	<1.0	30.3	0.223	0.445	93.2			<0.015	0.010	0.64	0.65	<0.0030	1.14
RSEM-R6E-EOP	7/9/2022 10:40	AWZ515	D	C249625	8.07	571	332	<1.0	251	251	156	<1.0	191	<1.0	<1.0	30.9	0.200	0.441	95.0			0.056	0.010	0.63	0.64	<0.0030	2.12

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
RSEM-R6E-EOP	7/10/2022 14:10	AWZ486	M	C249617	8.06	555	316	1.47	233	231	150	<1.0	183	<1.0	<1.0	29.9	0.181	0.469	92.9			<0.015	0.010	0.63	0.64	0.0031	1.73
RSEM-R6E-EOP	7/11/2022 12:35	AXC657	M	C250105	7.92	550	340	1.2	248	243	153	<1.0	187	<1.0	<1.0	29.9	0.174	0.426	91.1			<0.015	<0.010	0.63	0.63	0.0030	2.01
RSEM-R6E-EOP	7/12/2022 12:05	AXE615	M	C250400	7.81	552	340	<1.0	244	234	149	<1.0	182	<1.0	<1.0	30.5	0.144	0.459	95.8			0.061	0.011	0.58	0.59	0.0036	1.73
RSEM-R6E-EOP	7/12/2022 12:15	AXE616	D	C250400	7.95	553	336	1.7	251	234	145	<1.0	177	<1.0	<1.0	30.3	0.141	0.465	96.9			0.022	0.010	0.57	0.58	<0.0030	1.94
RSEM-R6E-EOP	7/13/2022 11:25	AXH414	M	C250934	7.80	549	328	1.69	226	240	151	<1.0	185	<1.0	<1.0	30.9	0.176	0.422	93.7			0.057	0.010	0.63	0.64	0.0031	1.62
RSEM-R6E-EOP	7/14/2022 11:10	AXJ116	M	C251290	7.95	551	324	1.25	252	238	153	<1.0	187	<1.0	<1.0	31.5	0.180	0.392	90.1			0.042	0.010	0.64	0.65	<0.0030	1.74
RSEM-R6E-EOP	7/14/2022 11:20	AXJ117	D	C251290	7.90	550	324	<1.0	242	239	157	<1.0	191	<1.0	<1.0	31.2	0.169	0.400	89.4			0.031	0.012	0.64	0.65	<0.0030	1.87
RSEM-R6E-EOP	7/15/2022 13:10	AXJ364	M	C251330	7.93	542	356	<0.97	234	230	149	<1.0	182	<1.0	<1.0	29.7	0.141	0.456	91.4			<0.015	0.010	0.56	0.57	<0.0030	1.67
RSEM-R6E-EOP	7/16/2022 11:30	AXN330	M	C251927	7.96	557	352	1.71	234	234	156	<1.0	191	<1.0	<1.0	29.0	0.166	0.469	91.7			0.046	<0.010	0.66	0.66	<0.0030	5.17
RSEM-R6E-EOP	7/17/2022 10:30	AXN586	M	C251966	7.96	557	348	2.06	236	242	151	<1.0	185	<1.0	<1.0	29.2	0.163	0.447	94.3			0.024	0.010	0.65	0.66	<0.0030	3.37
RSEM-R6E-EOP	7/17/2022 10:40	AXN587	D	C251966	7.91	553	348	2.37	243	238	154	<1.0	188	<1.0	<1.0	29.3	0.158	0.450	91.0			0.040	0.010	0.64	0.65	<0.0030	4.16
RSEM-R6E-EOP	7/18/2022 14:00	AXQ723	M	C252515	7.86	536	320	1.56	226	227	145	<1.0	177	<1.0	<1.0	28.5	0.144	0.454	89.2			<0.015	0.010	0.62	0.63	<0.0030	1.49
RSEM-R6E-EOP	7/19/2022 12:00	AXQ708	M	C252510	7.88	547	344	1.2	246	228	153	<1.0	186	<1.0	<1.0	28.2	0.144	0.507	88.3			0.020	0.010	0.59	0.60	<0.0030	1.16
RSEM-R6E-EOP	7/20/2022 14:00	AXX165	M	C253451	8.10	554	332	2.6	238	220	144	<1.0	176	<1.0	<1.0	30.2	0.167	0.443	98.4			<0.015	<0.010	0.50	0.50	<0.0030	1.65
RSEM-R6E-EOP	7/21/2022 13:00	AXX154	M	C253447	7.80	572	364	3.3	252	231	164	<1.0	200	<1.0	<1.0	32.3	0.180	0.510	87.8			0.098	<0.010	0.59	0.59	<0.0030	1.46
RSEM-R6E-EOP	7/22/2022 10:00	AXX133	M	C253442	7.70	593	364	4.35	267	230	179	<1.0	218	<1.0	<1.0	34.5	0.169	0.475	84.3			<0.015	<0.010	0.64	0.64	<0.0030	1.53
RSEM-R6E-EOP	7/23/2022 9:30	AYB213	M	C254120	8.13	595	352	4.9	247	242	164	<1.0	200	<1.0	<1.0	35.7	0.148	0.464	83.6			0.018	<0.010	0.60	0.60	0.0032	1.72
RSEM-R6E-EOP	7/24/2022 12:30	AYC676	M	C254290	8.14	598	368	3.38	258	245	170	<1.0	208	<1.0	<1.0	36.6	0.144	0.479	86.7			0.026	0.011	0.69	0.70	<0.0030	1.22
RSEM-R6E-EOP	7/24/2022 13:00	AYC679	D	C254290	8.07	597	364	2.36	258	247	172	<1.0	209	<1.0	<1.0	36.7	0.154	0.515	85.8			0.018	0.010	0.66	0.67	0.0031	1.67
RSEM-R6E-EOP	7/25/2022 9:00	AYC674	M	C254289	8.22	613	384	3.11	260	253	175	<1.0	214	<1.0	<1.0	33.5	0.173	0.451	92.4			0.018	0.012	0.73	0.75	0.0030	1.80
RSEM-R6E-EOP	7/26/2022 11:15	AYG701	M	C254966	8.15	587	400	3.2	270	255	152	<1.0	185	<1.0	<1.0	36.6	0.170	0.487	101			<0.015	0.0100	0.601	0.611	<0.0030	1.42
RSEM-R6E-EOP	7/27/2022 11:40	AYK060	M	C255556	8.11	563	378	3.6	259	229	146	<1.0	179	<1.0	<1.0	71.3	0.160	1.29	417			<0.015	0.0090	0.576	0.585	<0.0030	1.52
RSEM-R6E-EOP	7/27/2022 11:50	AYK061	D	C255556	8.31	547	366	4.4	251	230	147	<1.0	180	<1.0	<1.0	44.9	0.160	0.434	104			<0.015	0.0086	0.571	0.579	<0.0030	1.59
RSEM-R6E-EOP	7/28/2022 12:40	AYM152	M	C255903	8.28	534	382	<2.5	221	237	137	<1.0	167	<1.0	<1.0	29.0	0.180	0.444	97.1			0.025	0.0109	0.552	0.563	<0.0030	1.63
RSEM-R6E-EOP	7/29/2022 12:20	AYM047	M	C255900	8.29	535	426	5.2	227	239	140	<1.0	171	<1.0	<1.0	28.1	0.180	0.405	96.9			0.036	0.0109	0.545	0.556	0.0041	1.48
RSEM-R6E-EOP	7/30/2022 12:05	AYP671	M	C256352	8.30	536	364	2.8	236	231	148	<1.0	180	<1.0	<1.0	29.6	0.180	0.33	94			<0.015	0.0087	0.488	0.497	<0.0030	1.56
RSEM-R6E-EOP	7/31/2022 11:45	AYO872	M	C256301	8.21	543	386	2.0	240	220	144	<1.0	176	<1.0	<1.0	44.9	0.180	0.428	93.9			<0.015	0.0096	0.468	0.478	<0.0030	2.17
RSEM-R6E-EOP	7/31/2022 11:55	AYO873	D	C256301	8.17	544	374	1.6	241	219	145	<1.0	177	<1.0	<1.0	44.4	0.190	0.423	93.1			<0.015	0.0098	0.465	0.475	<0.0030	1.50
RSEM-R6E-EOP	8/1/2022 11:55	AYR821	M	C256691	8.20	574	400	3.2	238	237	140	<1.0	170	<1.0	<1.0	41.9	0.180	0.575	93.3			<0.015	0.0108	0.438	0.449	0.0052	1.13
RSEM-R6E-EOP	8/2/2022 11:35	AYU375	M	C257067	8.18	981	842	<1.0	414	377	127	<1.0	155	<1.0	<1.0	151	0.240	2.12	133			<0.015	0.0076	0.656	0.663	<0.0030	2.36
RSEM-R6E-EOP	8/2/2022 11:45	AYU376	D	C257067	8.20	989	832	3.2	423	415	129	<1.0	157	<1.0	<1.0	153	0.240	2.21	133			0.026	0.0108	0.657	0.668	<0.0030	2.38
RSEM-R6E-EOP	8/3/2022 11:50	AYX380	M	C257672	8.21	946	784	4.0	389	388	126	<1.0	154	<1.0	<1.0	147	0.250	2.19	129			<0.015	0.0152	0.629	0.644	<0.0030	1.85
RSEM-R6E-EOP	8/4/2022 11:00	AYY903	M	C257848	8.24	847	628	8.0	366	341	140	<1.0	171	<1.0	<1.0	123	0.220	1.81	106			<0.015	0.0151	0.697	0.712	<0.0030	2.10
RSEM-R6E-EOP	8/5/2022 10:10	AYY783	M	C257846	8.25	855	632	4.8	360	341	133	<1.0	162	<1.0	<1.0	113	0.230	1.69	124			<0.015	0.0125	0.558	0.571	<0.0030	2.31
RSEM-R6E-EOP	8/6/2022 11:20	AZA353	M	C258076	8.07	752	532	4.8	325	310	148	<1.0	181	<1.0	<1.0	96.5	0.210	1.50	98.9			<0.015	0.0147	0.687	0.702	<0.0030	1.08
RSEM-R6E-EOP	8/6/2022 11:20	AZA354	D	C258076	8.10	753	540	5.6	324	306	149	<1.0	182	<1.0	<1.0	95.5	0.200	1.46	94.6			<0.015	0.0135	0.694	0.708	0.0038	1.54
RSEM-R6E-EOP	8/7/2022 12:10	AZC300	M	C258444	8.12	685	420	3.6	272	276	143	<1.0	174	<1.0	<1.0	72.0	0.200	1.17	92.8			<0.015	0.0118	0.633	0.645	<0.0030	1.55
RSEM-R6E-EOP	8/8/2022 16:00	AZK277	M	C259762	8.27	593	372	6.0	246	222	126	<1.0	154	<1.0	<1.0	53.3	0.190	0.773	91.6			<0.015	0.0097	0.439	0.449	0.0034	1.53
RSEM-R6E-EOP	8/9/2022 13:00	AZK373	M	C259776	8.28	628	482	4.4	257	241	132	<1.0	161	<1.0	<1.0	60.4	0.180	0.905	94.0			0.180	0.0102	0.535	0.545	0.0044	1.22
RSEM-R6E-EOP	8/10/2022 15:00	AZL947	M	C259983	8.16	549	362	4.0	222	218	119	<1.0	145	<1.0	<1.0	43.5	0.170	0.648	91.4			<0.015	0.0091	0.339	0.348	<0.0030	1.89
RSEM-R6E-EOP	8/11/2022 13:30	AZL943	M	C259981	8.10	515	338	4.0	218	212	115	<1.0	140	<1.0	<1.0	35.8	0.170	0.524	90.6			<0.015	0.0084	0.278	0.287	<0.0030	2.17
RSEM-R6E-EOP	8/12/2022 12:00	AZL945	M	C259982	8.11	492	352	2.4	195	192	108	<1.0	131	<1.0	<1.0	32.9	0.160	0.523	90.2			0.021	0.0079	0.211	0.219	0.0047	1.55
RSEM-R6E-EOP	8/13/2022 10:00	AZR090	M	C260796	8.00	470	298	4.4	203	185	98.6	<1.0	120	<1.0	<1.0	33.7	0.160	0.452	79.9			0.024	0.0060	0.150	0.156	<0.0030	2.18
RSEM-R6E-EOP	8/14/2022 14:30	AZR292	M	C260829	7.99	490	366	3.6	202	206	115	<1.0	140	<1.0	<1.0	30.0	0.180	0.428	79.2			<0.015	<0.0050	0.127	0.127	0.0052	1.95
RSEM-R6E-EOP	8/14/2022 14:40	AZR295	D	C260829	8.06	488	362	2.0	208	203	116	<1.0	142	<1.0	<1.0	29.7	0.180	0.408	79.6			0.020	<0.0050	0.137	0.137	<0.0030	1.52
RSEM-R6E-EOP	8/15/2022 14:30	AZW324	M	C261663	8.13	598	374	2.4	258	239	123	<1.0	150	<1.0	<1.0	56.2	0.190	0.874	78.9			<0.015	0.0079	0.273	0.281	<0.0030	2.66
RSEM-R6E-EOP	8/16/2022 13:00	AZW500	M	C261690	8.09	575	362	2.4	233	227	116	<1.0	141	<1.0	<1.0	52.6	0.180	0.822	100			<0.015	0.0064	0.219	0.226	0.0042	2.21
RSEM-R6E-EOP	8/17/2022 13:30	BAA263	M	C262437	8.11	551	368	2.0	223	219	110	<1.0	134	<1.0	<1.0	49.7	0.180	0.744	97.4			0.036	0.0066	0.167	0.173	<0.0030	1.90
RSEM-R6E-EOP	8/18/2022 13:00	BAA274	M	C262439	8.12	527	428	<1.0	200	194	106	<1.0	129	<1.0	<1.0	44.6	0.170	0.658	99.3			<0.015	0.0053	0.132	0.137	<0.0030	1.78
RSEM-R6E-EOP	8/19/2022 10:00	BAA260	M	C262436	7.86	505	342	<1.0	204	186	99.5	<1.0	121	<1.0	<1.0	42.2	0.170	0.617	100			<0.015	0.0050	0.092	0.097	<0.0030	1.78
RSEM-R6E-EOP	8/20/2022 11:30	BAD640	M	C262969	8.18	494	276	<1.0	191	188	102	<1.0	125	<1.0	<1.0	37.4	0.180	0.573	91.3			<0.015	<0.0050	0.076	0.076	<0.0030	2.45
RSEM-R6E-EOP	8/21/2022 11:00	BAD601	M	C262959	8.11	481	302	<1.0	185	176	96.1	<1.0	117	<1.0	<1.0	34.9	0.180	0.538	90.9			<0.015	0.0051	0.047	0.052	<0.0030	2.40
RSEM-R6E-EOP	8/22/2022 13:30	BAG918	M	C263407	8.00	470	330	1.6	183	173	99.5	<1.0	121	<1.0	<1.0	31.6	0.180	0.480	88.2			<0.015	<0.0050	0.046	0.046	<0.0030	2.30
RSEM-R6E-EOP	8/23/2022 13:30	BAM964	M	C264451	8.35	474	322	<1.0	182	179	110	<1.0	134	<1.0	<1.0	26.0	0.180	0.392	68.9			<0.015	<0.0050	0.036	0.036	<0.0030	2.40
RSEM-R6E-EOP	8/23/2022 14:00	BAM967	D	C264451	8.33	477	300	<1.0	180	178	110	<1.0	134	<1.0	<1.0	27.5	0.170	0.419	70.8			<0.015	<0.0050	0.049	0.049	0.0041	2.09
RSEM-R6E-EOP	8/24/2022 13:30	BAM915	M	C264441	8.33	477	310	<1.0	185	179	111	<1.0	135	<1.0	<1.0	26.6	0.180	0.427	69.5			<0.015	<0.0050	0.050	0.050	<0.0030	2.22
RSEM-R6E-EOP	8/25/2022 15:15	BAO144	M	C264632	8.15	468	268	3.6	186	183	108	<1.0	132	<1.0	<1.0	27.4	0.170	0.391	85.1			0.015	<0.0050	0.035	0.035	<0.0030	2.88
RSEM-R6E-EOP	8/26/2022 6:30	BAO137	M	C264629	8.11	475	282	<1.0	195	189	115	<1.0	140	<1.0	<1.0	26.5	0.170	0.370	83.8			<0.015	<0.0050	0.065	0.065	<0.0030	2.22
RSEM-R6E-EOP	8/27/2022 12:30	BAR925	M	C265307	8.21	486	318	3.2	198	187	128	<1.0	156	<1.0	<1.0	25.0	0.180	0.374	82.9			0.034	<0.0050	0.053	0.053	<0.0030	2.32
RSEM-R6E-EOP	8/28/2022 14:00	BAR946	M	C265316	8.28	496	324	2.0	204	204	141	<1.0	172	<1.0	<1.0	22.5	0.180	0.310	79.5			<0.015	<0.0050	0.111	0.111	<0.0030	2.21
RSEM-R6E-EOP	8/29/2022 14:10	BAU337	D	C265774	8.17	493	256	1.6	219	205	145	<1.0	176	<1.0	<1.0	19.9	0.170	0.281	75.6			<0.015	<0.0050	0.125	0.125	<0.0030	2.35
RSEM-R6E-EOP	8/29/2022 14:30	BAU335	M	C265774	8.16	493	288	1.2	217	209	144	<1.0	176	<1.0	<1.0	19.5	0.170	0.272	74.2			<0.015	<0.0050	0.132	0.132	<0.0030	2.40
RSEM-R6E-EOP	8/30/2022 13:30	BBA809	M	C266812	8.29	495	280	1.6	216	217	157	<1.0	191	<1.0	<1.0	18.1	0.170	0.239	66.0			<0.015	<0.0050	0.152	0.152	<0.0030	2.10
RSEM-R6E-EOP	8/31/2022 14:10	BBA806	M	C266810	8.30	484	292	<1.0	228	218	152	<1.0	185	<1.0	<1.0	16.8	0.170	0.224	65.5			<0.015	<0.0050	0.166	0.166	0.0051	2.05
RSEM-R6E-EOP	9/1/2022 13:00	BBC912	M	C267169	8.35	484	282	1.6	220	218	154	1.2	184	1.5	<1.0	16.1	0.170	0.211	65.3			<0.015	0.0085	0.183	0.192	<0.0030	1.89
RSEM-R6E-EOP	9/2/2022 9:00	BBC920	M	C267172	8.38	495	48	1.2	240	225	163	1.9	195	2.3	<1.0	25.1	0.170	0.205	64.7			0.022	0.0074	0.245	0.253	<0.0030	1.85
RSEM-R6E-EOP	9/3/2022 14:30	BBE154	M	C267383	8.25	478	278	3.2	222	220	157	<1.0	192	<1.0	<1.0	14.3	0.160	0.186	64.9			<0.015	0.0063	0.243	0.249	<0.0030	1.95
RSEM-R6E-EOP	9/4/2022 14:00	BBI404	M	C268301	8.26	485	326	4.4	224	218	164	<1.0	200	<1.0	<1.0	14.0	0.170	0.184	63.3			<0.015	0.0067	0.259	0.266	<0.0030	2.37

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
RSEM-R6E-EOP	9/4/2022 14:10	BBI407	D	C268301	8.25	486	334	1.6	229	219	164	<1.0	201	<1.0	<1.0	13.7	0.170	0.178	63.8			0.038	0.0071	0.261	0.268	<0.0030	2.64
RSEM-R6E-EOP	9/5/2022 13:00	BBI327	M	C268286	8.28	489	300	2.8	223	216	166	<1.0	202	<1.0	<1.0	13.9	0.170	0.186	63.6			0.018	0.0053	0.253	0.258	<0.0030	2.25
RSEM-R6E-EOP	9/6/2022 15:15	BBI318	M	C268280	8.32	477	398	<1.0	216	213	159	<1.0	193	<1.0	<1.0	13.6	0.170	0.179	63.9			<0.015	<0.0050	0.204	0.204	<0.0030	2.21
RSEM-R6E-EOP	9/7/2022 11:50	BBM321	M	C268788	8.10	482	326	<1.6	215	226	163	<1.0	199	<1.0	<1.0	13.5	0.170	0.167	64.5			<0.015	0.0060	0.222	0.228	0.0057	1.90
RSEM-R6E-EOP	9/7/2022 12:00	BBM322	D	C268788	8.19	482	316	<1.0	226	227	163	<1.0	198	<1.0	<1.0	12.7	0.160	0.171	70.8			<0.015	0.0061	0.224	0.231	<0.0030	2.00
RSEM-R6E-EOP	9/8/2022 13:30	BBO445	M	C269143	8.21	478	318	2.8	224	231	169	<1.0	207	<1.0	<1.0	10.6	0.170	0.135	59.5			<0.015	0.0060	0.274	0.280	0.0047	1.83
RSEM-R6E-EOP	9/9/2022 10:30	BBS001	M	C269764	8.22	491	328	2.8	231	219	179	<1.0	219	<1.0	<1.0	9.80	0.160	0.127	58.1			<0.015	0.0061	0.366	0.372	<0.0030	1.68
RSEM-R6E-EOP	9/10/2022 12:20	BBR900	M	C269730	8.20	483	282	1.2	229	233	183	<1.0	223	<1.0	<1.0	8.61	0.160	0.096	54.3			<0.015	0.0063	0.407	0.414	<0.0030	1.69
RSEM-R6E-EOP	9/10/2022 12:30	BBR901	D	C269730	8.21	484	296	4.0	223	238	184	<1.0	225	<1.0	<1.0	8.20	0.160	0.098	54.2			0.021	0.0059	0.406	0.412	<0.0030	1.74
RSEM-R6E-EOP	9/11/2022 14:30	BBR959	M	C269754	8.20	478	260	3.6	221	215	183	<1.0	223	<1.0	<1.0	8.11	0.160	0.081	52.0			0.053	0.0065	0.426	0.433	<0.0030	1.63
RSEM-R6E-EOP	9/12/2022 11:50	BBU605	M	C270263	8.18	462	266	4.0	221	210	179	<1.0	218	<1.0	<1.0	7.76	0.150	0.075	49.0			<0.015	<0.0050	0.523	0.523	0.0043	1.46
RSEM-R6E-EOP	9/13/2022 14:10	BBX514	M	C270776	8.18	441	288	4.0	223	224	170	<1.0	207	<1.0	<1.0	6.85	0.140	0.071	46.3			0.039	0.0053	0.385	0.390	0.0039	1.19
RSEM-R6E-EOP	9/14/2022 10:05	BBZ913	M	C271275	8.13	434	280	5.6	224	229	164	<1.0	200	<1.0	<1.0	6.99	0.150	0.076	47.0			<0.015	<0.0050	0.373	0.373	0.0045	1.28
RSEM-R6E-EOP	9/14/2022 10:15	BBZ914	D	C271275	8.19	430	276	7.2	222	226	164	<1.0	200	<1.0	<1.0	7.46	0.160	0.076	46.5			<0.015	0.0056	0.375	0.380	0.0035	1.69
RSEM-R6E-EOP	9/15/2022 9:30	BCC124	M	C271667	8.19	441	278	<1.0	218	231	168	<1.0	204	<1.0	<1.0	7.47	0.160	0.077	48.2			<0.015	<0.0050	0.352	0.352	<0.0030	1.07
RSEM-R6E-EOP	9/16/2022 12:40	BCF677	M	C272242	8.15	460	294	2.4	225	222	175	<1.0	213	<1.0	<1.0	8.70	0.160	0.089	49.2			<0.015	<0.0050	0.365	0.365	0.0038	1.73
RSEM-R6E-EOP	9/16/2022 12:50	BCF678	D	C272242	8.03	451	244	<1.0	236	218	165	<1.0	201	<1.0	<1.0	8.58	0.160	0.091	49.8			<0.015	<0.0050	0.374	0.374	<0.0030	1.37
RSEM-R6E-EOP	9/17/2022 11:10	BCF750	M	C272259	8.11	655	422	3.6	308	295	166	<1.0	202	<1.0	<1.0	63.3	0.190	0.999	66.2			0.028	0.0059	0.476	0.482	<0.0030	1.66
RSEM-R6E-EOP	9/18/2022 11:10	BCF722	M	C272251	8.03	715	476	3.6	315	315	157	<1.0	192	<1.0	<1.0	82.3	0.210	1.37	72.0			0.025	0.0059	0.576	0.582	<0.0030	2.25
RSEM-R6E-EOP	9/19/2022 9:20	BCI768	M	C272683	8.13	638	414	4.0	284	281	164	<1.0	200	<1.0	<1.0	57.8	0.210	0.944	68.9			0.056	0.0087	0.519	0.527	<0.0030	1.55
RSEM-R6E-EOP	9/20/2022 14:50	BCL543	M	C273070	8.17	524	322	6.0	232	243	151	<1.0	185	<1.0	<1.0	31.5	0.180	0.479	61.6			<0.015	0.0050	0.423	0.428	<0.0030	1.50
RSEM-R6E-EOP	9/21/2022 13:15	BCR697	M	C273972	8.09	488	338	1.6	227	226	154	<1.0	187	<1.0	<1.0	22.5	0.200	0.342	57.6			<0.015	<0.0050	0.362	0.362	<0.0030	2.19
RSEM-R6E-EOP	9/22/2022 14:30	BCR616	D	C273969	8.27	475	306	1.6	216	218	153	<1.0	187	<1.0	<1.0	19.0	0.200	0.292	61.2			<0.015	<0.0050	0.312	0.312	<0.0030	1.46
RSEM-R6E-EOP	9/22/2022 14:45	BCR614	M	C273969	8.27	474	308	2.0	214	218	153	<1.0	187	<1.0	<1.0	19.1	0.200	0.291	61.6			<0.015	<0.0050	0.310	0.310	<0.0030	1.90
RSEM-R6E-EOP	9/23/2022 11:15	BCR891	M	C273985	8.25	483	332	<1.0	218	223	160	<1.0	195	<1.0	<1.0	16.8	0.210	0.248	61.6			0.020	0.0050	0.316	0.321	<0.0030	1.84
RSEM-R6E-EOP	9/24/2022 10:00	BCV560	M	C274577	8.18	468	302	<1.0	214	215	152	<1.0	185	<1.0	<1.0	16.5	0.190	0.17	58.2			0.032	<0.0050	0.280	0.280	<0.0030	0.69
RSEM-R6E-EOP	9/25/2022 14:15	BCV619	M	C274593	8.25	453	288	<1.0	208	208	148	<1.0	180	<1.0	<1.0	14.2	0.190	0.14	59.4			0.055	<0.0050	0.255	0.255	<0.0030	0.72
RSEM-R6E-EOP	9/26/2022 9:15	BCV504	M	C274562	8.21	456	292	2.8	203	206	150	<1.0	183	<1.0	<1.0	13.4	0.180	0.183	58.3			<0.015	<0.0050	0.250	0.250	<0.0030	<0.50
RSEM-R6E-EOP	9/27/2022 10:20	BDB609	M	C275584	8.12	444	288	<1.0	197	204	152	<1.0	185	<1.0	<1.0	11.6	0.180	0.146	55.9			0.034	<0.0050	0.228	0.228	<0.0030	1.99
RSEM-R6E-EOP	9/28/2022 10:20	BDE178	M	C276033	8.30	441	276	2.8	196	203	156	<1.0	190	<1.0	<1.0	10.5	0.180	0.118	53.2			<0.015	<0.0050	0.233	0.233	<0.0030	1.27
RSEM-R6E-EOP	9/28/2022 10:30	BDE179	D	C276033	8.29	440	272	2.0	202	203	156	<1.0	191	<1.0	<1.0	9.85	0.180	0.118	52.1			<0.015	<0.0050	0.226	0.226	<0.0030	1.52
RSEM-R6E-EOP	9/29/2022 10:30	BDH540	M	C276348	7.84	441	264	5.33	214	213	173	<1.0	211	<1.0	<1.0	9.16	0.179	0.095	60.2			0.046	<0.010	0.28	0.28	<0.0030	1.17
RSEM-R6E-EOP	9/30/2022 10:45	BDH543	M	C276348	7.91	439	268	2.5	211	213	183	<1.0	223	<1.0	<1.0	8.48	0.179	0.076	56.6			0.050	<0.010	0.29	0.29	<0.0030	0.96
RSEM-R6E-EOP	10/1/2022 9:30	BDL248	M	C276877	7.88	438	280	4.10	218	213	172	<1.0	209	<1.0	<1.0	8.23	0.198	0.073	56.0			<0.015	<0.010	0.28	0.28	<0.0030	1.49
RSEM-R6E-EOP	10/1/2022 9:40	BDL251	D	C276877	7.82	437	288	6.25	212	211	174	<1.0	212	<1.0	<1.0	8.34	0.198	0.075	56.2			<0.015	<0.010	0.28	0.28	<0.0030	1.47
RSEM-R6E-EOP	10/2/2022 10:15	BDL180	M	C276859	7.48	424	260	3.53	215	207	171	<1.0	208	<1.0	<1.0	7.94	0.191	0.074	55.9			<0.015	<0.010	0.24	0.24	<0.0030	1.71
RSEM-R6E-EOP	10/3/2022 10:20	BDP149	M	C277443	8.01	452	272	1.12	213	208	170	<1.0	208	<1.0	<1.0	9.37	0.210	0.094	66.1			0.040	<0.010	0.27	0.27	<0.0030	1.42
RSEM-R6E-EOP	10/4/2022 10:25	BDR435	M	C277814	7.46	455	268	9.11	215	210	171	<1.0	208	<1.0	<1.0	8.88	0.191	0.090	64.3			0.054	<0.010	0.25	0.25	<0.0030	1.85
RSEM-R6E-EOP	10/5/2022 10:45	BDV020	M	C278393	7.00	886	548	7.5	212	210	125	<1.0	153	<1.0	<1.0	36.5	0.245	0.665	272			0.072	<0.010	0.22	0.22	<0.0030	2.96
RSEM-R6E-EOP	10/6/2022 10:40	BDZ970	M	C278888	7.87	481	288	5.7	240	234	182	<1.0	222	<1.0	<1.0	7.87	0.168	0.073	67.4			0.040	<0.010	0.30	0.30	<0.0030	1.38
RSEM-R6E-EOP	10/7/2022 12:00	BEA025	M	C278893	7.99	469	336	4.61	246	230	176	<1.0	215	<1.0	<1.0	7.54	0.174	0.068	64.3			<0.015	<0.010	0.29	0.29	<0.0030	1.87
RSEM-R6E-EOP	10/8/2022 10:15	BED963	M	C279402	8.25	476	296	2.5	231	228	172	<1.0	210	<1.0	<1.0	8.05	0.192	0.078	63.5			0.016	<0.010	0.34	0.34	<0.0030	1.31
RSEM-R6E-EOP	10/9/2022 9:35	BED925	M	C279394	8.27	462	296	1.10	220	222	166	<1.0	202	<1.0	<1.0	7.66	0.178	0.071	63.0			0.033	<0.010	0.25	0.25	<0.0030	1.87
RSEM-R6E-EOP	10/10/2022 9:55	BED792	M	C279368	7.47	446	284	1.17	223	218	166	<1.0	202	<1.0	<1.0	7.60	0.174	0.072	62.5			0.021	<0.010	0.30	0.30	<0.0030	1.99
RSEM-R6E-EOP	10/11/2022 12:15	BEK435	M	C280406	7.72	455	272	1.0	218	219	168	<1.0	205	<1.0	<1.0	7.47	0.191	0.068	61.9			<0.015	<0.010	0.29	0.29	<0.0030	2.42
RSEM-R6E-EOP	10/12/2022 14:30	BEK645	M	C280448	7.82	454	268	1.43	214	216	173	<1.0	211	<1.0	<1.0	7.48	0.192	0.071	63.1			<0.015	<0.010	0.23	0.23	<0.0030	1.51
RSEM-R6E-EOP	10/13/2022 13:00	BEN617	M	C280837	7.78	450	260	<0.97	221	216	172	<1.0	210	<1.0	<1.0	7.49	0.202	0.067	60.0			<0.015	<0.010	0.27	0.27	<0.0030	1.30
RSEM-R6E-EOP	10/13/2022 13:30	BEN619	D	C280837	7.71	450	308	<0.97	212	224	165	<1.0	201	<1.0	<1.0	7.46	0.201	0.067	60.1			<0.015	<0.010	0.28	0.28	<0.0030	2.79
RSEM-R6E-EOP	10/14/2022 11:30	BEN599	M	C280833	7.67	439	272	2.76	212	222	169	<1.0	207	<1.0	<1.0	6.78	0.199	0.068	58.5			<0.015	<0.010	0.24	0.24	<0.0030	1.68
RSEM-R6E-EOP	10/15/2022 13:30	BER007	M	C281389	7.89	430	304	1.45	204	212	169	<1.0	206	<1.0	<1.0	6.28	0.198	0.062	54.8			<0.015	<0.010	0.19	0.19	<0.0030	1.38
RSEM-R6E-EOP	10/16/2022 15:30	BER094	M	C281399	7.88	439	252	2.83	211	217	169	<1.0	206	<1.0	<1.0	6.35	0.198	0.134	55.9			<0.015	<0.010	0.23	0.23	<0.0030	1.68
RSEM-R6E-EOP	10/17/2022 11:15	BER150	M	C281421	7.88	442	280	1.7	210	223	179	<1.0	218	<1.0	<1.0	7.84	0.200	0.062	62.6			<0.015	<0.010	0.22	0.22	0.0033	1.33
RSEM-R6E-EOP	10/18/2022 9:30	BEX619	M	C282315	7.88	440	276	1.6	210	218	175	<1.0	213	<1.0	<1.0	7.24	0.194	0.075	64.1			<0.015	<0.010	0.26	0.26	0.0032	2.55
RSEM-R6E-EOP	10/19/2022 12:30	BFA345	M	C282741	8.15	434	268	<1.0	218	202	154	<1.0	188	<1.0	<1.0	6.82	0.198	0.074	69.6			0.028	<0.010	0.18	0.18	<0.0030	1.83
RSEM-R6E-EOP	10/19/2022 12:40	BFA346	D	C282741	8.24	433	268	1.7	220	205	162	<1.0	197	<1.0	<1.0	6.99	0.202	0.060	62.3			<0.015	<0.010	0.19	0.19	<0.0030	1.55
RSEM-R6E-EOP	10/20/2022 10:00	BFD236	M	C283174	8.17	442	252	<0.97	216	217	162	<1.0	197	<1.0	<1.0	7.69	0.201	0.068	67.2			<0.015	<0.010	0.22	0.22	<0.0030	1.87
RSEM-R6E-EOP	10/21/2022 10:10	BFD223	M	C283172	8.19	445	256	2.1	220	220	153	<1.0	187	<1.0	<1.0	7.65	0.202	0.080	63.5			<0.015	<0.010	0.20	0.20	<0.0030	1.59
RSEM-R6E-EOP	10/22/2022 11:20	BFI041	M	C283756	8.22	448	248	1.5	229	216	163	<1.0	199	<1.0	<1.0	8.13	0.192	0.074	63.7			<0.015	<0.0050	0.211	0.211	0.0031	0.87
RSEM-R6E-EOP	10/22/2022 11:30	BFI042	D	C283756	8.21	444	244	1.49	219	214	154	<1.0	188	<1.0	<1.0	8.13	0.188	0.074	63.6			<0.015	<0.0050	0.220	0.220	0.0032	1.24
RSEM-R6E-EOP	10/23/2022 10:15	BFI228	M	C283774	8.18	438	244	3.0	220	217	159	<1.0	194	<1.0	<1.0	8.12	0.197	0.071	62.8			0.023	<0.010	0.244	0.244	0.0031	1.74
RSEM-R6E-EOP	10/24/2022 9:45	BFL669	M	C284145	8.27	439	276	1.82	217	215	162	<1.0	197	<1.0	<1.0	7.94	0.188	0.069	61.4			0.032	<0.010	0.243	0.243	0.0031	1.59
RSEM-R6E-EOP	10/25/2022 10:35	BFP705	M	C284665	8.25	473	292	4.16	236	224	160	<1.0	195	<1.0	<1.0	19.5	0.182	0.245	63.0			<0.015	<0.010	0.306	0.306	0.0031	2.11
RSEM-R6E-EOP	10/25/2022 10:45	BFP706	D	C284665	8.23	466	296	3.77	242	222	159	<1.0	194	<1.0	<1.0	19.5	0.190	0.250	63.3			0.029	<0.010	0.290	0.290	0.0032	1.73
RSEM-R6E-EOP	10/26/2022 12:30	BFS034	M	C285038	8.24	470	268	1.5	234	220	163	<1.0	199	<1.0	<1.0	18.3	0.192	0.215	60.1			<0.015	<0.010	0.348	0.348	<0.0030	1.68
RSEM-R6E-EOP	10/27/2022 10:05	BFU904	M	C285466	8.27	464	244	3.25	223	215	164	<1.0	200	<1.0	<1.0	15.1	0.199	0.161	59.9			<0.015	<0.010	0.333	0.333	<0.0030	1.32
RSEM-R6E-EOP	10/27/2022 10:15	BFU905	D	C285466	8.27	464	232	2.5	216	216	164	<1.0	200	<1.0	<1.0	13.7	0.199	0.159	59.6			0.020	<0.010	0.310	0.310	<0.0030	2.00
RSEM-R6E-EOP	10/28/2022 11:30	BFU721	M	C285458	8.22	460	212	2.5	219	228	167	<1.0	204	<1.0	<1.0	10.7	0.194	0.107	63.2			<0.015	<0.010	0.315	0.315	<0.0030	1.59
RSEM-R6E-EOP	10/29/2022 9:45	BFZ653	M	C286199	8.13	455	288	6.17	228	214	164	<1.0	200	<1.0	<1.0	9.10	0.186	0.076	59.9			<0.015	<0.010	0.275	0.275	<0.0030	1.81

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
RSEM-R6E-EOP	10/30/2022 11:20	BFZ645	M	C286196	8.11	441	260	4.55	211	212	162	<1.0	198	<1.0	<1.0	8.27	0.181	0.064	59.7			<0.015	<0.0050	0.442	0.442	<0.0030	1.19
RSEM-R6E-EOP	10/31/2022 11:00	BGA235	M	C286288	8.11	440	316	5.3	213	212	160	<1.0	195	<1.0	<1.0	8.53	0.186	0.067	60.4			<0.015	<0.010	0.380	0.380	<0.0030	1.85
RSEM-R6E-EOP	11/1/2022 15:20	BGE763	M	C286877	8.08	442	284	3.3	226	215	162	<1.0	198	<1.0	<1.0	9.13	0.191	0.056	63.2			0.037	<0.010	0.74	0.74	0.0031	1.23
RSEM-R6E-EOP	11/2/2022 12:30	BGJ735	M	C287754	8.02	454	296	3.88	224	222	165	<1.0	201	<1.0	<1.0	9.65	0.188	0.062	62.6			<0.015	<0.010	0.62	0.62	<0.0030	0.99
RSEM-R6E-EOP	11/3/2022 14:00	BGJ743	M	C287759	8.02	458	232	5.8	230	226	170	<1.0	207	<1.0	<1.0	8.46	0.185	0.058	64.2			<0.015	<0.010	0.70	0.70	<0.0030	1.62
RSEM-R6E-EOP	11/4/2022 11:00	BGJ738	M	C287756	7.92	459	280	2.08	226	226	171	<1.0	208	<1.0	<1.0	8.00	0.186	0.050	62.7			<0.015	<0.010	0.69	0.69	<0.0030	1.55
RSEM-R6E-EOP	11/5/2022 13:30	BGO362	M	C288361	8.02	451	252	2.1	216	221	169	<1.0	206	<1.0	<1.0	8.00	0.187	0.043	60.4			<0.015	<0.010	0.63	0.63	<0.0030	2.84
RSEM-R6E-EOP	11/6/2022 14:15	BGO251	M	C288323	7.95	457	332	7.3	231	220	170	<1.0	207	<1.0	<1.0	7.88	0.186	0.045	61.1			<0.015	<0.010	0.63	0.63	<0.0030	1.53
RSEM-R6E-EOP	11/6/2022 14:30	BGO253	D	C288323	8.08	464	296	5.5	226	224	173	<1.0	211	<1.0	<1.0	7.22	0.189	0.049	60.6			<0.015	<0.010	0.71	0.71	<0.0030	2.80
RSEM-R6E-EOP	11/7/2022 10:00	BGO319	M	C288345	8.16	470	220	2.8	224	227	178	<1.0	218	<1.0	<1.0	7.40	0.195		63.3			<0.015	0.011	0.86	0.87	0.0032	1.47
RSEM-R6E-EOP	11/8/2022 10:30	BGT300	M	C289111	8.01	465	312	3.7	239	231	171	<1.0	209	<1.0	<1.0	7.56	0.196	0.050	59.8			0.015	<0.010	0.59	0.59	<0.0030	2.08
RSEM-R6E-EOP	11/9/2022 10:40	BGW281	M	C289508	8.10	472	244	0.97	240	232	185	<1.0	225	<1.0	<1.0	6.99	0.199	0.050	58.6			<0.015	<0.010	0.71	0.71	0.0034	1.80
RSEM-R6E-EOP	11/9/2022 10:50	BGW282	D	C289508	8.09	471	264	2.04	236	235	175	<1.0	214	<1.0	<1.0	7.12	0.205	0.050	59.7			<0.015	<0.010	0.70	0.70	0.0034	2.23
RSEM-R6E-EOP	11/10/2022 10:50	BGV715	M	C289423	8.10	481	316	2.2	236	223	185	<1.0	226	<1.0	<1.0	7.27	0.208	0.059	58.1			<0.015	<0.010	0.69	0.69	0.0035	1.72
RSEM-R6E-EOP	11/11/2022 10:50	BHA031	M	C290104	8.05	466	220	2.1	224	223	181	<1.0	221	<1.0	<1.0	6.87	0.215	0.052	59.2			<0.015	<0.010	0.72	0.72	0.0054	1.83
RSEM-R6E-EOP	11/11/2022 11:00	BHA032	D	C290104	8.05	465	228	2.1	232	222	182	<1.0	222	<1.0	<1.0	6.82	0.214	0.051	59.2			0.030	<0.010	0.72	0.72	<0.0030	1.86
RSEM-R6E-EOP	11/12/2022 10:30	BHA061	M	C290112	8.04	458	300	1.9	233	218	180	<1.0	220	<1.0	<1.0	6.42	0.210	0.048	58.7			<0.015	<0.010	0.72	0.72	0.0032	1.90
RSEM-R6E-EOP	11/13/2022 11:10	BHA077	M	C290117	8.09	458	284	2.1	225	217	171	<1.0	209	<1.0	<1.0	6.30	0.217	0.053	57.8			<0.015	<0.010	0.76	0.76	0.0032	1.82
RSEM-R6E-EOP	11/14/2022 10:50	BHC286	M	C290544	8.18	520	304	1.7	285	225	167	<1.0	204	<1.0	<1.0	7.05	0.172	0.073	59.1			<0.015	<0.010	0.55	0.55	<0.0030	2.10
RSEM-R6E-EOP	11/15/2022 10:50	BHD949	M	C290817	8.10	442	320	1.3	262	234	173	<1.0	212	<1.0	<1.0	6.71	0.215	0.061	58.5			<0.015	<0.010	0.51	0.51	<0.0030	1.03
RSEM-R6E-EOP	11/15/2022 11:00	BHD950	D	C290817	8.14	442	316	2.0	272	236	174	<1.0	213	<1.0	<1.0	6.43	0.220	0.069	58.1			<0.015	<0.010	0.51	0.51	<0.0030	1.58
RSEM-R6E-EOP	11/16/2022 12:10	BHF925	M	C291159	8.05	442	276	1.15	234	245	174	<1.0	213	<1.0	<1.0	7.09	0.196	0.060	58.2			0.034	<0.010	0.49	0.49	<0.0030	1.43
RSEM-R6E-EOP	11/17/2022 12:00	BHH895	M	C291494	8.11	446	260	1.4	236	218	174	<1.0	213	<1.0	<1.0	6.49	0.198	0.058	57.1			<0.015	<0.010	0.50	0.50	0.0036	1.64
RSEM-R6E-EOP	11/18/2022 11:00	BHI799	M	C291574	7.96	450	264	<1.0	251	225	168	<1.0	206	<1.0	<1.0	7.25	0.201	0.060	59.0			<0.015	<0.010	0.55	0.55	0.0035	1.93
RSEM-R6E-EOP	11/19/2022 12:00	BHL409	M	C291899	8.12	466	300	1.1	231	223	185	<1.0	226	<1.0	<1.0	6.66	0.206	0.113	60.9			0.030	<0.010	0.54	0.54	0.0036	1.45
RSEM-R6E-EOP	11/19/2022 12:10	BHL410	D	C291899	8.04	466	284	1.3	231	223	183	<1.0	223	<1.0	<1.0	6.81	0.204	0.116	59.9			<0.015	<0.010	0.55	0.55	<0.0030	1.23
RSEM-R6E-EOP	11/20/2022 11:30	BHL416	M	C291901	8.17	457	336	1.1	234	227	184	<1.0	225	<1.0	<1.0	6.75	0.222	0.146	60.3			<0.015	<0.010	0.59	0.59	<0.0030	1.37
RSEM-R6E-EOP	11/21/2022 11:15	BHL420	M	C291903	8.16	463	320	<0.97	235	224	185	<1.0	226	<1.0	<1.0	6.86	0.228	0.127	60.8			<0.015	<0.010	0.58	0.58	<0.0030	2.06
RSEM-R6E-EOP	11/22/2022 12:15	BHR288	M	C292931	8.15	476	272	1.8	257	232	188	<1.0	229	<1.0	<1.0	7.92	0.161	0.116	62.4			<0.015	<0.010	0.55	0.55	<0.0030	1.24
RSEM-R6E-EOP	11/23/2022 15:15	BHR239	M	C292918	8.15	475	268	<1.0	251	228	185	<1.0	226	<1.0	<1.0	7.07	0.160	0.064	61.5			<0.015	<0.010	0.57	0.57	<0.0030	1.14
RSEM-R6E-EOP	11/24/2022 13:30	BHS968	M	C293245	8.12	470	272	<0.99	251	228	180	<1.0	220	<1.0	<1.0	7.26	0.166	0.068	62.3			<0.015	<0.010	0.56	0.56	<0.0030	1.65
RSEM-R6E-EOP	11/24/2022 13:45	BHS970	D	C293245	8.11	471	272	<0.97	247	232	183	<1.0	223	<1.0	<1.0	8.18	0.171	0.069	61.9			<0.015	<0.010	0.56	0.56	<0.0030	1.58
RSEM-R6E-EOP	11/25/2022 10:30	BHS972	M	C293246	8.04	470	276	1.50	243	229	183	<1.0	223	<1.0	<1.0	7.07	0.158	0.071	60.8			0.050	<0.010	0.54	0.54	<0.0030	1.65
RSEM-R6E-EOP	11/26/2022 12:00	BHX191	M	C293769	8.01	474	304	<0.98	255	227	182	<1.0	222	<1.0	<1.0	9.04	0.190	0.075	63.5			<0.015	<0.010	0.56	0.56	<0.0030	1.65
RSEM-R6E-EOP	11/27/2022 13:30	BHX163	M	C293759	8.02	481	296	1.0	268	232	185	<1.0	226	<1.0	<1.0	9.94	0.178	0.080	66.1			0.020	<0.010	0.56	0.56	<0.0030	1.67
RSEM-R6E-EOP	11/28/2022 10:00	BHX165	M	C293760	8.05	489	288	1.1	261	233	187	<1.0	228	<1.0	<1.0	9.20	0.183	0.083	66.5			<0.015	<0.010	0.56	0.56	<0.0030	1.67
RSEM-R6-EP-US-SD	2/9/2022 13:55	AOK262	M	C208577	8.10	325	193	2630	598	95.6	59.5	<1.0	72.7	<1.0	<1.0	42.8	0.059	0.180	34.9			0.288	0.042	0.48	0.52	0.0127	<5.0
RSEM-R6-EP-US-SD	4/22/2022 12:15	ARX723	M	C226550	8.07	856	552	308	399	325	163	<1.0	199	<1.0	<1.0	43.2	0.188	0.543	218			0.280	0.023	1.1	1.2	0.0054	2.27
RSEM-R6-EP-US-SD	4/27/2022 16:30	ASH199	M	C228648	8.01	1040	620	27600	3760	395	95.2	<1.0	116	<1.0	<1.0	145	0.177	1.93	190			0.735	0.049	2.6	2.6	0.0059	3.88
RSEM-R6-EP-US-SD	5/10/2022 11:55	ASX006	M	C231638	7.91	1220	820	194	477	436	131	<1.0	160	<1.0	<1.0	66.3	0.974	0.810	379			0.362	0.024	2.2	2.2	0.0034	1.60
RSEM-R6E-SP	1/1/2022 13:00	FJ2200029-001	M	FJ2200029	7.98	1260	842	3.8	568	512		<1.0				68.9	0.296	0.845	243			0.122	0.0323	0.778		<0.0010	3.72
RSEM-R6E-SP	1/7/2022 12:30	FJ2200035-001	M	FJ2200035	7.80	1300	830	6.3	544	608	386	<1.0	471	<1.0	<1.0	70.8	0.312	0.927	247			0.166	0.0833	0.491		0.0012	3.13
RSEM-R6E-SP	1/7/2022 12:40	FJ2200035-002	D	FJ2200035	7.84	1310	834	5.8	541	630	392	<1.0	479	<1.0	<1.0	70.9	0.311	0.928	248			0.166	0.0862	0.480		0.0010	2.97
RSEM-R6E-SP	1/11/2022 16:00	FJ2200088-002	M	FJ2200088	7.88	1250	851	1.1	548	539	367	<1.0	448	<1.0	<1.0	73.8	0.322	0.949	253			0.198	<0.0050	<0.0250	<0.0255	0.0017	2.93
RSEM-R6E-SP	1/16/2022 12:00	FJ2200109-001	M	FJ2200109	7.87	1280	822	4.2	534	510	382	<1.0	466	<1.0	<1.0	70.2	0.297	0.857	234			0.179	0.0209	0.899	0.920	0.0033	3.00
RSEM-R6E-SP	1/20/2022 12:00	FJ2200187-002	M	FJ2200187	7.61	1320	847	3.2	532	523	400	<1.0	488	<1.0	<1.0	72.0	0.278	0.873	242			0.240	0.198	0.0966	0.295	0.0013	3.47
RSEM-R6E-SP	1/22/2022 16:20	FJ2200193-004	M	FJ2200193	7.75	829	499	25.8	343	329	234	<1.0	285	<1.0	<1.0	46.0	0.208	0.639	147			0.142	0.0288	0.800	0.829	0.0020	4.53
RSEM-R6E-SP	1/24/2022 13:05	FJ2200237-002	M	FJ2200237	7.95	343	191	18.3	142	122	81.1	<1.0	98.9	<1.0	<1.0	22.2	0.150	0.202	48.8			0.161	0.0275	0.534	0.562	0.0010	4.17
RSEM-R6E-SP	1/25/2022 15:50	ANP163	M	C204905	7.11	364	196	4.7	141	130	87.3	<1.0	107	<1.0	<1.0	24.7	0.135	0.267	54.5			0.239	0.030	0.63	0.66	<0.0030	3.97
RSEM-R6E-SP	2/3/2022 11:00	AOC176	M	C207302	7.57	695	356	2.5	282	251	182	<1.0	222	<1.0	<1.0	50.7	0.204	0.464	114			0.268	0.034	0.71	0.75	0.0041	3.13
RSEM-R6E-SP	2/7/2022 5:30	AOE527	M	C207636	7.49	748	440	2.1	296	283	195	<1.0	238	<1.0	<1.0	52.9	0.197	0.507	124			0.236	0.034	0.88	0.91	0.0033	3.36
RSEM-R6E-SP	2/9/2022 13:35	AOK258	M	C208577	7.94	650	384	33.9	227	217	155	<1.0	189	<1.0	<1.0	52.5	0.084	0.472	92.6			0.306	0.038	0.77	0.81	<0.0030	3.53
RSEM-R6E-SP	2/10/2022 18:00	AOM661	M	C208923	7.05	384	216	9.1	131	120	69.4	<1.0	84.7	<1.0	<1.0	46.1	0.216	0.320	53.6			0.204	0.034	0.39	0.42	0.0036	2.60
RSEM-R6E-SP	2/17/2022 15:45	AOW645	M	C210704	7.83	502	244	5.13	170	151	76.2	<1.0	93.0	<1.0	<1.0	57.7	0.248	0.469	76.4			0.306	0.034	0.52	0.55	<0.0030	2.95
RSEM-R6E-SP	2/19/2022 11:55	AOX370	M	C210838	7.75	514	272	7.2	173	176	78.2	<1.0	95.4	<1.0	<1.0	117	0.290	0.473	87.1			0.237	0.0369	0.515	0.552	<0.0030	3.03
RSEM-R6E-SP	2/26/2022 11:00	API826	M	C212869	7.64	617	336	2.8	259	276	95.8	<1.0	117	<1.0	<1.0	74.8	0.299	0.660	99.2			0.319	0.039	0.51	0.55	<0.0030	3.05
RSEM-R6E-SP	3/3/2022 15:15	APQ572	M	C214168	7.57	666	392	3.2	287	253	102	<1.0	125	<1.0	<1.0	76.9	0.139	0.715	108			0.348	0.042	0.46	0.50	0.0034	2.53
RSEM-R6E-SP	3/5/2022 14:45	APS819	M	C214509	7.65	658	360	4.0	257	253	105	<1.0	128	<1.0	<1.0	75.9	0.320	0.733	107			0.361	0.041	0.44	0.48	<0.0030	2.58
RSEM-R6E-SP	3/7/2022 12:05	APU817	M	C214856	7.68	660	372	2.3	260	238	105	<1.0	128	<1.0	<1.0	76.2	0.308	0.736	105			0.605	0.041	0.42	0.46	0.0031	2.48
RSEM-R6E-SP	3/11/2022 11:45	APZ041	M	C215890	7.61	681	364	4.7	265	264	114	<1.0	140	<1.0	<1.0	75.9	0.137	0.666	113			0.543	0.044	0.30	0.35	<0.0030	1.88
RSEM-R6E-SP	3/14/2022 11:40	AQB611	M	C216399	7.75	709	408	4.04	242	244	123	<1.0	150	<1.0	<1.0	84.1	0.148	0.726	110			0.746	0.047	0.28	0.33	<0.0030	2.28
RSEM-R6E-SP	3/19/2022 13:50	AQJ970	M	C218236	7.89	525	340	12.5	200	198	91.0	<1.0	111	<1.0	<1.0	49.3	0.139	0.521	88.4			0.289	0.041	0.64	0.68	<0.0030	3.33
RSEM-R6E-SP	3/28/2022 11:10	AQU417	M	C220399	7.79	366	228	4.8	138	142	78.2	<1.0	95.4	<1.0	<1.0	14.9	0.122	0.199	78.1			0.179	0.015	0.28	0.30	<0.0030	1.72
RSEM-R6E-SP	11/29/2022 10:50	BIA657	M	C294441	8.07	511	300	<1.0	279	240	191	<1.0	233	<1.0	<1.0	9.92	0.204	0.092	69.2			0.016	<0.010	0.55	0.55	<0.0030	1.59
RSEM-R6E-SP	12/3/2022 11:50	BII771	M	C295634	7.93	560	360	<1.0	274	255	210	<1.0	256	<1.0	<1.0	8.23	0.246	0.104	74.3			0.064	<0.010	0.54	0.54	<0.0030	2.77
RSEM-R6E-SP	12/7/2022 12:30	BIR867	M	C297052	7.92	571	368	2.5	283	281	216	<1.0	263	<1.0	<1.0	12.7	0.222	0.087	77.1			0.051	<0.010	0.53	0.53	0.0034	1.99
RSEM-R6E-SP	12/9/2022 11:45	BIT657	M	C297341	7.80	576	372	<1.0	275	276	217	<1.0	264	<1.0	<1.0	14.1	0.221	0.071	78.5			0.055	<0.010	0.51	0.51	0.0030	2.00
RSEM-R6E-SP	12/15/2022 12:45	BJJ046	M	C299557	7.89	625	428	<1.0	291	287	230	<1.0	281	<1.0	<1.0	14.8	0.231	0.237	85.6			0.079	<0.010	0.50	0.50	<0.0030	2.44

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
RSEM-R6E-SP	12/18/2022 12:45	BJL803	M	C299943	7.88	642	360	<1.0	302	305	236	<1.0	288	<1.0	<1.0	15.0	0.226	0.089	87.4			0.109	<0.010	0.50	0.50	0.0045	2.33
RSEM-R6E-SP	12/20/2022 10:30	BJP133	M	C2A0603	7.83	674	404	<1.0	295	302	249	<1.0	304	<1.0	<1.0	16.6	0.244	0.122	88.9			0.135	<0.010	0.52	0.52	<0.0030	2.34
RSEM-R6E-SP	12/23/2022 12:15	BJQ105	M	C2A0819	7.70	683	412	<1.0	332	304	259	<1.0	316	<1.0	<1.0	18.6	<0.050	0.308	92.9			0.180	0.011	0.43	0.44	<0.0030	2.43
RSEM-R6E-SP	12/27/2022 12:30	BJS996	M	C2A1469	7.62	711	448	1.6	355	337	260	<1.0	318	<1.0	<1.0	20.6	0.264	0.223	90.5			0.288	0.012	0.49	0.50	<0.0030	3.24
RSEM-R6E-SP	12/31/2022 12:45	BJU300	M	C300112	7.85	747	464	<1.0	351	355	270	<1.0	330	<1.0	<1.0	19.2	0.240	0.209	85.2			0.299	0.0150	0.402	0.417	<0.0030	2.98
RSEM-R6E-SP-US	4/10/2022 13:00	ARK080	M	C223661	6.76	1080	740	63.0	431	431	171	<1.0	209	<1.0	<1.0	54.5	0.278	0.704	315			0.389	0.042	1.2	1.2	<0.0030	1.14
RSEM-R6W-EOP	1/4/2022 12:00	FJ2200037-001	M	FJ2200037	7.41	805	500	4.0	194	210	198	<1.0	242	<1.0	<1.0	43.1	0.245	0.515	192			0.214	0.0342	0.541	0.575	<0.0010	3.31
RSEM-R6W-EOP	1/20/2022 10:45	FJ2200187-001	M	FJ2200187	7.90	802	493	7.2	165	171	151	<1.0	184	<1.0	<1.0	47.5	0.218	0.478	190			0.241	0.0278	0.479	0.507	<0.0010	2.87
RSEM-R6W-EOP	1/21/2022 10:20	FJ2200183-001	M	FJ2200183	8.06	825	508	6.7	177	175	150	<1.0	183	<1.0	<1.0	48.1	0.236	0.533	193			0.230	0.0260	0.488	0.514	<0.0010	2.53
RSEM-R6W-EOP	1/22/2022 14:50	FJ2200193-001	M	FJ2200193	7.77	798	478	5.8	186	175	149	<1.0	181	<1.0	<1.0	47.1	0.241	0.548	188			0.216	0.0303	0.469	0.499	0.0016	2.50
RSEM-R6W-EOP	1/23/2022 10:55	FJ2200194-001	M	FJ2200194	8.01	804	463	6.3	171	173	174	<1.0	212	<1.0	<1.0	46.0	0.217	0.505	182			0.209	0.0293	0.478	0.507	0.0019	2.43
RSEM-R6W-EOP	1/24/2022 12:00	FJ2200237-001	M	FJ2200237	8.01	684	411	6.1	174	167	137	<1.0	167	<1.0	<1.0	42.3	0.250	0.478	156			0.189	0.0313	0.538	0.569	<0.0010	2.50
RSEM-R6W-EOP	1/25/2022 16:00	ANP164	M	C204905	7.47	675	388	4.8	167	163	129	<1.0	157	<1.0	<1.0	40.8	0.208	0.539	140			0.194	0.034	0.59	0.62	<0.0030	2.02
RSEM-R6W-EOP	1/26/2022 13:55	ANQ893	M	C205279	7.97	716	440	4.67	176	166	135	<1.0	165	<1.0	<1.0	42.4	0.132	0.569	153			0.218	0.035	0.72	0.76	0.0031	2.15
RSEM-R6W-EOP	1/26/2022 14:05	ANQ894	D	C205279	7.93	716	432	5.33	177	169	140	<1.0	171	<1.0	<1.0	42.0	0.106	0.562	147			0.195	0.035	0.58	0.61	0.0030	2.38
RSEM-R6W-EOP	1/27/2022 15:50	ANS643	M	C205612	7.88	707	420	7.8	168	167	137	<1.0	167	<1.0	<1.0	42.2	0.096	0.556	158			0.245	0.039	0.59	0.62	0.0032	2.08
RSEM-R6W-EOP	1/27/2022 16:00	ANS644	D	C205612	7.76	721	412	7.4	172	166	133	<1.0	163	<1.0	<1.0	42.2	0.121	0.558	161			0.347	0.040	0.58	0.62	<0.0030	2.09
RSEM-R6W-EOP	1/29/2022 10:55	ANV925	M	C206078	7.84	720	456	5.1	172	161	134	<1.0	164	<1.0	<1.0	43.5	0.114	0.559	162			0.193	0.036	0.58	0.62	0.0032	2.03
RSEM-R6W-EOP	1/30/2022 11:20	ANV924	M	C206077	7.54	746	600	8.77	168	158	127	<1.0	155	<1.0	<1.0	43.1	0.132	0.558	178			0.312	0.040	0.57	0.61	0.0034	2.02
RSEM-R6W-EOP	1/31/2022 10:35	ANV920	M	C206074	7.64	764	468	7.5	173	165	130	<1.0	159	<1.0	<1.0	44.1	0.140	0.578	189			0.208	0.041	0.57	0.62	0.0033	2.05
RSEM-R6W-EOP	2/7/2022 5:00	AOE528	M	C207636	6.80	831	512	2.76	197	193	127	<1.0	155	<1.0	<1.0	48.7	0.283	0.543	234			0.191	0.044	0.59	0.63	0.0035	2.17
RSEM-R6W-EOP	2/8/2022 11:45	AOJ290	M	C208265	7.24	820	476	7.5	179	182	109	<1.0	132	<1.0	<1.0	44.6	0.133	0.524	225			0.177	0.049	0.83	0.88	0.0031	3.63
RSEM-R6W-EOP	2/9/2022 11:10	AOK259	M	C208577	7.67	865	536	10.6	260	263	174	<1.0	213	<1.0	<1.0	51.3	0.101	0.589	188			0.214	0.041	0.84	0.88	<0.0030	2.68
RSEM-R6W-EOP	2/10/2022 10:30	AOM663	D	C208923	7.61	570	332	21.7	197	211	104	<1.0	127	<1.0	<1.0	41.8	0.219	0.392	131			0.227	0.037	0.84	0.88	<0.0030	2.62
RSEM-R6W-EOP	2/10/2022 22:20	AOM662	M	C208923	7.06	577	348	18.9	207	215	116	<1.0	141	<1.0	<1.0	43.3	0.216	0.361	117			0.227	0.038	0.81	0.85	0.0034	3.21
RSEM-R6W-EOP	2/11/2022 11:25	AOM648	M	C208915	6.67	590	372	10.8	204	184	82.4	<1.0	101	<1.0	<1.0	40.5	0.214	0.336	152			0.208	0.040	1.1	1.2	0.0037	3.34
RSEM-R6W-EOP	2/12/2022 13:30	AOP214	M	C209346	6.83	620	344	4.29	202	197	54.5	<1.0	66.5	<1.0	<1.0	28.7	0.113	0.218	205			0.214	0.045	1.4	1.5	<0.0030	2.86
RSEM-R6W-EOP	2/12/2022 13:40	AOP215	D	C209346	6.88	619	344	4.90	203	195	57.1	<1.0	69.6	<1.0	<1.0	28.8	0.212	0.226	204			0.193	0.045	1.5	1.5	<0.0030	3.25
RSEM-R6W-EOP	2/13/2022 10:45	AOP246	M	C209355	6.78	590	332	4.83	194	183	47.2	<1.0	57.5	<1.0	<1.0	22.2	0.129	0.200	207			0.189	0.049	1.4	1.5	<0.0030	2.94
RSEM-R6W-EOP	2/14/2022 12:50	AOQ979	M	C209670	6.74	544	348	6.42	173	164	37.7	<1.0	46.0	<1.0	<1.0	17.2	0.132	0.157	195			0.181	0.049	1.4	1.4	<0.0030	3.11
RSEM-R6W-EOP	2/15/2022 15:35	AOS724	M	C210043	7.47	571	380	7.2	184	183	40.5	<1.0	49.4	<1.0	<1.0	17.3	0.222	0.147	199			0.183	0.050	1.6	1.6	0.0057	2.70
RSEM-R6W-EOP	2/16/2022 10:40	AOU840	M	C210450	6.87	570	336	6.97	186	173	42.5	<1.0	51.9	<1.0	<1.0	18.1	0.222	0.133	202			0.213	0.047	1.5	1.6	0.0256	2.97
RSEM-R6W-EOP	2/17/2022 14:15	AOW646	M	C210704	6.92	572	324	5.26	194	172	43.7	<1.0	53.3	<1.0	<1.0	18.0	0.215	0.173	205			0.213	0.044	1.4	1.5	<0.0030	2.79
RSEM-R6W-EOP	2/17/2022 14:25	AOW647	D	C210704	6.86	569	340	5.4	198	169	42.8	<1.0	52.2	<1.0	<1.0	18.1	0.208	0.175	204			0.230	0.044	1.5	1.5	<0.0030	2.73
RSEM-R6W-EOP	2/18/2022 13:20	AOW653	M	C210707	6.86	572	324	6.35	202	190	41.3	<1.0	50.3	<1.0	<1.0	17.4	0.209	0.166	205			0.230	0.042	1.6	1.6	<0.0030	3.00
RSEM-R6W-EOP	2/19/2022 10:30	AOX371	M	C210838	6.86	562	318	4.4	184	180	46.1	<1.0	56.2	<1.0	<1.0	17.1	0.240	0.153	213			0.193	0.0423	1.65	1.69	<0.0030	3.67
RSEM-R6W-EOP	2/20/2022 15:20	AOY870	M	C211049	6.80	568	380	5.66	187	188	46.0	<1.0	56.2	<1.0	<1.0	17.9	0.211	0.150	195			0.190	0.039	1.6	1.6	<0.0030	2.94
RSEM-R6W-EOP	2/20/2022 15:30	AOY871	D	C211049	6.81	569	388	5.1	189	187	44.2	<1.0	54.0	<1.0	<1.0	18.4	0.211	0.139	198			0.360	0.038	1.6	1.6	<0.0030	2.92
RSEM-R6W-EOP	2/21/2022 11:00	AOY875	M	C211051	6.78	577	360	5.5	193	181	45.0	<1.0	54.9	<1.0	<1.0	18.9	0.212	0.149	197			0.188	0.039	1.6	1.6	<0.0030	2.47
RSEM-R6W-EOP	2/22/2022 10:30	APE539	M	C211930	6.66	574	324	4.77	179	172	44.8	<1.0	54.7	<1.0	<1.0	20.4	0.215	0.152	189			0.211	0.046	1.4	1.5	<0.0030	2.93
RSEM-R6W-EOP	2/23/2022 14:00	APE585	M	C211939	6.82	560	384	4.7	174	162	45.7	<1.0	55.7	<1.0	<1.0	21.4	0.224	0.153	183			0.201	0.049	1.3	1.3	<0.0030	3.07
RSEM-R6W-EOP	2/24/2022 13:10	APF947	M	C212235	6.95	545	320	3.8	162	154	50.0	<1.0	61.0	<1.0	<1.0	20.9	0.215	0.147	175			0.195	0.046	1.2	1.3	<0.0030	2.85
RSEM-R6W-EOP	2/25/2022 10:00	APF955	M	C212240	7.29	528	316	1.87	151	146	51.1	<1.0	62.3	<1.0	<1.0	20.2	0.204	0.173	168			0.191	0.042	1.2	1.2	<0.0030	3.01
RSEM-R6W-EOP	2/26/2022 13:00	API827	M	C212869	7.01	536	300	2.25	166	171	53.3	<1.0	65.0	<1.0	<1.0	21.1	0.203	0.174	174			0.194	0.037	1.1	1.2	0.0104	3.09
RSEM-R6W-EOP	2/27/2022 11:00	API844	M	C212877	6.88	534	312	2.1	170	171	56.8	<1.0	69.3	<1.0	<1.0	20.4	0.194	0.172	178			0.177	0.033	1.1	1.1	<0.0030	2.80
RSEM-R6W-EOP	2/28/2022 10:00	API841	M	C212874	6.87	538	312	2.4	166	171	53.2	<1.0	64.9	<1.0	<1.0	19.4	0.195	0.175	179			0.207	0.030	1.1	1.1	<0.0030	2.66
RSEM-R6W-EOP	3/1/2022 11:45	APN031	M	C213536	7.27	546	332	2.3	176	175	53.1	<1.0	64.8	<1.0	<1.0	18.6	0.188	0.164	185			0.370	0.029	1.2	1.3	<0.0030	2.87
RSEM-R6W-EOP	3/1/2022 11:55	APN032	D	C213536	7.27	547	328	2.7	183	174	50.6	<1.0	61.7	<1.0	<1.0	18.7	0.191	0.163	186			0.400	0.029	1.3	1.3	<0.0030	2.77
RSEM-R6W-EOP	3/4/2022 11:15	APQ571	M	C214167	7.08	568	348	2.7	179	170	54.1	<1.0	66.0	<1.0	<1.0	18.9	0.083	0.191	187			0.186	0.030	1.2	1.2	<0.0030	2.55
RSEM-R6W-EOP	3/5/2022 13:20	APS820	M	C214509	6.72	562	324	2.6	172	161	56.8	<1.0	69.2	<1.0	<1.0	18.7	0.200	0.215	184			0.240	0.027	1.2	1.2	<0.0030	2.69
RSEM-R6W-EOP	3/5/2022 13:30	APS821	D	C214509	6.75	565	324	1.39	175	159	55.4	<1.0	67.6	<1.0	<1.0	18.8	0.196	0.214	186			0.208	0.027	1.2	1.2	<0.0030	2.55
RSEM-R6W-EOP	3/6/2022 10:30	APS817	M	C214508	6.80	558	328	3.3	164	154	63.6	<1.0	77.5	<1.0	<1.0	19.1	0.194	0.221	182			0.216	0.025	1.0	1.0	<0.0030	2.59
RSEM-R6W-EOP	3/7/2022 10:55	APU818	M	C214856	6.87	566	324	3.5	166	148	66.2	<1.0	80.8	<1.0	<1.0	19.9	0.185	0.209	180			0.219	0.025	1.0	1.0	<0.0030	2.44
RSEM-R6W-EOP	3/8/2022 18:30	APV994	M	C215206	7.70	578	356	5.9	142	147	90.6	<1.0	111	<1.0	<1.0	21.9	0.218	0.260	160			0.235	0.023	0.95	0.97	<0.0030	2.52
RSEM-R6W-EOP	3/9/2022 11:00	APZ007	M	C215885	7.42	566	328	4.5	142	132	91.7	<1.0	112	<1.0	<1.0	22.5	0.092	0.243	154			0.267	0.024	0.90	0.93	<0.0030	2.62
RSEM-R6W-EOP	3/10/2022 10:00	APZ000	M	C215884	7.12	563	316	4.2	137	125	94.1	<1.0	115	<1.0	<1.0	22.4	0.064	0.243	147			0.227	0.023	0.88	0.90	<0.0030	2.02
RSEM-R6W-EOP	3/11/2022 10:50	APZ042	M	C215890	7.48	567	304	4.7	128	121	106	<1.0	130	<1.0	<1.0	24.4	0.081	0.263	136			0.253	0.020	0.76	0.78	<0.0030	1.92
RSEM-R6W-EOP	3/12/2022 14:30	AQB294	M	C216354	7.08	567	324	4.74	129	125	94.1	<1.0	115	<1.0	<1.0	24.6	0.074	0.251	153			0.230	0.022	0.92	0.94	<0.0030	1.55
RSEM-R6W-EOP	3/12/2022 14:40	AQB295	D	C216354	7.10	566	340	4.2	127	128	90.1	<1.0	110	<1.0	<1.0	24.0	0.101	0.276	136			0.301	0.022	0.91	0.93	<0.0030	2.49
RSEM-R6W-EOP	3/13/2022 11:15	AQB251	M	C216350	7.45	565	336	3.8	117	113	108	<1.0	132	<1.0	<1.0	26.2	0.066	0.300	122			0.226	0.019	0.76	0.78	<0.0030	1.74
RSEM-R6W-EOP	3/14/2022 10:55	AQB612	M	C216399	7.54	575	332	4.77	120	123	108	<1.0	131	<1.0	<1.0	26.6	0.080	0.293	124			0.212	0.021	0.81	0.83	<0.0030	2.00
RSEM-R6W-EOP	3/15/2022 7:00	AQE813	M	C217150	7.53	577	356	4.6	124	119	105	<1.0	128	<1.0	<1.0	25.5	0.070	0.275	127			0.202	0.020	0.84	0.86	<0.0030	2.84
RSEM-R6W-EOP	3/17/2022 11:00	AQH797	M	C217776	7.11	572	396	6.6	133	140	104	<1.0	127	<1.0	<1.0	25.7	0.172	0.281	133			0.218	0.023	0.94	0.97	0.0031	2.36
RSEM-R6W-EOP	3/18/2022 6:00	AQH794	M	C217775	7.50	586	352	15.9	173	167	110	<1.0	135	<1.0	<1.0	38.1	0.234	0.359	116			0.257	0.035	0.79	0.83	<0.0030	2.94
RSEM-R6W-EOP	3/19/2022 14:05	AQJ971	M	C218236	7.77	595	292	11.7	196	186	96.6	<1.0	118	<1.0	<1.0	42.3	0.131	0.394	124			0.251	0.045	0.72	0.77	<0.0030	3.28
RSEM-R6W-EOP	3/20/2022 14:35	AQJ912	M	C218219	7.62	517	328	4.6	183	170	95.7	<1.0	117	<1.0	<1.0	37.5	0.244	0.389	97.6			0.226	0.048	0.58	0.63	<0.0030	3.13
RSEM-R6W-EOP	3/21/2022 12:40	AQL265	M	C218465	7.57	502	284	29.7	168	162	71.4	<1.0	87.2	<1.0	<1.0	35.6	0.139	0.384	107			0.200	0.046	0.54	0.59	<0.0030	3.50
RSEM-R6W-EOP	3/22/2022 14:15	AQN715	M	C218958	7.29	501	284	17.9	173	164	75.2	<1.0	91.7	<1.0	<1.0	35.5	0.097	0.392	116			0.211	0.044	0.52	0.56	<0.0030	2.69

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
RSEM-R6W-EOP	3/23/2022 12:00	AQP257	M	C219363	7.17	487	284	13.5	165	154	67.7	<1.0	82.6	<1.0	<1.0	31.5	0.081	0.372	116			0.176	0.043	0.53	0.57	0.0042	2.64
RSEM-R6W-EOP	3/24/2022 10:30	AQP981	M	C219524	7.19	490	328	9.74	167	152	64.9	<1.0	79.2	<1.0	<1.0	29.6	0.075	0.364	128			0.189	0.047	0.53	0.58	<0.0030	2.81
RSEM-R6W-EOP	3/25/2022 11:30	AQP914	M	C219519	7.22	523	336	9.3	174	163	63.9	<1.0	77.9	<1.0	<1.0	27.8	0.076	0.353	141			0.192	0.042	0.60	0.64	0.0032	2.38
RSEM-R6W-EOP	3/25/2022 11:40	AQP915	D	C219519	7.25	523	328	9.3	173	162	62.7	<1.0	76.5	<1.0	<1.0	28.0	0.078	0.355	142			0.193	0.043	0.59	0.64	<0.0030	2.14
RSEM-R6W-EOP	3/26/2022 10:50	AQS235	M	C219944	7.12	569	372	7.5	180	181	70.8	<1.0	86.3	<1.0	<1.0	29.6	0.134	0.313	159			0.229	0.039	0.65	0.69	<0.0030	2.59
RSEM-R6W-EOP	3/26/2022 11:05	AQS236	D	C219944	7.22	569	372	7.57	172	179	66.1	<1.0	80.6	<1.0	<1.0	29.6	0.137	0.318	161			0.247	0.038	0.64	0.68	<0.0030	2.59
RSEM-R6W-EOP	3/27/2022 11:50	AQS345	M	C219976	7.24	596	372	4.0	183	195	68.7	<1.0	83.9	<1.0	<1.0	29.4	0.164	0.331	173			0.296	0.040	0.64	0.68	<0.0030	2.63
RSEM-R6W-EOP	3/28/2022 10:40	AQU418	M	C220399	7.20	604	392	3.84	176	179	64.2	<1.0	78.3	<1.0	<1.0	28.8	0.200	0.316	181			0.246	0.041	0.71	0.75	<0.0030	2.45
RSEM-R6W-EOP	3/29/2022 10:20	AQV263	M	C220606	7.07	605	392	4.6	165	165	62.6	<1.0	76.4	<1.0	<1.0	26.5	0.127	0.298	187			0.441	0.044	0.77	0.81	<0.0030	2.60
RSEM-R6W-EOP	3/30/2022 11:10	AQX832	M	C221206	6.91	587	364	4.2	135	137	59.8	<1.0	73.0	<1.0	<1.0	24.3	0.259	0.269	187			0.222	0.044	0.84	0.88	<0.0030	2.13
RSEM-R6W-EOP	3/31/2022 9:25	AQY795	M	C221428	6.96	582	372	7.5	152	153	64.5	<1.0	78.7	<1.0	<1.0	26.0	0.162	0.331	180			0.243	0.041	0.86	0.90	0.0032	1.92
RSEM-R6W-EOP	4/1/2022 11:20	AQY727	M	C221415	7.13	578	340	5.3	158	174	67.6	<1.0	82.5	<1.0	<1.0	26.7	0.135	0.338	174			0.222	0.036	0.78	0.81	0.0071	1.76
RSEM-R6W-EOP	4/2/2022 16:55	ARB520	M	C222000	6.97	518	324	4.7	143	150	66.3	<1.0	80.9	<1.0	<1.0	23.0	0.107	0.276	162			0.286	0.031	0.69	0.72	<0.0030	1.82
RSEM-R6W-EOP	4/3/2022 12:00	ARB459	M	C221989	7.07	534	336	4.0	147	146	68.6	<1.0	83.7	<1.0	<1.0	22.4	0.118	0.333	153			0.189	0.033	0.73	0.76	<0.0030	1.53
RSEM-R6W-EOP	4/4/2022 11:45	ARB188	M	C221904	7.00	532	332	5.3	138	141	65.2	<1.0	79.6	<1.0	<1.0	22.5	0.087	0.281	166			0.172	0.029	0.80	0.83	<0.0030	1.35
RSEM-R6W-EOP	4/5/2022 11:00	ARE598	M	C222522	6.89	453	268	1.5	129	127	63.6	<1.0	77.5	<1.0	<1.0	17.6	0.083	0.259	132			0.165	0.024	0.67	0.70	<0.0030	1.58
RSEM-R6W-EOP	4/6/2022 12:00	ARI188	M	C223269	6.87	497	312	2.3	152	129	68.6	<1.0	83.7	<1.0	<1.0	19.8	0.098	0.284	152			0.149	0.026	0.81	0.84	<0.0030	1.52
RSEM-R6W-EOP	4/7/2022 16:40	ARI195	M	C223271	6.93	446	264	<1.0	136	119	63.6	<1.0	77.6	<1.0	<1.0	17.7	0.069	0.245	140			0.143	0.024	0.71	0.74	<0.0030	1.34
RSEM-R6W-EOP	4/8/2022 12:00	ARI199	M	C223273	6.70	278	164	7.6	85.0	73.7	49.2	<1.0	60.0	<1.0	<1.0	9.85	0.059	0.163	75.1			0.104	0.018	0.39	0.41	<0.0030	0.82
RSEM-R6W-EOP	4/9/2022 12:30	ARK006	M	C223638	6.11	492	288	9.4	123	115	69.3	<1.0	84.5	<1.0	<1.0	19.5	0.084	0.289	140			0.149	0.025	0.78	0.81	<0.0030	1.47
RSEM-R6W-EOP	4/10/2022 12:00	ARK077	M	C223661	6.27	531	324	7.1	142	146	50.2	<1.0	61.2	<1.0	<1.0	22.7	0.107	0.300	160			0.164	0.026	0.77	0.80	<0.0030	1.40
RSEM-R6W-EOP	4/11/2022 10:00	ARK112	M	C223675	6.99	556	348	4.4	158	157	69.8	<1.0	85.2	<1.0	<1.0	24.3	0.111	0.333	164			0.180	0.026	0.75	0.78	<0.0030	2.11
RSEM-R6W-EOP	4/12/2022 10:30	ARN334	M	C224402	7.08	577	332	1.8	164	160	75.8	<1.0	92.5	<1.0	<1.0	26.1	0.132	0.445	164			0.181	0.024	0.69	0.71	<0.0030	1.30
RSEM-R6W-EOP	4/13/2022 12:10	ARP726	M	C224775	7.17	586	380	1.64	162	165	88.5	<1.0	108	<1.0	<1.0	27.2	0.113	0.396	167			0.178	0.025	0.70	0.72	<0.0030	0.60
RSEM-R6W-EOP	4/14/2022 9:35	ARQ065	M	C224815	7.11	582	344	1.0	170	170	87.1	<1.0	106	<1.0	<1.0	27.0	0.111	0.407	166			0.297	0.025	0.70	0.73	<0.0030	1.51
RSEM-R6W-EOP	4/15/2022 13:55	ARQ200	M	C224832	7.66	546	262	2.4	158	163	79.6	<1.0	97.1	<1.0	<1.0	24.9	0.230	0.303	165			0.080	0.0217	0.627	0.649	<0.0030	1.29
RSEM-R6W-EOP	4/16/2022 13:45	ARR879	M	C225206	7.01	518	296	<1.0	169	150	71.5	<1.0	87.3	<1.0	<1.0	23.6	0.101	0.331	139			0.167	0.021	0.64	0.66	<0.0030	1.19
RSEM-R6W-EOP	4/18/2022 13:55	ARU248	M	C225693	6.98	511	376	1.32	171	136	68.1	<1.0	83.0	<1.0	<1.0	23.0	<0.050	0.365	134			0.130	0.019	0.61	0.63	<0.0030	1.28
RSEM-R6W-EOP	4/19/2022 13:40	ARV035	M	C225905	7.09	516	312	1.1	176	138	72.7	<1.0	88.7	<1.0	<1.0	24.1	0.077	0.185	139			0.133	0.020	0.64	0.66	<0.0030	1.11
RSEM-R6W-EOP	4/20/2022 12:35	ARW668	M	C226267	7.08	506	308	1.1	166	142	69.8	<1.0	85.1	<1.0	<1.0	23.4	<0.050	0.302	135			0.145	0.019	0.58	0.60	<0.0030	1.27
RSEM-R6W-EOP	4/21/2022 13:25	ARX707	M	C226546	7.01	566	328	1.1	188	166	75.5	<1.0	92.1	<1.0	<1.0	26.0	<0.050	0.337	158			0.163	0.025	0.64	0.67	<0.0030	1.48
RSEM-R6W-EOP	4/22/2022 11:45	ARX721	M	C226550	6.89	622	388	2.7	192	174	82.6	<1.0	101	<1.0	<1.0	28.3	0.143	0.323	179			0.198	0.029	0.78	0.81	<0.0030	1.62
RSEM-R6W-EOP	4/23/2022 15:30	ARZ186	M	C226855	6.75	623	368	2.78	162	160	81.7	<1.0	99.6	<1.0	<1.0	27.0	0.148	0.383	183			0.183	0.029	0.84	0.87	<0.0030	1.19
RSEM-R6W-EOP	4/24/2022 11:30	ASA417	M	C227083	6.86	630	360	4.50	154	149	73.4	<1.0	89.6	<1.0	<1.0	26.4	0.137	0.362	188			0.206	0.033	0.89	0.93	<0.0030	1.84
RSEM-R6W-EOP	4/25/2022 11:20	ASA413	M	C227083	6.87	564	328	4.0	131	130	98.6	<1.0	120	<1.0	<1.0	23.2	0.117	0.322	164			0.488	0.030	0.81	0.84	<0.0030	0.89
RSEM-R6W-EOP	4/26/2022 11:00	ASD457	M	C227799	6.86	570	344	5.7	131	125	72.5	<1.0	88.4	<1.0	<1.0	23.9	0.125	0.345	171			0.205	0.029	0.83	0.86	<0.0030	1.73
RSEM-R6W-EOP	4/27/2022 12:00	ASH197	M	C228648	7.80	545	340	6.3	133	132	62.2	<1.0	75.9	<1.0	<1.0	23.2	0.107	0.303	161			0.399	0.026	0.76	0.79	<0.0030	1.98
RSEM-R6W-EOP	4/28/2022 12:30	ASH217	M	C228650	7.71	569	332	9.42	139	132	62.6	<1.0	76.3	<1.0	<1.0	23.9	0.117	0.326	170			0.338	0.027	0.80	0.82	<0.0030	1.69
RSEM-R6W-EOP	4/29/2022 10:00	ASH017	M	C228622	7.67	576	320	14.8	133	127	58.9	<1.0	71.9	<1.0	<1.0	24.3	0.123	0.328	174			0.174	0.028	0.84	0.87	<0.0030	1.65
RSEM-R6W-EOP	4/30/2022 12:00	ASL380	M	C229488	7.69	538	292	11.5	131	129	64.5	<1.0	78.7	<1.0	<1.0	23.7	0.107	0.336	161			0.156	0.026	0.73	0.76	<0.0030	1.48
RSEM-R6W-EOP	5/1/2022 11:00	ASL427	M	C229493	7.70	548	320	8.3	138	136	66.5	<1.0	81.1	<1.0	<1.0	24.1	0.114	0.340	163			0.114	0.026	0.72	0.75	<0.0030	1.38
RSEM-R6W-EOP	5/2/2022 11:00	ASL340	M	C229475	7.80	594	328	5.20	147	146	66.7	<1.0	81.3	<1.0	<1.0	25.2	0.126	0.305	175			0.118	0.027	0.72	0.75	<0.0030	1.56
RSEM-R6W-EOP	5/3/2022 14:25	ASO448	M	C230063	7.55	668	408	5.1	180	159	61.8	<1.0	75.3	<1.0	<1.0	27.3	0.280	0.353	215			0.329	0.028	0.69	0.71	<0.0030	2.15
RSEM-R6W-EOP	5/4/2022 12:20	ASP676	M	C230320	7.60	723	452	4.4	188	169	58.4	<1.0	71.3	<1.0	<1.0	29.0	0.176	0.392	246			0.120	0.028	0.70	0.73	<0.0030	1.33
RSEM-R6W-EOP	5/5/2022 11:25	ASR005	M	C230531	7.71	774	484	4.3	169	176	58.3	<1.0	71.1	<1.0	<1.0	29.4	0.158	0.363	256			0.134	0.027	0.67	0.70	<0.0030	1.91
RSEM-R6W-EOP	5/6/2022 10:30	ASR072	M	C230545	7.71	796	492	3.9	199	193	64.0	<1.0	78.1	<1.0	<1.0	30.2	0.144	0.365	264			0.118	0.026	0.63	0.65	<0.0030	1.25
RSEM-R6W-EOP	5/7/2022 11:25	ASS943	M	C230886	7.65	817	476	2.37	204	190	57.1	<1.0	69.6	<1.0	<1.0	31.3	0.196	0.405	271			0.116	0.023	0.59	0.61	0.0035	1.84
RSEM-R6W-EOP	5/8/2022 14:15	ASS885	M	C230861	7.63	823	520	6.9	196	192	61.4	<1.0	74.9	<1.0	<1.0	31.0	0.136	0.382	286			0.108	0.025	0.57	0.59	0.0037	1.49
RSEM-R6W-EOP	5/8/2022 14:25	ASS884	D	C230861	7.60	823	520	6.7	203	187	58.0	<1.0	70.8	<1.0	<1.0	31.0	0.171	0.378	285			0.109	0.025	0.57	0.60	0.0038	1.65
RSEM-R6W-EOP	5/9/2022 13:50	ASV292	M	C231306	7.50	871	568	5.10	196	199	55.4	<1.0	67.6	<1.0	<1.0	33.2	0.406	0.416	291			0.153	0.024	0.54	0.56	<0.0030	2.01
RSEM-R6W-EOP	5/10/2022 11:00	ASX004	M	C231638	7.45	892	568	5.62	205	198	57.2	<1.0	69.8	<1.0	<1.0	34.0	0.186	0.449	308			0.311	0.026	0.55	0.57	0.0035	1.81
RSEM-R6W-EOP	5/11/2022 12:25	ASZ424	M	C232133	7.34	974	636	7.57	216	219	50.4	<1.0	61.5	<1.0	<1.0	37.4	0.234	0.453	338			0.174	0.031	0.49	0.52	<0.0030	1.75
RSEM-R6W-EOP	5/12/2022 14:05	ATA814	M	C232369	7.24	1030	684	4.1	205	199	53.7	<1.0	65.5	<1.0	<1.0	39.7	0.361	0.418	351			0.554	0.030	0.46	0.49	0.0040	1.67
RSEM-R6W-EOP	5/13/2022 11:10	ATB012	M	C232410	7.14	1060	704	3.7	206	203	55.8	<1.0	68.1	<1.0	<1.0	40.4	0.383	0.509	360			0.206	0.032	0.45	0.49	<0.0030	1.64
RSEM-R6W-EOP	5/13/2022 11:20	ATB013	D	C232410	7.31	1060	708	5.7	202	222	54.3	<1.0	66.2	<1.0	<1.0	40.0	0.361	0.642	366			0.206	0.033	0.46	0.49	<0.0030	1.81
RSEM-R6W-EOP	5/14/2022 14:35	ATD059	M	C232817	7.18	1130	736	4.5	203	205	54.5	<1.0	66.5	<1.0	<1.0	41.5	0.686	0.504	391			0.218	0.034	0.47	0.51	0.0032	1.88
RSEM-R6W-EOP	5/15/2022 11:40	ATD051	M	C232812	7.30	1180	748	3.7	199	200	54.4	<1.0	66.3	<1.0	<1.0	41.7	0.706	0.547	418			0.209	0.033	0.47	0.51	<0.0030	2.01
RSEM-R6W-EOP	5/16/2022 10:10	ATC672	M	C232726	7.30	1190	784	3.7	184	209	52.5	<1.0	64.0	<1.0	<1.0	42.0	0.683	0.513	413			0.220	0.034	0.44	0.47	0.0031	1.79
RSEM-R6W-EOP	5/17/2022 12:00	ATH851	M	C233625	7.21	1190	796	3.85	224	198	52.4	<1.0	63.9	<1.0	<1.0	41.3	0.527	0.500	421			0.208	0.031	0.44	0.47	0.0036	2.17
RSEM-R6W-EOP	5/18/2022 12:00	ATJ925	M	C234012	7.21	1240	768	3.3	200	221	49.6	<1.0	60.6	<1.0	<1.0	43.3	0.415	0.540	430			0.323	0.032	0.43	0.46	<0.0030	2.12
RSEM-R6W-EOP	5/19/2022 13:00	ATL911	M	C234314	7.14	1240	824	2.3	201	201	48.7	<1.0	59.4	<1.0	<1.0	39.5	0.403	0.552	421			0.186	0.031	0.49	0.52	<0.0030	1.46
RSEM-R6W-EOP	5/20/2022 10:30	ATL359	M	C234241	7.25	1250	812	1.2	216	204	50.8	<1.0	61.9	<1.0	<1.0	43.8	0.411	0.549	438			0.260	0.031	0.45	0.48	<0.0030	1.99
RSEM-R6W-EOP	5/21/2022 10:30	ATN138	M	C234510	7.75	1250	816	2.8	196	196	50.9	<1.0	62.1	<1.0	<1.0	37.7	0.470	0.565	524			0.290	0.0320	0.556	0.588	<0.0030	2.13
RSEM-R6W-EOP	5/22/2022 15:00	ATO535	M	C234788	7.29	1260	836	2.6	192	185	50.2	<1.0	61.3	<1.0	<1.0	42.9	0.405	0.552	442			0.181	0.029	0.51	0.54	<0.0030	2.11
RSEM-R6W-EOP	5/23/2022 11:00	ATO584	M	C234797	7.32	1260	800	4.81	183	187	50.9	<1.0	62.1	<1.0	<1.0	40.8	0.413	0.584	441			0.340	0.029	0.54	0.57	<0.0030	2.18
RSEM-R6W-EOP	5/24/2022 10:40	ATR510	M	C235358	7.25	1250	816	2.27	198	183	52.0	<1.0	63.4	<1.0	<1.0	44.9	0.415	0.561	494			0.187	0.029	0.57	0.60	0.0215	1.79
RSEM-R6W-EOP	5/25/2022 15:25	ATT369	M	C235730	7.09	1250	828	2.05	206	197	52.3	<1.0	63.8	<1.0	<1.0	42.6	0.372	0.621	458			0.226	0.027	0.59	0.62	<0.0030	2.63
RSEM-R6W-EOP	5/26/2022 15:30	ATV285	M	C236083	7.10	1280	828	2.24	191	181	53.9	<1.0	65.8	<1.0	<1.0	43.2	0.383	0.594	481			0.190	0.032	0.55	0.58	<0.0030	2.23

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
RSEM-R6W-EOP	5/27/2022 13:35	ATV301	M	C236089	7.17	1280	828	3.7	193	178	56.2	<1.0	68.6	<1.0	<1.0	43.4	0.379	0.601	458			0.518	0.028	0.61	0.63	<0.0030	2.28
RSEM-R6W-EOP	5/28/2022 16:30	ATX747	M	C236620	7.08	1260	828	4.4	185	184	55.9	<1.0	68.2	<1.0	<1.0	55.5	0.370	0.798	434			0.212	0.029	0.62	0.65	<0.0030	1.90
RSEM-R6W-EOP	5/29/2022 17:40	ATW969	M	C236421	7.23	1270	860	9.3	203	207	91.2	<1.0	111	<1.0	<1.0	69.2	0.360	0.904	438			0.341	0.029	0.58	0.61	<0.0030	1.72
RSEM-R6W-EOP	5/30/2022 16:25	ATZ466	M	C236894	7.21	1320	852	6.09	206	212	71.3	<1.0	87.0	<1.0	<1.0	67.9	0.383	0.950	435			0.356	0.032	0.50	0.54	0.0050	1.66
RSEM-R6W-EOP	5/31/2022 11:30	AUC336	M	C237377	7.25	1340	872	5.3	211	205	79.6	<1.0	97.1	<1.0	<1.0	65.6	0.400	0.941	450			0.257	0.032	0.57	0.60	0.0039	1.52
RSEM-R6W-EOP	6/1/2022 11:30	AUE681	M	C237797	7.53	1360	852	5.13	211	204	73.5	<1.0	89.7	<1.0	<1.0	64.2	0.413	0.924	467			0.240	0.033	0.61	0.64	<0.0030	1.63
RSEM-R6W-EOP	6/2/2022 10:40	AUH701	M	C238258	7.47	1380	896	4.55	207	194	70.6	<1.0	86.2	<1.0	<1.0	55.8	0.427	0.854	495			0.241	0.032	0.60	0.63	0.0031	2.48
RSEM-R6W-EOP	6/3/2022 13:10	AUH662	M	C238247	7.46	1380	920	4.2	227	195	66.8	<1.0	81.5	<1.0	<1.0	60.7	0.451	0.903	482			0.220	0.030	0.60	0.63	<0.0030	2.10
RSEM-R6W-EOP	6/4/2022 10:25	AUL721	M	C238905	7.50	1410	904	2.21	214	214	87.1	<1.0	106	<1.0	<1.0	59.6	0.469	0.940	468			0.236	0.029	0.59	0.62	<0.0030	2.72
RSEM-R6W-EOP	6/5/2022 11:55	AUM441	M	C238986	7.59	1440	932	2.3	228	217	60.8	<1.0	74.2	<1.0	<1.0	58.4	0.486	0.911	476			0.209	0.029	0.59	0.62	<0.0030	2.05
RSEM-R6W-EOP	6/6/2022 10:50	AUO790	M	C239365	7.43	1450	968	1.4	219	225	61.6	<1.0	75.2	<1.0	<1.0	57.2	0.525	0.998	542			0.185	0.031	0.58	0.61	<0.0030	2.04
RSEM-R6W-EOP	6/7/2022 12:00	AUT413	M	C240162	7.34	1470	984	<1.0	234	215	56.3	<1.0	68.7	<1.0	<1.0	51.9	0.574	0.961	540			0.220	0.032	0.61	0.64	0.0033	2.77
RSEM-R6W-EOP	6/8/2022 13:00	AUT295	M	C240147	7.49	1480	992	<0.96	235	214	54.4	<1.0	66.3	<1.0	<1.0	51.6	0.585	0.974	540			0.154	0.031	0.62	0.66	<0.0030	1.95
RSEM-R6W-EOP	6/9/2022 13:30	AUV206	M	C240504	7.35	1450	992	<0.97	228	219	53.2	<1.0	64.9	<1.0	<1.0	56.5	0.580	0.974	536			0.157	0.027	0.62	0.64	<0.0030	2.15
RSEM-R6W-EOP	6/10/2022 11:00	AUV211	M	C240508	7.49	1460	980	<0.99	235	219	54.2	<1.0	66.2	<1.0	<1.0	52.2	0.569	1.00	548			0.117	0.027	0.65	0.68	0.0147	2.12
RSEM-R6W-EOP	6/11/2022 10:00	AUY735	M	C241062	7.82	1470	964	1.6	227	220	54.5	<1.0	66.5	<1.0	<1.0	57.4	0.571	0.960	568			0.142	0.025	0.55	0.57	<0.0030	2.06
RSEM-R6W-EOP	6/12/2022 10:30	AUY703	M	C241043	7.81	1480	976	1.1	219	220	55.3	<1.0	67.4	<1.0	<1.0	58.6	0.566	0.976	572			0.115	0.029	0.53	0.56	<0.0030	2.21
RSEM-R6W-EOP	6/13/2022 12:00	AVD504	M	C241814	7.93	1490	968	1.36	207	209	60.2	<1.0	73.4	<1.0	<1.0	57.9	0.569	0.948	588			0.078	0.022	0.54	0.57	<0.0030	2.19
RSEM-R6W-EOP	6/14/2022 10:30	AVD543	M	C241829	8.06	1490	1010	<1.0	197	206	58.6	<1.0	71.5	<1.0	<1.0	60.3	0.574	0.906	576			0.066	0.023	0.51	0.54	<0.0030	2.20
RSEM-R6W-EOP	6/15/2022 11:55	AVG248	M	C242252	8.07	1490	1000	<1.0	202	205	59.8	<1.0	72.9	<1.0	<1.0	58.6	0.588	0.995	559			0.066	0.021	0.50	0.52	<0.0030	2.16
RSEM-R6W-EOP	6/16/2022 12:45	AVK123	M	C242788	8.06	1500	1000	2.50	196	220	63.0	<1.0	76.9	<1.0	<1.0	60.8	0.626	0.996	561			0.104	0.018	0.52	0.54	<0.0030	2.64
RSEM-R6W-EOP	6/17/2022 11:35	AVK724	M	C242942	8.07	1510	982	2.8	207	201	59.9	<1.0	73.0	<1.0	<1.0	57.6	0.610	1.01	586			0.049	0.0141	0.409	0.423	<0.0030	2.35
RSEM-R6W-EOP	6/18/2022 12:45	AVL989	M	C243162	7.22	1480	948	1.7	223	219	63.3	<1.0	77.2	<1.0	<1.0	59.5	0.550	1.05	532			0.067	0.020	0.45	0.47	<0.0030	2.24
RSEM-R6W-EOP	6/19/2022 11:50	AVM019	M	C243177	7.78	1470	948	1.88	219	212	64.7	<1.0	78.9	<1.0	<1.0	62.2	0.572	1.05	503			0.061	0.020	0.42	0.44	<0.0030	1.70
RSEM-R6W-EOP	6/20/2022 10:50	AVO965	M	C243664	7.97	1450	972	2.85	203	190	69.6	<1.0	85.0	<1.0	<1.0	62.3	0.580	1.02	531			0.083	0.020	0.43	0.45	<0.0030	2.19
RSEM-R6W-EOP	6/21/2022 11:35	AVQ611	M	C244010	7.96	1450	932	3.05	231	213	65.5	<1.0	79.9	<1.0	<1.0	58.9	0.537	1.02	524			0.061	0.026	0.59	0.62	<0.0030	2.56
RSEM-R6W-EOP	6/22/2022 11:05	AVT153	M	C244412	7.99	1450	972	1.8	241	225	65.2	<1.0	79.5	<1.0	<1.0	58.5	0.545	1.06	554			0.116	0.029	0.71	0.74	<0.0030	2.43
RSEM-R6W-EOP	6/23/2022 11:15	AVV597	M	C244839	7.70	1460	948	2.3	240	254	65.2	<1.0	79.5	<1.0	<1.0	53.6	0.552	1.07	546			0.070	5.3	0.46	5.7	0.0040	3.11
RSEM-R6W-EOP	6/24/2022 11:10	AVV588	M	C244835	7.49	1430	992	2.34	249	268	63.6	<1.0	77.5	<1.0	<1.0	53.0	0.507	0.971	541			0.080	0.042	0.95	1.0	<0.0030	2.07
RSEM-R6W-EOP	6/25/2022 10:40	AVZ707	M	C245512	7.82	1430	960	1.20	268	268	58.0	<1.0	70.7	<1.0	<1.0	48.9	0.470	0.963	551			0.055	0.044	0.97	1.0	<0.0030	9.57
RSEM-R6W-EOP	6/26/2022 10:15	AVZ580	M	C245500	7.81	1400	956	1.17	282	280	55.2	<1.0	67.3	<1.0	<1.0	54.4	0.468	0.925	542			0.054	0.047	1.1	1.2	0.0045	2.98
RSEM-R6W-EOP	6/27/2022 10:25	AVY533	M	C245274	6.83	1370	892	2.22	262	274	52.5	<1.0	64.0	<1.0	<1.0	45.8	0.435	0.888	519			0.048	0.049	1.1	1.2	<0.0030	2.86
RSEM-R6W-EOP	6/28/2022 13:00	AWH753	M	C246896	6.60	1320	916	<1.0	296	264	53.0	<1.0	64.7	<1.0	<1.0	46.9	0.468	0.830	505			0.058	0.043	1.1	1.2	<0.0030	2.69
RSEM-R6W-EOP	6/29/2022 15:00	AWH758	M	C246898	6.57	1300	896	<0.96	298	268	55.9	<1.0	68.2	<1.0	<1.0	45.8	0.446	0.827	488			0.052	0.041	1.2	1.2	<0.0030	3.15
RSEM-R6W-EOP	6/30/2022 13:00	AWH756	M	C246897	6.61	1290	788	1.11	284	263	54.2	<1.0	66.1	<1.0	<1.0	45.2	0.454	0.813	487			0.055	0.039	1.0	1.1	<0.0030	3.00
RSEM-R6W-EOP	7/1/2022 13:00	AWJ894	M	C247203	7.73	1300	902	<1.0	269	279	52.3	<1.0	63.8	<1.0	<1.0	43.8	0.580	0.914	522			0.056	0.0366	1.13	1.16	<0.0030	2.81
RSEM-R6W-EOP	7/2/2022 12:30	AWJ849	M	C247196	7.71	1290	882	<1.0	275	272	52.5	<1.0	64.1	<1.0	<1.0	44.2	0.570	0.808	512			0.047	0.0347	1.09	1.13	<0.0030	2.92
RSEM-R6W-EOP	7/3/2022 11:30	AWM046	M	C247492	6.67	1270	824	<0.99	276	255	55.9	<1.0	68.2	<1.0	<1.0	46.5	0.441	0.806	507			0.342	0.032	1.0	1.0	<0.0030	3.02
RSEM-R6W-EOP	7/4/2022 10:30	AWM516	M	C247552	6.88	1260	840	<0.97	279	282	55.2	<1.0	67.4	<1.0	<1.0	45.9	0.437	0.837	500			0.050	0.031	1.0	1.1	<0.0030	3.61
RSEM-R6W-EOP	7/5/2022 10:10	AWR507	M	C248315	6.80	1240	852	<0.99	264	271	53.8	<1.0	65.7	<1.0	<1.0	42.6	0.360	0.869	476			0.114	0.029	0.89	0.92	<0.0030	3.27
RSEM-R6W-EOP	7/6/2022 14:25	AWV910	M	C249077	7.38	1260	844	1.1	272	259	58.9	<1.0	71.9	<1.0	<1.0	46.9	0.406	0.881	476			0.061	0.033	0.95	0.98	<0.0030	3.26
RSEM-R6W-EOP	7/7/2022 11:55	AWW343	M	C249139	6.90	1260	840	<1.0	277	251	55.9	<1.0	68.2	<1.0	<1.0	47.8	0.408	0.900	483			0.042	0.025	0.91	0.94	<0.0030	3.29
RSEM-R6W-EOP	7/8/2022 11:45	AWW522	M	C249170	6.92	1250	848	<0.98	274	263	60.3	<1.0	73.6	<1.0	<1.0	47.9	0.428	0.978	457			0.089	0.021	0.89	0.91	<0.0030	3.28
RSEM-R6W-EOP	7/9/2022 10:50	AWZ517	M	C249625	6.86	1240	816	1.1	265	279	58.3	<1.0	71.1	<1.0	<1.0	47.0	0.459	0.847	446			0.043	0.017	0.89	0.91	<0.0030	3.46
RSEM-R6W-EOP	7/10/2022 14:20	AWZ487	M	C249617	6.91	1260	832	<0.95	259	249	57.2	<1.0	69.7	<1.0	<1.0	48.0	0.462	0.900	463			0.055	0.013	0.83	0.85	0.0032	3.54
RSEM-R6W-EOP	7/11/2022 12:45	AXC658	M	C250105	6.61	1220	832	4.7	260	255	57.3	<1.0	69.9	<1.0	<1.0	48.1	0.391	0.914	446			0.124	0.020	0.77	0.79	0.0031	4.09
RSEM-R6W-EOP	7/12/2022 12:25	AXE618	M	C250400	7.66	1250	796	1.5	249	244	66.0	<1.0	80.5	<1.0	<1.0	50.2	0.334	0.869	457			0.031	0.023	0.67	0.70	0.0033	4.70
RSEM-R6W-EOP	7/13/2022 11:35	AXH415	M	C250934	6.97	1220	828	2.09	246	246	68.7	<1.0	83.8	<1.0	<1.0	52.9	0.395	0.861	436			0.030	0.022	0.68	0.70	<0.0030	3.20
RSEM-R6W-EOP	7/14/2022 12:30	AXJ119	M	C251290	6.91	1250	816	2.2	250	250	73.3	<1.0	89.4	<1.0	<1.0	56.5	0.397	0.863	439			0.036	0.022	0.69	0.71	<0.0030	3.91
RSEM-R6W-EOP	7/15/2022 13:20	AXJ365	M	C251330	6.99	1240	856	2.06	246	242	84.6	<1.0	103	<1.0	<1.0	54.2	0.325	1.09	440			0.032	0.022	0.69	0.71	<0.0030	4.77
RSEM-R6W-EOP	7/16/2022 11:40	AXN331	M	C251927	6.93	1270	864	2.9	249	252	81.9	<1.0	99.9	<1.0	<1.0	56.5	0.314	1.14	426			0.083	0.022	0.73	0.75	<0.0030	7.69
RSEM-R6W-EOP	7/17/2022 10:50	AXN589	M	C251966	6.97	1290	844	1.92	267	247	84.4	<1.0	103	<1.0	<1.0	58.7	0.331	1.14	438			0.053	0.022	0.72	0.74	<0.0030	7.67
RSEM-R6W-EOP	7/18/2022 14:30	AXQ724	M	C252515	6.86	1290	832	2.72	229	239	84.4	<1.0	103	<1.0	<1.0	61.9	0.285	1.27	418			0.051	0.022	0.76	0.78	<0.0030	2.64
RSEM-R6W-EOP	7/19/2022 12:30	AXQ709	M	C252510	7.06	1300	872	1.84	265	241	88.5	<1.0	108	<1.0	<1.0	64.1	0.285	1.25	402			0.049	0.021	0.75	0.77	<0.0030	2.76
RSEM-R6W-EOP	7/20/2022 14:30	AXX166	M	C253451	7.70	1320	864	2.3	241	231	89.3	<1.0	109	<1.0	<1.0	69.0	0.292	1.26	440			0.052	0.019	0.64	0.66	<0.0030	3.45
RSEM-R6W-EOP	7/21/2022 13:30	AXX155	M	C253447	6.75	1300	876	1.96	233	228	94.7	<1.0	116	<1.0	<1.0	69.9	0.327	1.26	422			0.083	0.016	0.65	0.66	0.0030	3.33
RSEM-R6W-EOP	7/22/2022 10:30	AXX134	M	C253442	7.17	1300	860	<0.96	238	230	97.7	<1.0	119	<1.0	<1.0	69.3	0.322	1.29	435			0.074	0.011	0.65	0.66	0.0051	3.37
RSEM-R6W-EOP	7/23/2022 10:00	AYB214	M	C254120	7.95	1330	852	<1.0	233	216	95.0	<1.0	116	<1.0	<1.0	70.4	0.316	1.26	435			0.079	0.011	0.64	0.65	0.0060	3.58
RSEM-R6W-EOP	7/24/2022 13:30	AYC677	M	C254290	7.70	1270	836	2.9	218	206	101	<1.0	124	<1.0	<1.0	71.2	0.292	1.28	420			0.070	0.016	0.58	0.60	0.0031	3.47
RSEM-R6W-EOP	7/25/2022 9:30	AYC675	M	C254289	7.17	1260	832	2.37	223	208	98.3	<1.0	120	<1.0	<1.0	70.7	0.285	1.27	407			0.054	0.013	0.57	0.58	0.0033	2.78
RSEM-R6W-EOP	7/26/2022 11:25	AYG702	M	C254966	7.66	1290	856	1.6	231	216	96.5	<1.0	118	<1.0	<1.0	77.2	0.310	1.37	429			0.097	0.0061	0.450	0.456	0.0038	2.65
RSEM-R6W-EOP	7/28/2022 12:50	AYM153	M	C255903	8.04	1210	828	<2.8	219	208	96.5	<1.0	118	<1.0	<1.0	65.8	0.260	1.29	395			0.060	0.0121	0.390	0.402	<0.0030	3.84
RSEM-R6W-EOP	7/29/2022 12:30	AYM048	M	C255900	8.09	1220	916	2.8	220	213	106	<1.0	129	<1.0	<1.0	71.1	0.290	1.27	375			0.068	0.0110	0.370	0.381	<0.0030	2.33
RSEM-R6W-EOP	7/30/2022 12:15	AYP672	M	C256352	8.10	1190	850	3.6	211	203	110	<1.0	134	<1.0	<1.0	87.5	0.270	1.06	372			0.082	0.0083	0.338	0.347	<0.0030	2.93
RSEM-R6W-EOP	7/31/2022 12:05	AYO874	M	C256301	7.86	1160	804	2.4	204	194	115	<1.0	140	<1.0	<1.0	88.3	0.270	1.18	356			0.075	0.0090	0.341	0.350	<0.0030	3.13
RSEM-R6W-EOP	8/1/2022 12:05	AYR822	M	C256691	8.10	1150	816	4.0	197	193	123	<1.0	150	<1.0	<1.0	74.5	0.260	1.25	320			0.100	0.0103	0.348	0.358	<0.0030	2.72
RSEM-R6W-EOP	8/2/2022 11:55	AYU378	M	C257067	8.18	1130	754	1.2	198	196	122	<1.0	149	<1.0	<1.0	71.9	0.250	1.27	291			0.063	0.0105	0.364	0.375	<0.0030	2.95
RSEM-R6W-EOP	8/3/2022 12:00	AYX381	M	C257672	8.19	1110	710	4.0	197	189	125	<1.0	153	<1.0	<1.0	81.6	0.260	1.39	288			0.067	0.0130	0.386	0.399	0.0058	2.90

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
RSEM-R6W-EOP	8/4/2022 11:20	AYY904	M	C257848	8.21	1100	670	<1.0	179	171	115	<1.0	140	<1.0	<1.0	86.2	0.250	1.42	283			0.088	0.0145	0.373	0.387	<0.0030	3.43
RSEM-R6W-EOP	8/5/2022 10:20	AYY784	M	C257846	8.21	1110	690	3.6	191	180	118	<1.0	144	<1.0	<1.0	81.0	0.260	1.39	299			0.069	0.0131	0.369	0.382	<0.0030	3.42
RSEM-R6W-EOP	8/6/2022 11:30	AZA356	M	C258076	7.96	1060	614	3.6	168	161	112	<1.0	137	<1.0	<1.0	84.6	0.260	1.61	281			0.060	0.0136	0.380	0.393	<0.0030	2.72
RSEM-R6W-EOP	8/7/2022 12:20	AZC301	M	C258444	8.14	985	600	2.4	159	154	105	<1.0	129	<1.0	<1.0	76.7	0.260	1.51	263			0.059	0.0164	0.388	0.405	<0.0030	2.72
RSEM-R6W-EOP	8/8/2022 16:30	AZK278	M	C259762	8.29	936	596	1.6	171	151	104	<1.0	127	<1.0	<1.0	71.5	0.250	3.18	240			0.035	0.0163	0.423	0.440	<0.0030	2.57
RSEM-R6W-EOP	8/9/2022 13:30	AZK374	M	C259776	8.35	932	624	<1.0	170	151	105	<1.0	128	<1.0	<1.0	69.5	0.260	1.15	235			0.042	0.0129	0.412	0.425	<0.0030	2.42
RSEM-R6W-EOP	8/10/2022 15:30	AZL948	M	C259983	8.14	921	578	1.6	163	160	103	<1.0	126	<1.0	<1.0	70.9	0.250	1.49	232			0.038	0.0102	0.387	0.397	<0.0030	2.84
RSEM-R6W-EOP	8/11/2022 14:00	AZL944	M	C259981	8.05	912	464	<1.0	170	163	104	<1.0	127	<1.0	<1.0	68.4	0.250	3.16	236			0.015	0.0088	0.379	0.387	0.0030	1.87
RSEM-R6W-EOP	8/12/2022 12:30	AZL946	M	C259982	8.08	914	568	1.6	174	159	103	<1.0	126	<1.0	<1.0	67.1	0.250	1.19	229			0.037	0.0075	0.358	0.366	<0.0030	2.66
RSEM-R6W-EOP	8/13/2022 10:30	AZR091	M	C260796	8.00	903	562	<1.0	173	169	102	<1.0	125	<1.0	<1.0	70.5	0.240	1.16	220			0.063	<0.0050	0.362	0.362	<0.0030	2.84
RSEM-R6W-EOP	8/14/2022 15:00	AZR293	M	C260829	7.79	884	548	<1.0	163	172	98.9	<1.0	121	<1.0	<1.0	65.5	0.250	1.15	222			0.034	<0.0050	0.303	0.303	<0.0030	2.43
RSEM-R6W-EOP	8/15/2022 15:00	AZW325	M	C261663	8.08	901	578	<1.0	163	168	103	<1.0	125	<1.0	<1.0	68.3	0.260	1.14	210			0.045	<0.0050	0.358	0.358	0.0036	2.67
RSEM-R6W-EOP	8/16/2022 13:30	AZW501	M	C261690	8.01	885	562	<1.0	172	170	103	<1.0	125	<1.0	<1.0	67.8	0.250	1.29	249			0.059	<0.0050	0.366	0.366	0.0042	2.92
RSEM-R6W-EOP	8/17/2022 14:00	BAA264	M	C262437	8.07	886	604	1.2	171	169	102	<1.0	124	<1.0	<1.0	67.8	0.250	1.15	246			0.068	<0.0050	0.418	0.418	0.0091	2.70
RSEM-R6W-EOP	8/18/2022 13:30	BAA275	M	C262439	8.11	888	612	<1.0	167	169	102	<1.0	124	<1.0	<1.0	67.5	0.240	1.18	243			0.032	0.0060	0.266	0.272	<0.0030	3.11
RSEM-R6W-EOP	8/19/2022 10:30	BAA261	M	C262436	8.01	882	584	<1.0	173	163	101	<1.0	124	<1.0	<1.0	67.4	0.240	1.15	242			0.035	0.0078	0.223	0.231	<0.0030	3.03
RSEM-R6W-EOP	8/20/2022 12:00	BAD641	M	C262969	8.18	880	542	<1.0	170	164	100	<1.0	122	<1.0	<1.0	67.0	0.250	1.26	228			0.036	0.0070	0.220	0.227	<0.0030	2.88
RSEM-R6W-EOP	8/21/2022 11:30	BAD602	M	C262959	8.13	887	546	<1.0	157	161	98.6	<1.0	120	<1.0	<1.0	66.6	0.250	1.24	217			0.035	0.0085	0.222	0.230	<0.0030	2.77
RSEM-R6W-EOP	8/22/2022 14:00	BAG919	M	C263407	8.23	921	592	<1.0	134	151	103	<1.0	125	<1.0	<1.0	66.6	0.260	1.28	242			0.040	0.0089	0.262	0.271	<0.0030	2.98
RSEM-R6W-EOP	8/23/2022 14:30	BAM965	M	C264451	8.11	930	584	<1.0	143	149	103	<1.0	126	<1.0	<1.0	59.6	0.270	1.32	200			0.030	0.0100	0.259	0.269	<0.0030	2.60
RSEM-R6W-EOP	8/24/2022 14:00	BAM916	M	C264441	8.15	947	562	<1.0	136	134	105	<1.0	129	<1.0	<1.0	60.0	0.270	1.25	200			0.050	0.0107	0.268	0.278	<0.0030	2.30
RSEM-R6W-EOP	8/25/2022 15:20	BAO145	M	C264632	8.04	943	570	2.0	143	141	101	<1.0	124	<1.0	<1.0	69.9	0.270	1.32	246			0.040	0.0103	0.278	0.289	<0.0030	3.83
RSEM-R6W-EOP	8/26/2022 7:00	BAO138	M	C264629	8.03	948	572	2.4	139	139	103	<1.0	126	<1.0	<1.0	70.5	0.270	1.33	248			0.029	0.0090	0.283	0.292	<0.0030	2.68
RSEM-R6W-EOP	8/27/2022 13:00	BAR926	M	C265307	7.84	970	566	<1.0	138	130	110	<1.0	134	<1.0	<1.0	70.0	0.280	1.34	246			0.028	0.0058	0.279	0.284	<0.0030	3.12
RSEM-R6W-EOP	8/28/2022 14:30	BAR947	M	C265316	8.15	961	548	1.6	136	124	111	<1.0	135	<1.0	<1.0	70.2	0.280	1.31	247			0.026	0.0117	0.261	0.273	<0.0030	3.37
RSEM-R6W-EOP	8/29/2022 14:00	BAU334	M	C265774	7.87	934	524	1.6	131	125	107	<1.0	130	<1.0	<1.0	66.5	0.280	1.36	228			0.019	0.0069	0.238	0.245	<0.0030	2.75
RSEM-R6W-EOP	8/30/2022 14:00	BBA810	M	C266812	7.75	921	550	2.4	131	130	112	<1.0	136	<1.0	<1.0	65.8	0.270	1.23	220			0.016	<0.0050	0.204	0.204	<0.0030	2.86
RSEM-R6W-EOP	8/31/2022 14:00	BBA807	M	C266810	7.85	907	528	<1.0	130	136	114	<1.0	139	<1.0	<1.0	64.9	0.270	1.23	211			0.039	<0.0050	0.180	0.180	<0.0030	3.05
RSEM-R6W-EOP	9/1/2022 13:30	BBC913	M	C267169	8.23	900	510	1.6	139	135	113	<1.0	138	<1.0	<1.0	63.7	0.260	1.19	213			0.023	<0.0050	0.153	0.153	<0.0030	2.84
RSEM-R6W-EOP	9/2/2022 9:30	BBC921	M	C267172	8.24	886	518	2.4	137	136	111	<1.0	135	<1.0	<1.0	62.7	0.260	1.15	210			0.022	<0.0050	0.145	0.145	<0.0030	2.86
RSEM-R6W-EOP	9/3/2022 15:00	BBE155	M	C267383	7.91	870	524	<1.0	141	134	109	<1.0	133	<1.0	<1.0	61.7	0.270	1.13	203			0.018	<0.0050	0.093	0.093	<0.0030	3.11
RSEM-R6W-EOP	9/4/2022 14:30	BBI405	M	C268301	8.15	882	536	1.6	134	128	110	<1.0	135	<1.0	<1.0	61.1	0.270	1.17	201			<0.015	0.0057	0.091	0.097	<0.0030	2.35
RSEM-R6W-EOP	9/5/2022 13:30	BBI328	M	C268286	8.12	899	540	<1.0	128	124	111	<1.0	135	<1.0	<1.0	62.5	0.270	1.20	207			<0.015	0.0055	0.102	0.108	<0.0030	2.65
RSEM-R6W-EOP	9/6/2022 15:25	BBI319	M	C268280	8.19	919	580	3.2	120	116	113	<1.0	138	<1.0	<1.0	63.4	0.280	1.23	212			0.038	0.0072	0.125	0.133	<0.0030	2.85
RSEM-R6W-EOP	9/7/2022 12:10	BBM324	M	C268788	7.91	911	554	4.4	118	115	111	<1.0	135	<1.0	<1.0	63.5	0.270	1.24	218			0.047	0.0092	0.150	0.159	<0.0030	2.91
RSEM-R6W-EOP	9/8/2022 13:40	BBO446	M	C269143	8.12	937	576	2.0	106	110	110	<1.0	135	<1.0	<1.0	64.5	0.290	1.28	220			0.016	0.0099	0.163	0.173	<0.0030	3.07
RSEM-R6W-EOP	9/9/2022 10:40	BBS002	M	C269764	8.09	940	590	3.2	103	99.2	113	<1.0	138	<1.0	<1.0	64.2	0.290	1.28	222			0.022	0.0128	0.205	0.217	<0.0030	3.10
RSEM-R6W-EOP	9/10/2022 12:40	BBR903	M	C269730	8.12	949	586	2.4	99.2	99.3	115	<1.0	140	<1.0	<1.0	64.5	0.300	1.27	224			0.048	0.0153	0.245	0.260	<0.0030	2.93
RSEM-R6W-EOP	9/11/2022 14:40	BBR960	M	C269754	8.06	965	624	1.6	95.3	95.4	113	<1.0	138	<1.0	<1.0	64.1	0.290	1.25	230			0.040	0.0164	0.261	0.278	<0.0030	2.86
RSEM-R6W-EOP	9/12/2022 12:00	BBU606	M	C270263	8.13	1040	560	2.4	102	96.5	114	<1.0	139	<1.0	<1.0	63.6	0.280	1.21	259			0.021	0.0168	0.291	0.308	<0.0030	2.00
RSEM-R6W-EOP	9/13/2022 14:20	BBX515	M	C270776	8.12	1100	686	4.4	106	107	114	<1.0	139	<1.0	<1.0	62.2	0.280	1.25	284			0.056	0.0165	0.271	0.288	<0.0030	2.48
RSEM-R6W-EOP	9/14/2022 10:25	BBZ916	M	C271275	8.15	1130	688	<1.0	110	116	114	<1.0	139	<1.0	<1.0	64.1	0.290	1.33	290			<0.015	0.0142	0.262	0.277	<0.0030	2.61
RSEM-R6W-EOP	9/15/2022 9:40	BCC125	M	C271667	7.48	1110	696	2.0	111	111	111	<1.0	135	<1.0	<1.0	64.2	0.260	1.23	296			<0.015	0.0101	0.222	0.232	<0.0030	2.33
RSEM-R6W-EOP	9/16/2022 13:00	BCF680	M	C272242	7.57	1130	694	<1.0	121	118	110	<1.0	134	<1.0	<1.0	64.4	0.270	1.29	298			0.018	<0.0050	0.212	0.212	<0.0030	2.96
RSEM-R6W-EOP	9/17/2022 11:30	BCF751	M	C272259	8.09	1130	686	<1.0	119	113	108	<1.0	132	<1.0	<1.0	64.8	0.290	1.27	303			0.022	0.0085	0.200	0.209	<0.0030	2.90
RSEM-R6W-EOP	9/18/2022 11:20	BCF723	M	C272251	8.01	1190	740	<1.0	140	139	111	<1.0	135	<1.0	<1.0	73.1	0.270	1.44	315			0.061	0.0075	0.202	0.210	<0.0030	3.61
RSEM-R6W-EOP	9/19/2022 9:30	BCI769	M	C272683	8.05	1240	832	2.0	133	138	114	<1.0	139	<1.0	<1.0	71.5	0.290	1.27	343			0.030	0.0104	0.192	0.203	<0.0030	2.66
RSEM-R6W-EOP	9/20/2022 15:10	BCL544	M	C273070	8.06	1280	780	3.2	139	144	114	<1.0	139	<1.0	<1.0	69.4	0.260	1.24	350			0.020	0.0117	0.200	0.211	<0.0030	2.80
RSEM-R6W-EOP	9/21/2022 13:30	BCR698	M	C273972	8.14	1280	832	<1.0	154	146	87.7	<1.0	107	<1.0	<1.0	67.3	0.300	1.34	382			0.054	0.0086	0.169	0.178	<0.0030	2.97
RSEM-R6W-EOP	9/22/2022 15:00	BCR615	M	C273969	8.09	1270	822	<1.0	153	152	110	<1.0	134	<1.0	<1.0	64.9	0.290	1.26	386			0.018	0.0078	0.175	0.182	<0.0030	3.25
RSEM-R6W-EOP	9/23/2022 11:30	BCR892	M	C273985	8.11	1280	818	<1.0	167	160	110	<1.0	134	<1.0	<1.0	63.9	0.300	1.24	395			0.021	0.0081	0.175	0.183	<0.0030	2.80
RSEM-R6W-EOP	9/24/2022 10:15	BCV561	M	C274577	7.97	1280	828	<1.0	171	176	104	<1.0	127	<1.0	<1.0	60.8	0.270	1.01	380			0.017	0.0087	0.187	0.195	<0.0030	2.88
RSEM-R6W-EOP	9/25/2022 14:30	BCV620	M	C274593	7.96	1270	828	<1.0	180	186	97.7	<1.0	119	<1.0	<1.0	55.0	0.280	0.92	391			0.073	0.0084	0.172	0.180	<0.0030	2.33
RSEM-R6W-EOP	9/25/2022 14:45	BCV621	D	C274593	7.86	1270	848	<1.0	182	187	96.0	<1.0	117	<1.0	<1.0	58.0	0.280	0.94	381			0.048	0.0086	0.172	0.180	<0.0030	2.26
RSEM-R6W-EOP	9/26/2022 9:30	BCV505	M	C274562	7.97	1270	816	<1.0	187	191	98.0	<1.0	120	<1.0	<1.0	58.3	0.280	1.12	390			<0.015	0.0065	0.159	0.165	<0.0030	2.57
RSEM-R6W-EOP	9/27/2022 10:30	BDB610	M	C275584	7.79	1260	826	2.4	188	196	98.5	<1.0	120	<1.0	<1.0	56.3	0.280	1.07	389			0.026	0.0054	0.139	0.145	<0.0030	1.87
RSEM-R6W-EOP	9/28/2022 10:40	BDE181	M	C276033	8.01	1270	820	<1.0	207	206	100	<1.0	122	<1.0	<1.0	55.9	0.270	0.943	376			0.033	<0.0050	0.113	0.113	<0.0030	2.19
RSEM-R6W-EOP	9/29/2022 10:40	BDH541	M	C276348	6.80	1240	820	<1.0	215	209	115	<1.0	140	<1.0	<1.0	56.7	0.249	0.940	426			0.021	<0.010	0.13	0.13	<0.0030	2.53
RSEM-R6W-EOP	9/30/2022 10:55	BDH544	M	C276348	7.03	1240	812	<1.0	221	212	103	<1.0	126	<1.0	<1.0	56.5	0.255	0.941	432			0.031	<0.010	0.13	0.13	<0.0030	2.60
RSEM-R6W-EOP	10/1/2022 9:50	BDL249	M	C276877	6.89	1260	844	1.0	220	211	99.7	<1.0	122	<1.0	<1.0	55.0	0.311	0.929	427			0.031	<0.010	0.12	0.12	<0.0030	3.36
RSEM-R6W-EOP	10/2/2022 10:25	BDL181	M	C276859	6.67	1190	788	<0.97	226	210	91.1	<1.0	111	<1.0	<1.0	54.1	0.263	0.958	419			<0.015	<0.010	0.13	0.13	<0.0030	2.56
RSEM-R6W-EOP	10/3/2022 10:30	BDP150	M	C277443	6.84	1210	768	<0.99	203	208	106	<1.0	129	<1.0	<1.0	53.3	0.298	0.936	396			0.090	<0.010	0.14	0.14	<0.0030	3.33
RSEM-R6W-EOP	10/4/2022 10:05	BDR436	M	C277814	6.53	1180	792	<0.99	205	206	100	<1.0	122	<1.0	<1.0	53.9	0.270	0.916	393			0.019	<0.010	0.12	0.12	<0.0030	2.21
RSEM-R6W-EOP	10/4/2022 10:15	BDR437	D	C277814	6.61	1190	804	1.0	209	205	99.8	<1.0	122	<1.0	<1.0	53.8	0.254	0.964	394			0.089	<0.010	0.11	0.11	<0.0030	3.03
RSEM-R6W-EOP	10/5/2022 10:55	BDV021	M	C278393	6.72	1150	752	<1.0	199	203	100	<1.0	122	<1.0	<1.0	52.5	0.259	0.944	393			0.050	<0.010	0.13	0.13	<0.0030	2.80
RSEM-R6W-EOP	10/6/2022 10:50	BDZ971	M	C278888	6.92	1120	716	<1.0	197	205	111	<1.0	135	<1.0	<1.0	55.0	0.251	1.01	374			0.050	<0.010	0.18	0.18	<0.0030	2.65
RSEM-R6W-EOP	10/6/2022 11:00	BDZ973	D	C278888	6.88	1150	744	1.9	209	206	89.6	<1.0	109	<1.0	<1.0	54.4	0.224	0.970	367			0.066	0.010	0.16	0.17	<0.0030	2.72
RSEM-R6W-EOP	10/7/2022 12:10	BEA026	M	C278893	6.97	1110	740	<0.97	206	205	102	<1.0	124	<1.0	<1.0	54.4	0.232	1.01	359			0.018	<0.010	0.21	0.21	<0.0030	3.15
RSEM-R6W-EOP	10/8/2022 10:25	BED964	M	C279402	7.90	1100	720	<1.0	209	214	97.0	<1.0	118	<1.0	<1.0	54.7	0.228	0.990	341			0.039	0.012	0.22	0.23	<0.0030	2.52

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
RSEM-R6W-EOP	10/9/2022 9:45	BED926	M	C279394	7.87	1090	708	<1.0	215	222	106	<1.0	129	<1.0	<1.0	54.2	0.222	0.957	317			0.082	<0.010	0.22	0.22	<0.0030	2.48
RSEM-R6W-EOP	10/10/2022 10:05	BED793	M	C279368	8.03	1100	724	<0.97	226	232	114	<1.0	140	<1.0	<1.0	54.7	0.221	1.05	317			0.128	0.011	0.30	0.31	<0.0030	2.67
RSEM-R6W-EOP	10/11/2022 12:30	BEK436	M	C280406	7.02	1100	744	<1.0	230	232	127	<1.0	155	<1.0	<1.0	57.0	0.223	0.997	314			<0.015	<0.010	0.30	0.30	<0.0030	1.4
RSEM-R6W-EOP	10/12/2022 14:45	BEK646	M	C280448	7.22	1100	716	1.1	232	229	126	<1.0	154	<1.0	<1.0	56.2	0.229	1.04	320			<0.015	<0.010	0.29	0.29	<0.0030	3.65
RSEM-R6W-EOP	10/13/2022 13:15	BEN618	M	C280837	7.15	1120	708	<0.99	246	241	139	<1.0	170	<1.0	<1.0	57.3	0.240	1.02	325			0.017	<0.010	0.31	0.31	<0.0030	3.36
RSEM-R6W-EOP	10/14/2022 11:45	BEN600	M	C280833	7.06	1120	744	<0.97	252	246	128	<1.0	156	<1.0	<1.0	57.8	0.236	0.959	324			<0.015	<0.010	0.30	0.30	<0.0030	2.46
RSEM-R6W-EOP	10/15/2022 13:45	BER008	M	C281389	7.39	1150	804	<1.0	253	260	145	<1.0	177	<1.0	<1.0	56.4	0.234	1.09	311			<0.015	<0.010	0.30	0.30	<0.0030	2.36
RSEM-R6W-EOP	10/16/2022 15:45	BER095	M	C281399	7.38	1150	716	<0.99	296	263	149	<1.0	181	<1.0	<1.0	56.2	0.233	1.10	313			<0.015	<0.010	0.29	0.29	<0.0030	1.01
RSEM-R6W-EOP	10/16/2022 16:00	BER097	D	C281399	7.55	1150	752	<1.0	263	265	143	<1.0	175	<1.0	<1.0	51.9	0.231	1.10	340			<0.015	<0.010	0.31	0.31	<0.0030	2.50
RSEM-R6W-EOP	10/17/2022 11:30	BER151	M	C281421	7.29	1150	768	<1.0	265	269	149	<1.0	182	<1.0	<1.0	56.0	0.230	1.10	337			0.047	<0.010	0.27	0.27	0.0046	3.50
RSEM-R6W-EOP	10/18/2022 9:40	BEX620	M	C282315	7.44	1160	772	<1.0	266	262	156	<1.0	191	<1.0	<1.0	58.1	0.227	1.04	350			<0.015	<0.010	0.27	0.27	0.0033	1.88
RSEM-R6W-EOP	10/19/2022 12:50	BFA348	M	C282741	8.00	1160	752	<1.0	279	262	140	<1.0	171	<1.0	<1.0	56.3	0.235	1.09	349			0.021	<0.010	0.24	0.24	<0.0030	2.49
RSEM-R6W-EOP	10/20/2022 10:10	BFD237	M	C283174	7.86	1160	756	4.29	276	277	148	<1.0	181	<1.0	<1.0	56.9	0.235	1.09	351			<0.015	<0.010	0.26	0.26	<0.0030	2.74
RSEM-R6W-EOP	10/21/2022 10:20	BFD224	M	C283172	7.86	1150	768	<1.0	266	280	141	<1.0	173	<1.0	<1.0	54.5	0.235	0.940	345			0.015	<0.010	0.28	0.28	<0.0030	2.66
RSEM-R6W-EOP	10/22/2022 11:40	BFI044	M	C283756	7.85	1120	724	<1.0	291	270	144	<1.0	175	<1.0	<1.0	54.0	0.230	0.934	332			<0.015	<0.0050	0.283	0.283	0.0034	2.54
RSEM-R6W-EOP	10/23/2022 10:25	BFI229	M	C283774	7.78	1070	692	<1.0	283	277	159	<1.0	194	<1.0	<1.0	50.1	0.214	0.881	318			0.017	0.015	0.354	0.368	0.0034	2.29
RSEM-R6W-EOP	10/24/2022 9:55	BFL670	M	C284145	7.93	1040	696	<0.99	270	275	165	<1.0	202	<1.0	<1.0	47.4	0.214	0.838	311			0.032	0.010	0.394	0.405	0.0034	1.97
RSEM-R6W-EOP	10/25/2022 10:55	BFP708	M	C284665	7.93	984	664	<0.96	287	271	169	<1.0	206	<1.0	<1.0	42.3	0.197	0.774	279			0.039	<0.010	0.464	0.464	0.0032	1.92
RSEM-R6W-EOP	10/26/2022 12:40	BFS035	M	C285038	8.00	935	596	<1.0	268	267	173	<1.0	211	<1.0	<1.0	39.7	0.205	0.736	254			0.028	<0.010	0.560	0.560	<0.0030	2.46
RSEM-R6W-EOP	10/27/2022 10:25	BFU907	M	C285466	8.02	925	580	<1.0	280	267	165	<1.0	202	<1.0	<1.0	38.0	0.206	0.724	253			<0.015	<0.010	0.524	0.524	<0.0030	1.94
RSEM-R6W-EOP	10/28/2022 11:40	BFU722	M	C285458	8.11	884	544	<0.97	263	277	183	<1.0	223	<1.0	<1.0	33.7	0.209	0.650	227			0.028	<0.010	0.572	0.572	<0.0030	2.03
RSEM-R6W-EOP	10/29/2022 9:55	BFZ654	M	C286199	8.28	847	556	<0.97	265	259	182	<1.0	222	<1.0	<1.0	31.4	0.210	0.611	209			0.015	<0.010	0.491	0.491	0.0031	2.05
RSEM-R6W-EOP	10/30/2022 11:30	BFZ646	M	C286196	8.34	830	512	1.5	271	254	183	<1.0	223	<1.0	<1.0	29.5	0.215	0.588	207			<0.015	<0.0050	0.689	0.689	0.0032	1.57
RSEM-R6W-EOP	10/31/2022 11:10	BGA236	M	C286288	8.12	765	516	<1.0	252	253	177	<1.0	216	<1.0	<1.0	26.3	0.190	0.492	192			0.016	<0.010	0.561	0.561	0.0032	2.27
RSEM-R6W-EOP	11/1/2022 15:35	BGE764	M	C286877	7.86	761	496	1.17	271	263	180	<1.0	220	<1.0	<1.0	25.1	0.197	0.464	186			0.016	0.013	0.68	0.69	0.0033	1.73
RSEM-R6W-EOP	11/1/2022 15:55	BGE765	D	C286877	7.91	758	500	1.10	271	259	181	<1.0	221	<1.0	<1.0	24.9	0.196	0.462	191			<0.015	0.013	0.71	0.72	0.0033	1.60
RSEM-R6W-EOP	11/2/2022 12:45	BGJ736	M	C287754	7.73	746	484	1.32	258	263	183	<1.0	223	<1.0	<1.0	22.2	0.191	0.417	178			0.024	0.013	0.93	0.94	<0.0030	1.78
RSEM-R6W-EOP	11/3/2022 14:15	BGJ744	M	C287759	8.01	736	572	<0.99	270	260	184	<1.0	224	<1.0	<1.0	22.0	0.190	0.394	176			0.017	0.014	0.81	0.83	<0.0030	1.72
RSEM-R6W-EOP	11/4/2022 11:15	BGJ739	M	C287756	7.71	717	420	<0.99	264	257	188	<1.0	229	<1.0	<1.0	19.7	0.188	0.360	166			<0.015	0.012	0.63	0.64	<0.0030	1.78
RSEM-R6W-EOP	11/5/2022 13:45	BGO363	M	C288361	7.96	658	360	1.64	237	243	185	<1.0	225	<1.0	<1.0	15.9	0.177	0.287	143			<0.015	0.011	0.94	0.95	<0.0030	3.52
RSEM-R6W-EOP	11/6/2022 14:45	BGO252	M	C288323	7.90	619	436	2.01	237	232	180	<1.0	220	<1.0	<1.0	13.2	0.168	0.303	130			<0.015	0.011	0.84	0.85	<0.0030	2.16
RSEM-R6W-EOP	11/7/2022 10:15	BGO320	M	C288345	8.13	609	332	1.47	238	232	183	<1.0	223	<1.0	<1.0	12.2	0.172		117			<0.015	0.011	0.86	0.87	0.0033	2.19
RSEM-R6W-EOP	11/8/2022 10:40	BGT301	M	C289111	7.80	570	360	2.0	228	228	178	<1.0	217	<1.0	<1.0	11.5	0.162	0.193	116			0.064	<0.010	0.73	0.73	<0.0030	2.02
RSEM-R6W-EOP	11/9/2022 11:00	BGW284	M	C289508	7.93	565	372	2.63	230	224	179	<1.0	219	<1.0	<1.0	10.3	0.168	0.174	112			<0.015	<0.010	0.80	0.80	0.0036	1.81
RSEM-R6W-EOP	11/10/2022 11:00	BGV716	M	C289423	7.93	554	356	3.3	232	218	176	<1.0	215	<1.0	<1.0	9.25	0.167	0.176	103			<0.015	<0.010	0.78	0.78	0.0032	2.16
RSEM-R6W-EOP	11/11/2022 11:10	BHA034	M	C290104	7.73	537	300	3.1	227	215	160	<1.0	195	<1.0	<1.0	9.36	0.182	0.159	101			<0.015	<0.010	0.77	0.77	0.0031	1.81
RSEM-R6W-EOP	11/12/2022 10:40	BHA062	M	C290112	7.76	524	372	3.7	234	209	162	<1.0	198	<1.0	<1.0	8.42	0.179	0.143	98.7			<0.015	<0.010	0.81	0.81	0.0030	2.37
RSEM-R6W-EOP	11/13/2022 11:20	BHA078	M	C290117	7.82	517	348	2.8	214	206	168	<1.0	205	<1.0	<1.0	7.75	0.183	0.137	94.1			<0.015	<0.010	0.78	0.78	0.0032	1.87
RSEM-R6W-EOP	11/14/2022 11:00	BHC287	M	C290544	8.26	467	336	2.2	259	215	179	<1.0	219	<1.0	<1.0	7.97	0.207	0.149	90.0			<0.015	<0.010	0.55	0.55	<0.0030	2.30
RSEM-R6W-EOP	11/15/2022 11:10	BHD952	M	C290817	7.85	492	324	3.3	266	223	164	<1.0	200	<1.0	<1.0	7.64	0.184	0.151	89.0			<0.015	<0.010	0.52	0.52	<0.0030	1.42
RSEM-R6W-EOP	11/16/2022 12:20	BHF926	M	C291159	7.75	492	320	2.7	221	235	163	<1.0	199	<1.0	<1.0	8.89	0.164	0.132	92.1			<0.015	<0.010	0.54	0.54	<0.0030	1.40
RSEM-R6W-EOP	11/17/2022 12:10	BHH896	M	C291494	7.84	502	308	1.7	232	208	165	<1.0	202	<1.0	<1.0	8.23	0.168	0.126	87.9			<0.015	<0.010	0.50	0.50	0.0033	2.03
RSEM-R6W-EOP	11/18/2022 11:10	BHI800	M	C291574	7.89	502	300	2.1	240	210	164	<1.0	200	<1.0	<1.0	8.60	0.169	0.201	92.7			<0.015	<0.010	0.52	0.52	<0.0030	2.10
RSEM-R6W-EOP	11/19/2022 12:20	BHL412	M	C291899	7.91	496	316	2.1	208	203	155	<1.0	189	<1.0	<1.0	7.64	0.162	0.195	88.5			<0.015	<0.010	0.50	0.50	<0.0030	1.84
RSEM-R6W-EOP	11/20/2022 11:40	BHL417	M	C291901	8.01	478	328	3.03	214	201	166	<1.0	203	<1.0	<1.0	7.54	0.175	0.191	85.9			<0.015	<0.010	0.50	0.50	<0.0030	1.69
RSEM-R6W-EOP	11/21/2022 11:25	BHL421	M	C291903	8.00	471	300	2.72	208	199	163	<1.0	199	<1.0	<1.0	6.63	0.180	0.187	85.7			<0.015	<0.010	0.48	0.48	<0.0030	1.28
RSEM-R6W-EOP	11/22/2022 12:39	BHR289	M	C292931	7.97	478	276	2.9	231	200	159	<1.0	194	<1.0	<1.0	7.36	0.121	0.109	83.7			<0.015	<0.010	0.42	0.42	<0.0030	1.13
RSEM-R6W-EOP	11/23/2022 15:30	BHR240	M	C292918	7.99	471	272	3.1	223	199	161	<1.0	196	<1.0	<1.0	6.26	0.136	0.107	80.2			<0.015	<0.010	0.43	0.43	<0.0030	1.20
RSEM-R6W-EOP	11/24/2022 14:00	BHS969	M	C293245	7.97	468	276	4.4	214	201	156	<1.0	191	<1.0	<1.0	6.79	0.130	0.118	79.3			<0.015	<0.010	0.48	0.48	<0.0030	1.54
RSEM-R6W-EOP	11/25/2022 10:45	BHS973	M	C293246	7.84	459	272	1.60	207	199	156	<1.0	190	<1.0	<1.0	5.85	0.119	0.108	77.8			<0.015	<0.010	0.42	0.42	<0.0030	1.55
RSEM-R6W-EOP	11/26/2022 12:15	BHX192	M	C293769	7.83	456	292	1.18	217	193	148	<1.0	181	<1.0	<1.0	7.02	0.147	0.112	77.2			0.019	<0.010	0.45	0.45	<0.0030	1.56
RSEM-R6W-EOP	11/27/2022 13:45	BHX164	M	C293759	7.82	452	276	2.3	229	194	157	<1.0	191	<1.0	<1.0	7.18	0.147	0.107	77.4			0.016	<0.010	0.41	0.41	<0.0030	1.61
RSEM-R6W-EOP	11/28/2022 10:15	BHX166	M	C293760	7.80	454	276	2.8	226	190	157	<1.0	192	<1.0	<1.0	6.79	0.147	0.101	78.6			0.073	<0.010	0.42	0.42	<0.0030	1.54
RSEM-R6W-EOP	11/28/2022 10:30	BHX167	D	C293760	7.85	455	276	2.0	219	193	152	<1.0	186	<1.0	<1.0	6.57	0.148	0.103	77.6			0.016	<0.010	0.42	0.42	<0.0030	1.54
RSEM-R6W-EOP	11/29/2022 10:05	BIA658	M	C294441	7.84	471	292	3.1	222	204	158	<1.0	193	<1.0	<1.0	6.82	0.161	0.103	79.6			0.026	<0.010	0.42	0.42	<0.0030	2.15
RSEM-R6W-EOP	11/30/2022 10:50	BID442	M	C294835	7.84	471	304	2.1	217	207	161	<1.0	196	<1.0	<1.0	5.93	0.167	0.080	80.5			0.032	<0.010	0.42	0.42	0.0034	1.82
RSEM-R6W-EOP	11/30/2022 11:00	BID443	D	C294835	7.89	473	312	2.0	222	206	163	<1.0	198	<1.0	<1.0	6.11	0.165	0.068	81.4			0.022	<0.010	0.44	0.44	0.0040	1.25
RSEM-R6W-EOP	12/1/2022 11:20	BIF877	M	C295196	7.95	483	292	2.3	230	213	171	<1.0	208	<1.0	<1.0	3.71	0.186	0.090	78.8			0.018	<0.010	0.43	0.43	0.0042	1.81
RSEM-R6W-EOP	12/2/2022 10:50	BIF818	M	C295193	8.02	485	288	2.05	225	220	170	<1.0	208	<1.0	<1.0	3.40	0.188	0.086	83.7			0.016	<0.010	0.41	0.41	0.0043	1.41
RSEM-R6W-EOP	12/3/2022 10:45	BII772	M	C295634	7.89	483	324	1.3	220	206	169	<1.0	206	<1.0	<1.0	3.13	0.199	0.088	80.0			0.023	<0.010	0.44	0.44	0.0038	1.74
RSEM-R6W-EOP	12/3/2022 10:55	BII773	D	C295634	7.78	481	320	2.3	222	204	170	<1.0	207	<1.0	<1.0	3.57	0.193	0.089	81.9			0.025	<0.010	0.47	0.47	0.0037	1.55
RSEM-R6W-EOP	12/4/2022 10:45	BII770	M	C295633	8.06	474	320	1.0	216	203	167	<1.0	204	<1.0	<1.0	3.28	0.188	0.084	77.4			0.020	<0.010	0.45	0.45	0.0058	2.10
RSEM-R6W-EOP	12/5/2022 12:30	BIL940	M	C296047	8.07	475	312	2.47	211	209	167	<1.0	204	<1.0	<1.0	6.66	0.163	0.057	78.0			0.018	<0.010	0.42	0.42	0.0040	1.47
RSEM-R6W-EOP	12/6/2022 10:30	BIO857	M	C296487	7.80	475	292	2.04	225	220	167	<1.0	204	<1.0	<1.0	5.72	0.166	0.047	76.9			<0.015	<0.050	<2.0	<2.0	0.0038	1.30
RSEM-R6W-EOP	12/7/2022 11:35	BIR864	M	C297052	7.90	484	312	1.9	223	227	167	<1.0	203	<1.0	<1.0	6.02	0.192	0.052	84.2			0.021	<0.010	0.49	0.49	0.0039	1.32
RSEM-R6W-EOP	12/7/2022 11:45	BIR865	D	C297052	7.93	483	324	1.1	231	226	167	<1.0	204	<1.0	<1.0	6.25	0.191	0.052	83.5			0.020	<0.010	0.49	0.49	0.0040	1.31
RSEM-R6W-EOP	12/8/2022 16:10	BIT646	M	C297337	7.94	496	316	1.6	220	229	169	<1.0	207	<1.0	<1.0	6.75	0.195	0.056	88.0			<0.015	<0.010	0.51	0.51	0.0043	1.22
RSEM-R6W-EOP	12/9/2022 11:10	BIT658	M	C297341	7.71	498	332	<1.0	227	231	170	<1.0	207	<1.0	<1.0	6.06	0.200	0.055	84.4			<0.015	<0.010	0.48	0.48	0.0043	1.33

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	pH-lab	Conductivity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	T-S2-	H2S	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4	TOC
					pH	uS/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
RSEM-R6W-EOP	12/10/2022 11:50	BIX265	M	C297760	7.61	494	324	2.1	219	215	159	<1.0	194	<1.0	<1.0	6.16	0.195	0.053	84.1			0.022	<0.010	0.47	0.47	0.0033	1.01
RSEM-R6W-EOP	12/10/2022 12:00	BIX266	D	C297760	7.70	496	316	<1.0	223	216	171	<1.0	209	<1.0	<1.0	6.70	0.199	0.052	84.7			0.021	<0.010	0.47	0.47	0.0033	1.08
RSEM-R6W-EOP	12/11/2022 15:30	BIX268	M	C297761	7.70	496	312	2.5	228	215	172	<1.0	210	<1.0	<1.0	7.04	0.201	0.080	82.3			0.021	<0.010	0.47	0.47	0.0031	1.27
RSEM-R6W-EOP	12/12/2022 10:15	BIX294	M	C297767	7.66	494	308	1.8	230	216	170	<1.0	208	<1.0	<1.0	6.38	0.203	0.078	83.9			0.023	<0.010	0.46	0.46	0.0030	1.02
RSEM-R6W-EOP	12/13/2022 12:30	BJH803	M	C299400	7.97	499	276	2.6	223	216	172	<1.0	210	<1.0	<1.0	6.08	0.187	0.193	86.2			0.028	<0.010	0.42	0.42	0.0039	0.87
RSEM-R6W-EOP	12/14/2022 13:15	BJH809	M	C299405	7.95	493	280	3.4	206	212	169	<1.0	206	<1.0	<1.0	5.19	0.183	0.056	82.1			0.023	<0.010	0.46	0.46	0.0033	1.13
RSEM-R6W-EOP	12/14/2022 13:30	BJH810	D	C299405	7.78	482	264	5.10	208	215	161	<1.0	196	<1.0	<1.0	6.14	0.195	0.056	80.9			0.022	<0.010	0.47	0.47	0.0035	0.98
RSEM-R6W-EOP	12/15/2022 13:00	BJJ047	M	C299557	7.98	483	268	1.6	217	211	165	<1.0	201	<1.0	<1.0	5.41	0.201	0.175	80.2			<0.015	<0.010	0.44	0.44	0.0038	1.20
RSEM-R6W-EOP	12/16/2022 10:30	BJJ051	M	C299559	8.10	484	292	2.5	222	206	167	<1.0	204	<1.0	<1.0	5.80	0.204	0.177	78.0			<0.015	<0.010	0.45	0.45	0.0041	1.27
RSEM-R6W-EOP	12/17/2022 13:00	BJL794	M	C299939	8.04	492	280	1.1	213	213	170	<1.0	208	<1.0	<1.0	6.03	0.200	0.286	80.7			0.030	<0.010	0.44	0.44	0.0040	1.37
RSEM-R6W-EOP	12/18/2022 13:15	BJL804	M	C299943	7.95	497	288	1.19	224	216	170	<1.0	208	<1.0	<1.0	6.31	0.197	0.051	82.3			0.021	<0.010	0.44	0.44	0.0039	1.27
RSEM-R6W-EOP	12/19/2022 11:00	BJL813	M	C299950	7.83	502	288	1.3	231	216	169	<1.0	206	<1.0	<1.0	6.39	0.194	0.042	83.5			0.022	<0.010	0.46	0.46	0.0041	1.32
RSEM-R6W-EOP	12/20/2022 10:00	BJP134	M	C2A0603	7.92	502	312	2.17	215	219	171	<1.0	209	<1.0	<1.0	6.34	0.197	0.078	83.1			0.015	<0.010	0.47	0.47	0.0034	1.10
RSEM-R6W-EOP	12/21/2022 10:30	BJP447	M	C2A0675	7.92	493	316	1.9	228	222	175	<1.0	213	<1.0	<1.0	6.70	0.234	0.229	83.2			0.018	<0.010	0.47	0.47	0.0034	1.21
RSEM-R6W-EOP	12/21/2022 10:40	BJP448	D	C2A0675	7.82	489	320	2.7	218	221	170	<1.0	207	<1.0	<1.0	6.85	0.231	0.246	82.1			0.027	<0.010	0.48	0.48	0.0046	1.18
RSEM-R6W-EOP	12/22/2022 12:35	BJQ104	M	C2A0818	7.86	493	308	3.6	242	211	172	<1.0	210	<1.0	<1.0	6.54	<0.050	0.225	83.6			<0.015	<0.010	0.45	0.45	0.0044	1.11
RSEM-R6W-EOP	12/23/2022 11:25	BJQ106	M	C2A0819	7.91	498	292	4.4	222	210	177	<1.0	216	<1.0	<1.0	7.51	<0.050	0.253	83.1			<0.015	<0.010	0.43	0.43	<0.0030	0.92
RSEM-R6W-EOP	12/24/2022 12:30	BJR122	M	C2A1052	8.01	531	310	2.8	227	223	177	<1.0	216	<1.0	<1.0	8.18	0.230	0.137	72.5			0.024	<0.0050	0.431	0.431	<0.0030	1.35
RSEM-R6W-EOP	12/24/2022 12:40	BJR121	D	C2A1052	8.07	527	314	<1.0	231	225	177	<1.0	216	<1.0	<1.0	7.41	0.200	0.124	72.3			0.020	<0.0050	0.434	0.434	<0.0030	1.18
RSEM-R6W-EOP	12/25/2022 10:55	BJR129	M	C2A1055	8.06	525	308	<1.0	227	225	178	<1.0	217	<1.0	<1.0	7.58	0.230	0.124	72.7			<0.015	0.0052	0.430	0.436	<0.0030	1.27
RSEM-R6W-EOP	12/26/2022 8:05	BJR178	M	C2A1058	7.89	523	304	<1.0	226	225	176	<1.0	214	<1.0	<1.0	7.59	0.230	0.129	72.1			0.021	<0.0050	0.426	0.426	<0.0030	1.20
RSEM-R6W-EOP	12/27/2022 13:00	BJS997	M	C2A1469	7.72	513	320	1.9	234	219	182	<1.0	222	<1.0	<1.0	9.02	0.234	0.189	78.1			0.032	<0.010	0.43	0.43	0.0042	1.27
RSEM-R6W-EOP	12/28/2022 12:00	BJS998	M	C2A1470	7.73	515	328	<1.0	225	219	175	<1.0	214	<1.0	<1.0	9.50	0.226	0.147	77.5			0.029	<0.010	0.48	0.48	0.0048	1.03
RSEM-R6W-EOP	12/29/2022 14:00	BJT907	M	C2A1753	7.83	521	320	1.8	231	217	181	<1.0	221	<1.0	<1.0	10.5	0.207	0.212	79.0			0.056	<0.010	0.41	0.41	0.0031	0.93
RSEM-R6W-EOP	12/29/2022 14:15	BJT908	D	C2A1753	7.93	522	320	1.8	231	220	181	<1.0	221	<1.0	<1.0	10.5	0.211	0.209	78.6			0.055	<0.010	0.40	0.40	0.0033	1.58
RSEM-R6W-EOP	12/30/2022 10:30	BJT902	M	C2A1751	7.73	532	324	1.5	246	227	180	<1.0	219	<1.0	<1.0	11.1	0.202	0.230	81.4			0.078	<0.010	0.39	0.39	0.0036	1.92
RSEM-R6W-EOP	12/31/2022 13:00	BJU301	M	C300112	7.90	557	360	2.4	221	229	187	<1.0	228	<1.0	<1.0	11.4	0.220	0.163	75.9			0.070	0.0070	0.411	0.418	<0.0030	1.52
RSEM-R6-WP-IN	1/10/2022 9:50	FJ2200044-002	M	FJ2200044	6.81	791	523	3.4	185	170	184	<1.0	224	<1.0	<1.0	40.5	0.234	0.457	174			0.177	0.0309	0.503	0.534	0.0011	3.36
RSEM-R6-WP-IN	5/13/2022 11:50	ATB015	M	C232410	7.38	1070	696	8.5	218	224	57.3	<1.0	69.9	<1.0	<1.0	40.4	0.367	0.463	364			0.108	0.027	0.39	0.42	<0.0030	2.10
RSEM-R6W-SP	1/7/2022 13:15	FJ2200035-003	M	FJ2200035	6.99	852	510	18.6	194	211	196	<1.0	240	<1.0	<1.0	43.4	0.247	0.512	190			0.224	0.0346	0.520		0.0075	4.64
RSEM-R6W-SP	1/10/2022 10:30	FJ2200044-003	M	FJ2200044	7.27	887	554	4.1	197	188	244	<1.0	297	<1.0	<1.0	43.9	0.234	0.512	198			0.212	0.0382	0.543	0.581	<0.0010	3.78
RSEM-R6W-SP	1/11/2022 17:00	FJ2200088-001	M	FJ2200088	7.79	789	473	6.2	179	180	172	<1.0	210	<1.0	<1.0	39.7	0.226	0.460	173			0.214	0.0296	0.471	0.501	<0.0010	2.65
RSEM-R6W-SP	1/18/2022 11:20	FJ2200122-001	M	FJ2200122	8.01	803	462	13.1	165	159	142	<1.0	174	<1.0	<1.0	45.2	0.234	0.532	184			0.240	0.0273	0.463	0.490	<0.0010	429
RSEM-R6W-SP	1/19/2022 12:00	FJ2200185-001	M	FJ2200185	7.92	812	485	7.9	184	170	153	<1.0	187	<1.0	<1.0	45.8	0.272	0.535	186			0.241	0.0286	0.469	0.498	<0.0010	2.76
RSEM-R6W-SP	2/1/2022 16:00	AOB116	M	C207120	7.97	799	488	11.7	190	173	115	<1.0	140	<1.0	<1.0	41.3	0.181	0.498	222			0.216	0.043	0.55	0.59	<0.0030	2.83
RSEM-R6W-SP	2/2/2022 12:00	AOB073	M	C207109	7.93	805	512	6.09	195	188	113	<1.0	138	<1.0	<1.0	47.0	0.193	0.510	235			0.212	0.043	0.55	0.60	0.0031	2.31
RSEM-R6W-SP	2/3/2022 12:00	AOC177	M	C207302	6.99	820	516	9.7	198	175	121	<1.0	148	<1.0	<1.0	47.0	0.292	0.515	219			0.200	0.043	0.52	0.57	0.0034	2.95
RSEM-R6W-SP	2/4/2022 11:00	AOC181	M	C207304	7.01	827	512	9.0	210	203	130	<1.0	159	<1.0	<1.0	48.0	0.285	0.549	223			0.225	0.042	0.51	0.56	<0.0030	2.55
RSEM-R6W-SP	2/5/2022 10:00	AOE502	M	C207630	6.96	831	536	9.4	213	191	135	<1.0	165	<1.0	<1.0	48.6	0.286	0.542	221			0.233	0.042	0.59	0.64	<0.0030	2.52
RSEM-R6W-SP	2/6/2022 13:00	AOE484	M	C207624	6.91	843	536	6.82	215	197	134	<1.0	163	<1.0	<1.0	48.5	0.289	0.548	223			0.223	0.042	0.59	0.64	<0.0030	2.33
RSEM-R6W-SP	3/2/2022 13:30	APO714	M	C213881	7.23	545	348	4.9	175	168	52.5	<1.0	64.1	<1.0	<1.0	18.7	0.189	0.188	187			0.204	0.031	1.2	1.2	<0.0030	2.88
RSEM-R6W-SP	3/3/2022 15:40	APQ573	M	C214168	7.09	565	340	3.9	179	167	50.3	<1.0	61.4	<1.0	<1.0	18.8	0.093	0.182	189			0.200	0.027	1.2	1.2	<0.0030	3.07
RSEM-R6W-SP	4/17/2022 17:25	ARR904	M	C225213	6.82	484	300	11.0	156	139	89.0	<1.0	109	<1.0	<1.0	21.7	0.111	0.317	127			0.140	0.022	0.57	0.59	<0.0030	1.15
RSEM-R6W-SP	7/27/2022 12:00	AYK062	M	C255556	7.87	1250	816	2.8	228	207	98.0	<1.0	120	<1.0	<1.0	89.8	0.300	1.29	427			0.080	0.0054	0.446	0.452	0.0042	3.04
SeptimusBeaverPond_1	4/2/2022 15:15	ARB522	M	C222000	7.07	221	144	14.7	95.7	95.8	69.6	<1.0	84.9	<1.0	<1.0	3.20	<0.050	0.031	35.8			0.104	<0.010	<0.010	<0.010	0.0630	10.3
SeptimusBeaverPond_2	4/2/2022 15:25	ARB523	M	C222000	6.94	139	92	17.9	67.0	60.9	60.6	<1.0	74.0	<1.0	<1.0	2.36	0.051	0.016	5.9			0.090	<0.010	<0.010	<0.010	0.127	9.63
SeptimusBeaverPond_3	4/2/2022 15:35	ARB524	M	C222000	6.98	162	76	11.9	73.6	71.4	64.2	<1.0	78.4	<1.0	<1.0	2.97	<0.050	0.028	10.6			0.274	<0.010	<0.010	<0.010	0.169	17.1
SeptimusBeaverPond_4	4/2/2022 15:50	ARB525	M	C222000	7.08	220	72	11.7	107	103	94.8	<1.0	116	<1.0	<1.0	6.00	<0.050	0.069	11.2			0.097	<0.010	<0.010	<0.010	0.178	13.9
SeptimusBeaverPond_5	4/2/2022 16:00	ARB526	M	C222000	7.20	576	324	6.4	267	265	237	<1.0	290	<1.0	<1.0	21.6	<0.050	0.256	26.3			2.43	<0.010	<0.010	<0.010	0.496	28.0
SeptimusBeaverPond_6	4/2/2022 16:15	ARB527	M	C222000	7.38	319	164	7.9	146	152	157	<1.0	191	<1.0	<1.0	3.21	<0.050	0.092	4.0			0.029	<0.010	<0.010	<0.010	0.0048	9.20
SeptimusBeaverPond_7	4/2/2022 16:20	ARB528	M	C222000	7.31	260	144	60.3	123	118	117	<1.0	143	<1.0	<1.0	1.98	<0.050	0.047	12.0			0.142	<0.010	<0.010	<0.010	0.0173	9.92
SeptimusBeaverPond_8	4/2/2022 16:30	ARB529	M	C222000	7.15	280	152	7.3	129	130	73.6	<1.0	89.8	<1.0	<1.0	9.53	<0.050	0.134	54.4			0.028	<0.010	<0.010	<0.010	0.0048	6.35
SeptimusBeaverPond_1	6/25/2022 14:35	AVZ710	M	C245512	7.80	863	580	5.26	483	453	201	<1.0	246	<1.0	<1.0	34.6	0.229	0.483	227			0.020	<0.010	<0.050	<0.050	0.0034	12.2
SeptimusBeaverPond_2	6/25/2022 14:50	AVZ711	M	C245512	7.57	648	424	21.3	332	323	197	<1.0	240	<1.0	<1.0	16.3	0.189	0.243	129			0.080	<0.010	<0.010	<0.010	0.0738	14.0
SeptimusBeaverPond_3	6/25/2022 14:55	AVZ712	M	C245512	7.68	600	384	5.43	308	307	214	<1.0	261	<1.0	<1.0	12.0	0.173	0.186	94.7			0.054	<0.010	<0.010	<0.010	<0.0030	12.5
SeptimusBeaverPond_4	6/25/2022 15:10	AVZ713	M	C245512	7.49	596	388	5.70	320	299	208	<1.0	253	<1.0	<1.0	14.3	0.174	0.225	94.2			0.019	<0.010	<0.010	<0.010	0.0390	17.0
SeptimusBeaverPond_5	6/25/2022 15:25	AVZ714	M	C245512	7.61	630	424	1.77	317	317	183	<1.0	223	<1.0	<1.0	17.3	0.188	0.252	133			0.099	<0.010	<0.010	<0.010	0.0940	13.6
SeptimusBeaverPond_6	6/25/2022 15:40	AVZ715	M	C245512	7.52	661	452	8.03	355	335	178	<1.0	217	<1.0	<1.0	17.0	0.198	0.250	156			0.112	<0.010	<0.050	<0.050	0.0734	15.8
SeptimusBeaverPond_7	6/25/2022 15:50	AVZ716	M	C245512	7.33	660	452	44.4	355	334	183	<1.0	223	<1.0	<1.0	17.3	0.203	0.248	149			0.102	<0.010	<0.010	<0.010	0.0872	18.2
SeptimusBeaverPond_8	6/25/2022 15:55	AVZ717	M	C245512	7.47	666	460	14.3	354	340	204	<1.0	249	<1.0	<1.0	17.4	0.207	0.252	162			0.047	<0.010	<0.050	<0.050	0.0546	14.1
SeptimusBeaverPond_1	9/17/2022 15:00	BCF762	M	C272259	8.18	669	522	5.2	371	360	229	<1.0	279	<1.0	<1.0	19.9	0.210	0.288	97.4			0.026	<0.0050	<0.020	<0.020	<0.0030	9.28
SeptimusBeaverPond_2	9/17/2022 15:15	BCF755	M	C272259	7.93	633	532	43.2	340	327	213	<1.0	260	<1.0	<1.0	17.1	0.190	0.256	97.1			0.052	<0.0050	<0.020	<0.020	0.0243	19.4
SeptimusBeaverPond_3	9/17/2022 15:25	BCF756	M	C272259	8.14	660	534	12.4	345	338	218	<1.0	266	<1.0	<1.0	17.4	0.200	0.270	105			0.095	<0.0050	<0.020	<0.020	0.0371	20.5
SeptimusBeaverPond_4	9/17/2022 15:30	BCF757	M	C272259	8.17	664	528	6.0	364	350	221	<1.0	270	<1.0	<1.0	17.9	0.200	0.272	102			0.026	<0.0050	<0.020	<0.020	0.0174	17.1
SeptimusBeaverPond_5	9/17/2022 15:45	BCF758	M	C272259	8.13	676	534	6.0	364	355	228	<1.0	278	<1.0	<1.0	18.2	0.180	0.270	100			0.018	<0.0050	<0.020	<0.020	0.0164	22.3
SeptimusBeaverPond_6	9/17/2022 15:55	BCF759	M	C272259	8.37	448	310	4.8	264	251	204	2.4	243	2.9	<1.0	8.18	0.160	0.174	24.6			0.023	<0.0050	<0.020	<0.020	<0.0030	21.7
SeptimusBeaverPond_7	9/17/2022 16:10	BCF760	M	C272259	8.26	420	292	3.6	230	227	215	<1.0	262	<1.0	<1.0	2.60	0.110	0.082	3.0			0.042	<0.0050	<0.020	<0.020	<0.0030	24.6
SeptimusBeaverPond_8	9/17/2022 16:20	BCF761	M	C272259	8.09	678	542	24.0	359	353	237	<1.0	289	<1.0	<1.0	18.7	0.200	0.267	96.9			0.028	<0.0050	<0.020	<0.020	0.0185	23.3
USCD-North-Well	2/9/2022 12:00	AOK260	M	C208577	7.87	864	516	5.1	426	423	262	<1.0	319	<1.0	<1.0	38.9	0.064	0.273	103			<0.015	<0.010	9.9	9.9	0.0048	3.68
USCD-North-Well	3/30/2022 12:20	AQX835	M	C221206	7.98	766	484	7.6	362	367	227	<1.0	277	<1.0	<1.0	23.7	0.082	0.244	128			0.068	<0.010	3.1	3.1	0.0063	2.68
USCD-North-Well	5/18/2022 15:30	ATJ927	M	C234012	8.03	537	280	2.7	258	254	195	<1.0	238	<1.0	<1.0	10.3	0.178	0.153	63.6			0.024	<0.010	0.86	0.86	0.0043	1.54
USCD-South-Well	2/9/2022 12:10	AOK261	M	C208577	7.92	862	512	12.0	419	423	257	<1.0	314	<1.0	<1.0	42.9	0.083	0.309	113			<0.015	<0.010	8.3	8.3	0.0048	3.38
USCD-South-Well	3/30/2022 12:45	AQX836	M	C221206	7.99	737	440	8.9	352	369	230	<1.0	281	<1.0	<1.0	19.2	0.178	0.250	121			0.445	<0.010	2.4	2.4	0.0057	3.11

Notes: Under Sample Class "M" denotes a monitoring sample and "D" denotes a field duplicate sample. "<" = Result not detected and is below the indicated detection limit. Values are absent from the table if a test result was not reported.

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC mg/L	T-Al mg/L	T-Sb mg/L	T-As mg/L	T-Ba mg/L	T-Be mg/L	T-Bi mg/L	T-B mg/L	T-Cd mg/L	T-Ca mg/L	T-Cr mg/L	T-Co mg/L	T-Cu mg/L	T-Fe mg/L	T-Pb mg/L	T-Li mg/L	T-Mg mg/L	T-Mn mg/L	T-Hg mg/L	T-Mo mg/L	T-Ni mg/L	T-P mg/L	T-K mg/L
85-Background	5/19/2022 12:10	ATL918	M	C234314																							
85-EOP	3/24/2022 15:30	AQP987	M	C219524																							
85-EOP	3/30/2022 16:15	AQX839	M	C221206																							
85-EOP	5/4/2022 18:10	ASP685	M	C230320																							
85-EOP	5/7/2022 17:10	ASS950	M	C230886																							
85-EOP	5/12/2022 16:45	ATA820	M	C232369																							
85-EOP	5/19/2022 11:50	ATL916	M	C234314																							
85-EOP	5/29/2022 11:45	ATW973	M	C236421																							
85-EP	3/27/2022 10:40	AQS346	M	C219976																							
85-EP	4/3/2022 17:05	ARB463	M	C221989																							
85-IDZ	3/24/2022 16:35	AQP988	M	C219524																							
85-IDZ	3/30/2022 16:50	AQX840	M	C221206																							
85-IDZ	5/4/2022 18:35	ASP687	M	C230320																							
85-IDZ	5/7/2022 18:00	ASS952	M	C230886																							
85-IDZ	5/12/2022 17:15	ATA822	M	C232369																							
85-IDZ	5/19/2022 12:00	ATL917	M	C234314																							
85-IDZ	5/29/2022 12:15	ATW975	M	C236421																							
85-US	3/24/2022 16:30	AQP989	M	C219524																							
85-US	5/4/2022 18:30	ASP686	M	C230320																							
85-US	5/7/2022 17:55	ASS951	M	C230886																							
85-US	5/12/2022 17:00	ATA821	M	C232369																							
85-US	5/29/2022 12:05	ATW974	M	C236421																							
85-WP	4/3/2022 17:00	ARB462	M	C221989																							
A25_EOP	2/10/2022 14:45	AOM668	M	C208923																							
A25_EOP	2/12/2022 12:50	AOP218	M	C209346																							
A25_EOP	3/20/2022 17:15	AQJ918	M	C218219																							
A25_EOP	3/26/2022 19:00	AQS242	M	C219944																							
A25-SP	4/2/2022 13:40	ARB530	M	C222000																							
A25-SP	4/29/2022 14:00	ASL383	M	C229488																							
A25-SP	5/3/2022 15:40	ASO451	M	C230063																							
AC-S-Sump	3/6/2022 14:00	APS818	M	C214508	0.99	0.939	0.00103	0.00238	0.237	<0.0001	<0.001	0.109	0.000063	108	0.0016	0.00297	0.00239	1.39	0.00085	0.0539	46.8	0.0184	0.0000046	0.005	0.0145	0.052	3.15
Area_20_Sump	7/8/2022 12:15	AWW523	M	C249170	2.67	1.46	<0.0005	0.00258	0.4	<0.0001	<0.001	<0.05	0.000107	113	0.0033	0.00174	0.00489	4.74	0.00233	0.0071	29.2	0.12	0.0000349	0.0041	0.0057	0.257	3.67
Area_23_BT	2/11/2022 12:55	AOM649	M	C208915	0.91	0.0666	0.0006	0.00041	0.113	<0.0001	<0.001	0.102	0.000037	80.7	<0.001	0.00304	0.00069	0.084	<0.0002	0.132	19.8	0.0544	0.0000037	0.0063	0.019	0.024	2.55
Area_23_NCD	4/21/2022 16:00	ARX711	M	C226546																							
Area_23_NCD	5/7/2022 13:15	ASS948	M	C230886																							
Area_23_NCD-EOP	4/21/2022 17:05	ARX712	M	C226546																							
Area_23_NCD-EOP	5/7/2022 13:50	ASS949	M	C230886																							
Area_24_E_Sump	7/27/2022 15:35	AYK064	M	C255556																							
Area_24_E_Sump	8/3/2022 16:35	AYX385	M	C257672																							
Area_24_E_Sump	8/7/2022 14:25	AZC303	M	C258444																							
Area_24_E_Sump	8/11/2022 15:30	AZR300	M	C260829																							
Area_24_E_Sump	9/10/2022 12:50	BBR905	M	C269730																							
Area_24_E_Sump	9/13/2022 11:40	BBX516	M	C270776	2.34	0.0349	<0.0005	0.00031	0.101	<0.0001	<0.001	<0.05	<0.00001	72.8	<0.001	<0.0002	0.00054	0.05	<0.0002	0.0101	24.4	0.0033	<0.0000019	0.0022	<0.001	0.016	4.03
Area_24_E_Sump	9/22/2022 16:00	BCR620	M	C273969																							
Area_24_E_Sump	9/28/2022 13:45	BDE183	M	C276033																							
Area_24_E_Sump	10/4/2022 13:25	BDR439	M	C277814																							
Area_24_E_Sump	10/13/2022 15:00	BEN620	M	C280837																							
Area_24_E_Sump	10/21/2022 12:00	BFD225	M	C283172																							
Area_24_E_Sump	10/26/2022 14:25	BFS036	M	C285038																							
Area_24_E_Sump	11/3/2022 15:20	BGJ746	M	C287759																							
Area_24_E_Sump	11/8/2022 12:30	BGT302	M	C289111																							
Area_24_E_Sump	11/15/2022 12:25	BHD953	M	C290817																							
Area_24_E_Sump	11/23/2022 14:20	BHR242	M	C292918																							
Area_24_E_Sump	11/30/2022 12:30	BID445	M	C294835																							
Area_24_W_Sump	7/10/2022 14:55	AWZ489	M	C249617																							
Area_24_W_Sump	7/13/2022 15:55	AXH418	M	C250934																							
Area_24_W_Sump	7/24/2022 15:00	AYC681	M	C254290																							
Area_24_W_Sump	7/27/2022 15:45	AYK065	M	C255556																							
Area_25_Pond	3/17/2022 14:30	AQH806	M	C217776																							
Area_30_EOP	2/10/2022 15:30	AOM665	M	C208923	3.41	0.998	<0.0005	0.00088	0.0558	<0.0001	<0.001	<0.05	0.000071	40.2	0.0022	0.00085	0.00253	2.04	0.00095	0.0037	10.5	0.0455	0.0000055	0.0019	0.0044	0.082	1.69
Area_30_EOP	3/20/2022 16:05	AQJ915	M	C218219	4.83	0.0705	<0.0005	0.00032	0.0515	<0.0001	<0.001	<0.05	0.000023	140	<0.001	0.00039	0.00138	0.087	<0.0002	0.0078	33.6	0.0896	0.0000036	0.004	0.0025	0.027	2.66
Area_30_EOP	4/2/2022 15:00	ARB521	M	C222000	3.28	0.036	<0.0005	0.00026	0.0252	0.00016	<0.001	<0.05	0.000031	149	<0.001	0.00056	0.00066	0.193	<0.0002	0.0052	30.5	0.285	<0.0000019	0.0029	0.0037	0.028	1.82
Area_30_EOP	4/23/2022 13:30	ARZ187	M	C226855	4.63	0.0748	<0.0005	0.00033	0.0354	<0.0001	<0.001	<0.05	0.000023	193	<0.001	0.00115	0.00105	0.198	<0.0002	0.0078	64.8	0.591	0.000002	0.0037	0.0052	0.02	2.78
Area_30_EOP	5/1/2022 13:00	ASL428	M	C229493	4.28	0.268	<0.0005	0.00042	0.0429	<0.0001	<0.001	<0.05	0.000022	98.4	<0.001	0.00038	0.00117	0.39	0.0002	0.0066	32.3	0.026	0.0000021	0.0064	0.0033	0.033	3.17
Area_30_EOP	5/4/2022 14:15	ASP680	M	C230320	8.97	0.247	<0.0005	0.00034	0.0493	<0.0001	<0.001	0.055	0.000013	128	<0.001	0.00035	0.00207	0.505	0.00025	0.0088	51.0	0.0326	<0.0000019	0.006	0.0042	0.041	4.80
Area_30_EOP	5/7/2022 12:30	ASS944	M	C230886	4.21	0.389	<0.0005	0.0005	0.05	<0.0001	<0.001	<0.05	0.000014	121	0.0012	0.00035	0.00177	0.446	0.00026	0.0077	38.0	0.0229	<0.0000019	0.007	0.0039	0.03	3.40
Area_30_EOP	5/10/2022 12:50	ASX005	M	C231638	5.23	0.0682	<0.0005	0.00051	0.0481	<0.0001	<0.001	<0.05	0.000029	135	<0.001	0.00023	0.00139	0.141	<0.0002	0.007	38.9	0.0071	<0.0000019	0.0082	0.0038	0.019	3.50
Area_30_EOP	5/30/2022 13:45	ATZ470	M	C236894	7.45	0.15	<0.0005	0.00076	0.0593	<0.0001	<0.001	<0.05	0.000083	161	0.0011	0.00185	0.00224	0.192	<0.0002	0.0098	45.9	0.0261	0.0000028	0.0136	0.0135	0.041	5.31
Area_30_EOP	6/20/2022 11:55	AVO967	M	C243664	3.94	0.0465	<0.0005	0.00039	0.0489	<0.0001	<0.001	<0.05	<0.00001	222	<0.001	<0.0002	0.00103	0.092	<0.0002	0.0109	53.3	0.0028	0.0000027	0.0111	0.0046	0.013	3.54

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
Area_30_EOP	8/5/2022 12:00	AYY785	M	C257846	5.07	0.0789	<0.001	0.00045	0.0516	<0.0002	<0.002	<0.1	<0.00002	338	<0.002	<0.0004	0.0011	0.185	<0.0004	0.0128	90.3	0.0064	<0.0000019	0.011	0.0042	<0.02	3.89
Area_30_EOP	9/17/2022 14:45	BCF754	M	C272259	4.15	0.0368	<0.0005	0.00045	0.0613	<0.0001	<0.001	0.094	0.000022	663	<0.001	0.00021	0.00136	0.067	<0.0002	0.0211	188	0.0152	<0.0000019	0.0135	0.0043	0.035	6.21
Area_30_SP	1/25/2022 14:05	ANP166	M	C204905	3.00	0.741	<0.0005	0.00039	0.0262	<0.0001	<0.001	<0.05	0.000027	26.3	0.0014	0.00028	0.00126	0.67	0.00036	<0.002	7.20	0.0498	0.000004	0.0011	0.0015	0.071	1.43
Area_30_SP	4/18/2022 15:35	ARU249	M	C225693	8.85	0.74	<0.0005	0.00141	0.1	<0.0001	<0.001	<0.05	0.000094	409	0.0023	0.00197	0.00393	1.82	0.0009	0.0156	118	1.09	0.0000036	0.0079	0.0253	0.091	5.87
Area_30_SP	4/27/2022 15:30	ASH198	M	C228648	6.39	0.15	<0.0005	0.00045	0.0383	<0.0001	<0.001	<0.05	0.000035	178	<0.001	0.00048	0.00122	0.354	0.0003	0.0111	73.2	0.186	0.0000021	0.0043	0.0054	0.026	3.11
Area_30_SP	5/4/2022 14:25	ASP681	M	C230320	9.51	0.331	<0.0005	0.00043	0.0502	<0.0001	<0.001	<0.05	0.000021	130	<0.001	0.00053	0.00222	0.708	0.00034	0.0086	50.2	0.0747	0.0000043	0.0061	0.0043	0.046	4.91
Area_30_SP	5/4/2022 14:35	ASP682	M	C230320	9.13	0.308	<0.0005	0.00046	0.0533	<0.0001	<0.001	<0.05	0.000023	135	0.001	0.00053	0.00224	0.699	0.00033	0.0087	51.4	0.072	0.0000034	0.0067	0.0044	0.049	5.11
Area_30_SP	5/24/2022 14:30	ATR511	M	C235358	9.08	0.0472	<0.0005	0.00037	0.0508	<0.0001	<0.001	<0.05	<0.00001	193	<0.001	<0.0002	0.00175	0.088	<0.0002	0.008	60.8	0.0047	<0.0000019	0.0077	0.0039	0.017	4.76
Area_30_SP	6/16/2022 13:40	AVK125	M	C242788	6.27	0.215	<0.0005	0.00053	0.0944	<0.0001	<0.001	0.057	0.000012	314	<0.001	0.00033	0.00157	0.421	0.00025	0.0151	71.3	0.0298	0.0000029	0.0124	0.0051	0.022	5.15
Area_30_SP	6/25/2022 14:15	AVZ709	M	C245512	6.14	0.0246	<0.0005	0.00036	0.0581	<0.0001	<0.001	0.052	<0.00001	296	<0.001	<0.0002	0.00122	0.049	<0.0002	0.0136	79.3	0.0024	0.0000026	0.0118	0.0049	<0.01	4.58
Area_30_SP	7/3/2022 12:30	AWM047	M	C247492	7.67	0.0282	<0.0005	0.00038	0.0606	<0.0001	<0.001	0.056	<0.00001	350	<0.001	<0.0002	0.00107	0.087	<0.0002	0.0152	96.0	0.0089	0.0000031	0.0115	0.0039	<0.01	4.23
Area_30_SP	7/11/2022 13:20	AXC660	M	C250105	7.26	0.046	<0.0025	0.00058	0.0703	<0.0005	<0.005	<0.25	<0.00005	446	<0.005	<0.001	<0.0025	0.111	<0.001	0.022	144	0.0069	0.0000038	0.0136	0.0051	<0.05	4.94
Area_30_SP	7/30/2022 15:00	AYP674	M	C256352	7.75	0.03	<0.0025	0.00058	0.0807	<0.0005	<0.005	<0.25	<0.00005	621	<0.005	<0.001	<0.0025	0.06	<0.001	0.024	217	0.0108	<0.0000019	0.0158	0.0054	<0.05	6.31
Area_30_SP	9/9/2022 11:45	BBS004	M	C269764	5.45	0.115	<0.0025	0.00094	0.0584	<0.0005	<0.005	<0.25	<0.00005	529	<0.005	0.0016	<0.0025	0.546	<0.001	0.017	148	0.0301	<0.0000019	0.0118	0.0054	<0.05	4.34
Area_30_SP	10/1/2022 11:20	BDL253	M	C276877	4.03	<0.015	<0.0025	<0.0005	0.0498	<0.0005	<0.005	<0.25	<0.00005	490	<0.005	<0.001	<0.0025	<0.05	<0.001	0.016	134	0.0192	<0.0000019	0.0088	<0.005	<0.05	4.82
Area_30_SP	10/6/2022 13:35	BDZ975	M	C278888	4.02	<0.015	<0.0025	<0.0005	0.0468	<0.0005	<0.005	<0.25	<0.00005	518	<0.005	<0.001	<0.0025	0.22	<0.001	0.015	159	0.0098	<0.0000019	0.0093	<0.005	<0.05	4.42
Area_30_SP	10/22/2022 13:20	BFI046	M	C283756	4.28	0.027	<0.0025	<0.0005	0.0536	<0.0005	<0.005	<0.25	<0.00005	534	<0.005	0.0214	<0.0025	0.058	<0.001	0.017	168	0.0254	<0.0000019	0.0082	<0.005	<0.05	4.84
Area_52_Sump	6/12/2022 9:30	AVD505	M	C241814	5.21	0.0858	<0.0005	0.00026	0.0905	<0.0001	<0.001	0.21	0.00215	164	<0.001	0.0336	0.00429	0.08	<0.0002	0.137	94.3	0.702	<0.0000019	0.0023	0.116	0.01	6.72
Area_A_N_Ditch	1/25/2022 14:40	ANP165	M	C204905	2.65	0.381	<0.0005	0.00085	0.162	<0.0001	<0.001	<0.05	0.000028	49.8	<0.001	0.00052	0.00142	1.11	0.00037	<0.002	8.64	0.173	0.0000062	0.0046	0.0016	0.05	1.54
Area_A_N_Ditch	3/21/2022 13:20	AQL270	M	C218465	2.47	3.36	<0.0005	0.00183	0.238	0.00011	<0.001	<0.05	0.000069	61.9	0.0054	0.00139	0.00403	3.25	0.00157	0.0049	12.2	0.106	0.0000101	0.0021	0.0049	0.128	2.38
Area_A_N_Ditch	5/3/2022 13:00	ASO449	M	C230063	2.17	0.0705	<0.0005	0.00021	0.179	<0.0001	<0.001	<0.05	0.000011	63.2	<0.001	<0.0002	0.00094	0.122	<0.0002	0.0025	13.3	0.0086	<0.0000019	0.0013	<0.001	0.017	0.993
Area_A_N_Ditch	5/30/2022 14:55	ATZ471	M	C236894	2.54	0.0446	<0.0005	0.00021	0.173	<0.0001	<0.001	<0.05	0.000017	62.0	<0.001	0.00032	0.00073	0.089	<0.0002	0.0028	11.5	0.0161	<0.0000019	0.0016	0.0016	0.02	1.09
Area_A_N_Ditch	8/1/2022 13:55	AYR823	M	C256691																							
Area_A_N_Ditch	12/7/2022 14:10	BIR868	M	C297052	1.66	0.0109	<0.0005	0.00016	0.205	<0.0001	<0.001	<0.05	0.000022	84.0	<0.001	<0.0002	0.00052	0.023	<0.0002	0.0033	13.5	0.0022	<0.0000019	0.0017	<0.001	0.013	1.29
Area_A_NE_Sump	3/9/2022 17:00	APZ006	M	C215885	2.2	0.0278	<0.0005	0.00021	0.118	<0.0001	<0.001	0.052	0.000015	107	<0.001	<0.0002	<0.0005	0.037	<0.0002	0.0259	33.2	0.0048	<0.0000019	0.0023	0.0011	<0.01	2.32
Area_A_NE_Sump	5/11/2022 11:00	ASZ427	M	C232133																							
Area_A_NE_Sump	5/22/2022 13:10	ATO539	M	C234788																							
Area_A_NE_Sump	5/26/2022 10:15	ATV286	M	C236083																							
Area_A_NE_Sump	5/30/2022 14:20	ATZ472	M	C236894																							
Area_A_NE_Sump	6/4/2022 11:40	AUL726	M	C238905																							
Area_A_NE_Sump	6/11/2022 11:30	AUY739	M	C241062																							
Area_A_NE_Sump	6/18/2022 13:15	AVL992	M	C243162																							
Area_A_NE_Sump	6/24/2022 16:45	AVZ718	M	C245512																							
Area_A_NE_Sump	7/3/2022 13:30	AWM051	M	C247492																							
Area_A_NE_Sump	7/6/2022 11:05	AWV912	M	C249077																							
Area_A_NE_Sump	7/12/2022 13:00	AXE622	M	C250400																							
Area_A_NE_Sump	7/24/2022 14:40	AYC680	M	C254290																							
Area_A_NE_Sump	8/7/2022 13:55	AZC302	M	C258444																							
Area_A_NE_Sump	8/14/2022 16:00	AZR297	M	C260829																							
Area_A_NE_Sump	8/15/2022 16:00	AZW326	M	C261663	2.29	1.43	<0.0005	0.00129	0.22	<0.0001	<0.001	<0.05	0.000104	105	0.0025	0.00142	0.00353	2.45	0.00144	0.0133	27.1	0.0938	<0.0000019	0.0012	0.0048	0.134	3.90
Area_A_NE_Sump	8/27/2022 13:30	BAR930	M	C265307																							
Area_A_NE_Sump	9/4/2022 16:00	BBI410	M	C268301																							
Area_A_NE_Sump	9/8/2022 10:30	BBO450	M	C269143																							
Area_A_NE_Sump	9/22/2022 16:20	BCR621	M	C273969																							
Dewatering_Pond	6/1/2022 14:30	AUE685	M	C237797	10.9	0.8	<0.0005	0.00111	0.059	0.00013	<0.001	0.061	0.000314	73.7	0.0016	0.00554	0.00621	1.97	0.00094	0.031	19.7	0.0886	0.000007	0.0033	0.0242	0.074	5.05
Earthfill_Dam_DS_OUT	1/1/2022 13:45	FJ2200029-004	M	FJ2200029	3.18	0.0069	<0.00010	0.00016	0.0940	<0.000100	<0.000050	0.011	0.0000067	52.0	<0.00050	<0.00010	<0.00050	<0.010	<0.000050	0.0038	11.6	0.00658	<0.0000050	0.00159	<0.00050	<0.050	1.30
Earthfill_Dam_DS_OUT	1/5/2022 12:10	FJ2200018-001	M	FJ2200018	1.69	0.0090	<0.00010	0.00017	0.111	<0.000100	<0.000050	0.014	0.0000060	54.9	<0.00050	<0.00010	<0.00050	<0.010	<0.000050	0.0046	12.7	0.00792	<0.0000050	0.00186	<0.00050	<0.050	1.45
Earthfill_Dam_DS_OUT	1/13/2022 13:00	FJ2200098-001	M	FJ2200098	3.03	0.0142	<0.00010	0.00022	0.0982	<0.000100	<0.000050	<0.010	<0.0000050	44.8	<0.00050	<0.00010	<0.00050	0.011	<0.000050	0.0028	10.2	0.00408	<0.0000050	0.00162	<0.00050	<0.050	1.02
Earthfill_Dam_DS_OUT	1/19/2022 11:00	FJ2200185-002	M	FJ2200185	2.13	0.0094	0.00010	0.00017	0.115	<0.000100	<0.000050	0.014	0.0000061	63.9	<0.00050	<0.00010	<0.00050	<0.010	<0.000050	0.0046	14.4	0.00783	<0.0000050	0.00187	<0.00050	<0.050	1.62
Earthfill_Dam_DS_OUT	1/26/2022 14:30	ANQ896	M	C205279	0.87	0.0082	<0.0005	<0.0001	0.089	<0.0001	<0.001	<0.05	<0.00001	51.6	<0.001	<0.0002	<0.0005	0.01	<0.0002	0.003	9.93	0.0042	<0.0000019	0.0015	<0.001	<0.01	1.01
Earthfill_Dam_DS_OUT	2/3/2022 15:00	AOC179	M	C207302	1.9	0.0063	<0.0005	0.00018	0.1	<0.0001	<0.001	<0.05	0.000016	65.4	<0.001	<0.0002	<0.0005	<0.01	<0.0002	0.0049	12.4	0.0069	<0.0000019	0.0017	<0.001	0.016	1.39
Earthfill_Dam_DS_OUT	2/8/2022 12:00	AOI292	M	C208265	1.11	0.003	<0.0005	0.0001	0.101	<0.0001	<0.001	<0.05	<0.00001	69.1	<0.001	<0.0002	<0.0005	<0.01	<0.0002	0.0049	10.9	<0.001	<0.0000019	0.0014	<0.001	<0.01	1.48
Earthfill_Dam_DS_OUT	2/16/2022 12:00	AOU843	M	C210450	1.1	0.0085	<0.0005	0.00026	0.113	<0.0001	<0.001	<0.05	<0.00001	52.5	<0.001	<0.0002	0.00068	0.01	<0.0002	0.0043	10.5	0.0049	<0.0000019	0.0018	<0.001	0.016	1.36
Earthfill_Dam_DS_OUT	2/24/2022	APF946	M	C212235	1.5	0.0137	<0.0005	<0.0001	0.0646	<0.0001	<0.001	<0.05	<0.00001	42.3	<0.001	<0.0002	<0.0005	0.013	<0.0002	0.0021	6.41	<0.001	0.0000033	<0.001	<0.001	0.016	0.471
Earthfill_Dam_DS_OUT	3/2/2022 12:20	APO715	M	C213881	1.4	0.0114	<0.0005	<0.0001	0.101	<0.0001	<0.001	<0.05	<0.00001	86.1	<0.001	<0.0002	0.00058	0.01	<0.0002	0.006	12.8	0.0054	<0.0000019	0.0013	<0.001	0.016	1.52
Earthfill_Dam_DS_OUT	3/10/2022 10:30	APZ004	M	C215884	1.4	0.0117	<0.0005	0.00017	0.0686	<0.0001	<0.001	<0.05	<0.00001	34.9	<0.001	<0.0002	0.00055	0.014	<0.0002	<0.002	7.51	<0.001	<0.0000019	0.0012	<0.001	<0.01	0.490
Earthfill_Dam_DS_OUT	3/10/2022 10:40	APZ005	D	C215884	1.0	0.0071	<0.0005	0.00017	0.109	<0.0001	<0.001	<0.05	<0.00001	68.7	<0.001	<0.0002	<0.0005	<0.01	<0.0002	0.005	14.7	0.0066	<0.0000019	0.0018	<0.001	<0.01	1.57
Earthfill_Dam_DS_OUT	3/17/2022 15:00	AQH799	M	C217776	1.4	0.172	<0.0005	0.00032	0.106	<0.0001	<0.001	<0.05	<0.00001	54.5	<0.001	<0.0002	0.00063	0.3	<0.0002	0.005	12.7	0.0081	0.000002	0.0021	<0.001	0.017	1.42
Earthfill_Dam_E_BT	3/23/2022 12:30	AQP256	M	C219363	1.76	0.0092	<0.0005	0.00025	0.102	<0.0001	<0.001	<0.05	0.000012	68.2	<0.001	<0.0002	<0.0005	0.011	<0.0002	0.005	15.6	<0.001	<0.0000019	0.0018	<0.001	0.011	1.75
Earthfill_Dam_E_BT	3/30/2022 13:05	AQX834	M	C221206	0.71	0.0387	<0.0005	0.0002	0.0913	<0.0001	<0.001	<0.05	<0.00001	70.5	<0.001	<0.0002	<0.0005	0.127	<0.0002	0.0054	12.7	0.0067	<0.0000019	0.0014	<0.001	0.014	1.33
Earthfill_Dam_E_BT	4/7/2022 15:30	ARI194	M	C223271	1.4	0.0208	<0.0005	0.00011	0.103	<0.0001	<0.001	<0.05	<0.00001	85.9	<0.001	<0.0002	0.00068	0.063	<0.0002	0.0053	14.8	0.0086	<0.0000019	0.0019	<0.001	0.01	1.77
Earthfill_Dam_E_BT	4/13/2022 14:10	ARP728	M	C224775	0.89	0.045	<0.0005	0.00014	0.0885	<0.0001	<0.001	<0.05	<0.00001	68.6	<0.001	<0.0002	<0.0005	0.092	<0.0002	0.006	13.1	0.0058	0.000002	0.0014	<0.001	0.016	1.35
Earthfill_Dam_E_BT	4/20/2022 11:40	ARW670	M	C226267	<0.50	0.0213	<0.0005	0.00014	0.106	<0.0001	<0.001	<0.05	<0.00001	78.7	<0.001	<0.0002	<0.0005	0.043	<0.0002	0.0057	17.6	0.0018	<0.0000019	0.0026	<0.001	0.012	1.89
Earthfill_Dam_E_BT	4/28/2022 13:00	ASH220	M	C228650	0.93	0.0092	<0.0005	0.00018	0.0879	<0.0001	<0.001	<0.05	<0.00001	65.0	<0.001	<0.0002	<0.0005	0.016	<0.0002	0.0054	14.8	0.0037	<0.0000019	0.0015	<0.001	0.011	1.43
Earthfill_Dam_E_BT	5/4/2022 11:20	ASP678	M	C230320	1.32	0.0118	<0.0005	0.00012	0.0878	<0.0001	<0.001	<0.05	<0.00001	69.7	<0.001	<0.0002	<0.0005	0.018	<0.0002	0.0051	14.8	0.0017	<0.0000019	0.0016	<0.001	0.015	1.42
Earthfill_Dam_E_BT	5/11/2022 13:50	ASZ426	M	C232133	1.07	0.012	<0.0005	0.00036	0.0919	<0.0001	<0.001	<0.05	0.000011	73.9	<0.001	<0.0002	<0.0005	0.021	<0.0002	0.0051	15.4	0.0031	<0.0000019	0.0015	<0.001	0.019	1.67
GC-Debris-US	1/23/2022 18:15	FJ2200194-005	M	FJ2200194																							
GC-Debris-US	2/9/2022 18:00	AOK264	M	C208577																							
GC-Debris-US	2/15/2022 10:55	AOS725	M	C210043																							

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC mg/L	T-Al mg/L	T-Sb mg/L	T-As mg/L	T-Ba mg/L	T-Be mg/L	T-Bi mg/L	T-B mg/L	T-Cd mg/L	T-Ca mg/L	T-Cr mg/L	T-Co mg/L	T-Cu mg/L	T-Fe mg/L	T-Pb mg/L	T-Li mg/L	T-Mg mg/L	T-Mn mg/L	T-Hg mg/L	T-Mo mg/L	T-Ni mg/L	T-P mg/L	T-K mg/L
GC-Debris-US	3/17/2022 13:40	AQH804	M	C217776																							
GC-Debris-US	3/19/2022 17:05	AQJ977	M	C218236																							
GC-Debris-US	3/22/2022 10:40	AQN718	M	C218958																							
GC-Debris-US	3/26/2022 17:55	AQS241	M	C219944																							
GC-Debris-US	3/31/2022 17:00	AQY800	M	C221428																							
GC-Debris-US	4/9/2022 11:40	ARK010	M	C223638																							
GC-Debris-US	4/15/2022 11:00	ARQ205	M	C224832																							
GC-Debris-US	4/30/2022 14:00	ASL382	M	C229488																							
GC-Debris-US	5/4/2022 16:50	ASP684	M	C230320																							
GC-Debris-US	5/10/2022 17:00	ASX008	M	C231638																							
GC-Debris-US	5/21/2022 14:30	ATN143	M	C234510																							
GC-Debris-US	5/27/2022 10:10	ATV304	M	C236089																							
GC-Debris-US	5/28/2022 11:00	ATX756	M	C236620																							
GC-Debris-US	6/1/2022 16:10	AUE686	M	C237797																							
GC-Debris-US	6/11/2022 12:20	AUY741	M	C241062																							
GC-Debris-US	6/17/2022 16:40	AVK726	M	C242942																							
GC-Debris-US	6/23/2022 14:45	AVV601	M	C244839																							
GC-Debris-US	7/3/2022 15:30	AWM052	M	C247492																							
GC-Debris-US	7/6/2022 16:35	AWV914	M	C249077																							
GC-Debris-US	7/24/2022 16:00	AYC683	M	C254290																							
GC-Debris-US	7/31/2022 15:40	AYO877	M	C256301																							
GC-Debris-US	8/4/2022 13:30	AYY908	M	C257848																							
GC-Debris-US	8/14/2022 17:10	AZR299	M	C260829																							
L3-DC-DS	2/10/2022 18:45	AOM670	M	C208923																							
L3-DC-DS	3/17/2022 20:10	AQH808	M	C217776																							
L3-DC-DS	3/19/2022 18:55	AQJ980	M	C218236																							
L3-DC-DS	3/22/2022 16:50	AQN721	M	C218958																							
L3-DC-DS	3/24/2022 15:30	AQP986	M	C219524																							
L3-DC-DS	3/29/2022 17:50	AQV268	M	C220606																							
L3-DC-DS	4/9/2022 10:20	ARK008	M	C223638																							
L3-DC-DS	4/23/2022 17:55	ARZ191	M	C226855																							
L3-DC-DS	4/27/2022 19:00	ASH201	M	C228648																							
L3-DC-DS	5/5/2022 15:10	ASR011	M	C230531																							
L3-DC-DS	5/8/2022 17:20	ASS889	M	C230861																							
L3-DC-DS	5/12/2022 10:10	ATA819	M	C232369																							
L3-DC-DS	5/21/2022 16:40	ATN141	M	C234510																							
L3-DC-DS	5/28/2022 19:05	ATX750	M	C236620																							
L3-DC-DS	6/11/2022 15:00	AUY743	M	C241062																							
L3-DC-US	2/10/2022 18:00	AOM669	M	C208923																							
L3-DC-US	3/17/2022 20:00	AQH807	M	C217776																							
L3-DC-US	3/19/2022 18:45	AQJ979	M	C218236																							
L3-DC-US	3/22/2022 16:40	AQN720	M	C218958																							
L3-DC-US	3/24/2022 15:20	AQP985	M	C219524																							
L3-DC-US	3/29/2022 17:40	AQV267	M	C220606																							
L3-DC-US	4/9/2022 10:40	ARK007	M	C223638																							
L3-DC-US	4/23/2022 17:45	ARZ190	M	C226855																							
L3-DC-US	4/27/2022 18:50	ASH200	M	C228648																							
L3-DC-US	5/5/2022 15:00	ASR010	M	C230531																							
L3-DC-US	5/8/2022 17:10	ASS888	M	C230861																							
L3-DC-US	5/12/2022 10:00	ATA818	M	C232369																							
L3-DC-US	5/21/2022 16:20	ATN140	M	C234510																							
L3-DC-US	5/28/2022 18:55	ATX749	M	C236620																							
L3-DC-US	6/11/2022 15:20	AUY742	M	C241062																							
L3-W-DC-EOP	2/9/2022 18:30	AOK265	M	C208577																							
L3-W-DC-EOP	2/12/2022 17:45	AOP219	M	C209346																							
L3-W-DC-EOP	3/17/2022 20:20	AQH809	M	C217776																							
L3-W-DC-EOP	3/19/2022 18:30	AQJ978	M	C218236																							
L3-W-DC-EOP	3/22/2022 16:35	AQN722	M	C218958																							
L3-W-DC-EOP	3/24/2022 15:10	AQP984	M	C219524																							
L3-W-DC-EOP	3/29/2022 17:25	AQV266	M	C220606																							
L3-W-DC-EOP	4/9/2022 10:30	ARK009	M	C223638																							
L3-W-DC-EOP	4/16/2022 17:40	ARR881	M	C225206																							
L3-W-DC-EOP	4/22/2022 15:55	ARZ192	M	C226855																							
L3-W-DC-EOP	4/23/2022 17:30	ARZ189	M	C226855																							
L3-W-DC-EOP	4/24/2022 14:50	ASA419	M	C227083																							
L3-W-DC-EOP	4/27/2022 19:10	ASH202	M	C228648																							
L3-W-DC-EOP	5/5/2022 14:50	ASR009	M	C230531																							
L3-W-DC-EOP	5/8/2022 17:00	ASS887	M	C230861																							
L3-W-DC-EOP	5/12/2022 9:50	ATA817	M	C232369																							

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
L3-W-DC-EOP	5/21/2022 16:00	ATN142	M	C234510																							
L3-W-DC-EOP	5/28/2022 18:45	ATX748	M	C236620																							
L3-W-DC-EOP	6/17/2022 17:45	AVK728	M	C242942																							
L3-W-DC-Sump	6/11/2022 15:30	AUY744	M	C241062																							
L3-W-DC-Sump	7/3/2022 16:40	AWM054	M	C247492																							
LBEX_B1	1/22/2022 10:30	FJ2200193-002	M	FJ2200193	3.65	3.45	0.00041	0.00299	0.114	0.000297	<0.000050	0.026	0.000624	78.6	0.00610	0.00569	0.0193	6.46	0.00604	0.0078	17.1	0.286	<0.0000050	0.00190	0.0182	0.404	6.37
LBGC-OUT	1/23/2022 15:50	FJ2200194-004	M	FJ2200194																							
LBGC-OUT	2/9/2022 17:50	AOK263	M	C208577																							
LBGC-OUT	3/17/2022 13:30	AQH805	M	C217776																							
LBGC-OUT	3/19/2022 15:15	AQJ976	M	C218236																							
LBGC-OUT	3/22/2022 10:50	AQN719	M	C218958																							
LBGC-OUT	3/26/2022 17:15	AQS240	M	C219944																							
LBGC-OUT	3/31/2022 18:00	AQY801	M	C221428																							
LBGC-OUT	4/9/2022 11:50	ARK011	M	C223638																							
LBGC-OUT	4/15/2022 11:50	ARQ206	M	C224832																							
LBGC-OUT	4/21/2022 11:45	ARX708	M	C226546																							
LBGC-OUT	4/30/2022 14:00	ASL381	M	C229488																							
LBGC-OUT	5/4/2022 16:40	ASP683	M	C230320																							
LBGC-OUT	5/10/2022 16:20	ASX007	M	C231638																							
LBGC-OUT	5/21/2022 14:50	ATN144	M	C234510																							
LBGC-OUT	5/27/2022 11:05	ATV305	M	C236089																							
LBGC-OUT	5/28/2022 10:45	ATX755	M	C236620																							
LBGC-OUT	6/1/2022 16:45	AUE687	M	C237797																							
LBGC-OUT	6/11/2022 12:00	AUY740	M	C241062																							
LBGC-OUT	6/17/2022 17:25	AVK727	M	C242942																							
LBGC-OUT	6/23/2022 14:05	AVV600	M	C244839																							
LBGC-OUT	7/3/2022 15:50	AWM053	M	C247492																							
LBGC-OUT	7/6/2022 16:00	AWV913	M	C249077																							
LBGC-OUT	7/24/2022 15:50	AYC682	M	C254290																							
LBGC-OUT	7/31/2022 15:30	AYO876	M	C256301																							
LBGC-OUT	8/4/2022 14:25	AYY909	M	C257848																							
LBGC-OUT	8/14/2022 17:00	AZR298	M	C260829																							
LBGC-OUT	10/25/2022 15:55	BFP710	M	C284665																							
MWTF-CELL-1-PIPE	1/12/2022 8:45	AMY185	M	C201826																							
MWTF-CELL-1-PIPE	1/19/2022 8:45	ANG681	M	C203398																							
MWTF-CELL-1-PIPE	1/26/2022 9:00	ANP082	M	C204889																							
MWTF-CELL-1-PIPE	2/2/2022 9:15	ANZ527	M	C206699																							
MWTF-CELL-1-PIPE	2/9/2022 8:50	AOI319	M	C208269																							
MWTF-CELL-1-PIPE	2/16/2022 8:50	AOS652	M	C210024																							
MWTF-CELL-1-PIPE	2/23/2022 9:00	APC513	M	C211586																							
MWTF-CELL-1-PIPE	3/2/2022 9:30	APM689	M	C213453																							
MWTF-CELL-1-PIPE	3/9/2022 8:45	APW000	M	C215209																							
MWTF-CELL-1-PIPE	3/16/2022 8:50	AQE363	M	C217028																							
MWTF-CELL-1-PIPE	3/23/2022 9:30	AQN282	M	C218879																							
MWTF-CELL-1-PIPE	3/30/2022 9:30	AQV055	M	C220559																							
MWTF-CELL-1-PIPE	4/6/2022 8:50	ARE618	M	C222526																							
MWTF-CELL-1-PIPE	4/13/2022 8:45	ARN240	M	C224394																							
MWTF-CELL-1-PIPE	4/20/2022 9:10	ARV016	M	C225896																							
MWTF-CELL-1-PIPE	4/27/2022 9:30	ASD263	M	C227745																							
MWTF-CELL-1-PIPE	5/3/2022 8:50	ASK914	M	C229394																							
MWTF-CELL-1-PIPE	5/11/2022 8:50	ASW835	M	C231613																							
MWTF-CELL-1-PIPE	5/18/2022 9:05	ATH374	M	C233574																							
MWTF-CELL-1-PIPE	5/25/2022 9:15	ATQ476	M	C235131																							
MWTF-CELL-1-PIPE	6/1/2022 8:50	AUC440	M	C237402																							
MWTF-CELL-1-PIPE	6/8/2022 8:50	AUR914	M	C239868																							
MWTF-CELL-1-PIPE	6/29/2022 8:50	AWE580	M	C246283																							
MWTF-CELL-1-PIPE	7/11/2022 11:35	AXC956	M	C250181	2.61	0.436	0.00148	0.00161	0.128	<0.0001	<0.001	0.23	0.000055	147	0.0058	0.00074	0.00347	0.668	0.00047	0.0466	37.4	0.0244	0.0000063	0.0186	0.0057	0.065	9.41
MWTF-CELL-1-PIPE	7/28/2022 11:45	AYM157	M	C255903	2.42	0.295	0.00149	0.00134	0.0911	<0.0001	<0.001	0.194	0.000057	132	0.0025	0.00034	0.00266	0.272	0.00023	0.0266	19.4	0.0121	<0.0000019	0.0174	0.0017	0.035	7.81
MWTF-CELL-3	1/5/2022 11:00	AMR869	M	C200496		0.0841	0.00091	0.00080	0.0168	<0.00010	<0.0010	0.086	<0.000010	18.0	0.0021	<0.00020	0.00129	0.066	<0.00020	0.0569	23.0	0.0027	<0.000050	0.0051	0.0013		3.59
MWTF-CELL-3	1/10/2022 9:30	FJ2200044-001	M	FJ2200044	3.13	0.202	0.00093	0.00146	0.0158	<0.000100	<0.000050	0.080	<0.0000050	17.4	0.00168	0.00011	0.00101	0.089	0.000071	0.0576	26.3	0.00313	<0.0000050	0.00526	0.00141	<0.050	3.50
MWTF-CELL-3	1/12/2022 8:55	AMY187	M	C201826		0.0812	0.00111	0.00101	0.0175	<0.00010	<0.0010	0.096	<0.000010	20.9	0.0012	<0.00020	0.00098	0.081	<0.00020	0.0743	25.1	0.0171	<0.000050	0.0060	0.0022		3.49
MWTF-CELL-3	1/19/2022 8:55	ANG683	M	C203398		0.116	0.00123	0.00094	0.0371	<0.00010	<0.0010	0.119	<0.000010	19.1	0.0010	0.00024	<0.00050	0.093	<0.00020	0.0681	25.6	0.0203	<0.000050	0.0069	0.0026		4.02
MWTF-CELL-3	1/26/2022 9:10	ANP081	M	C204889		0.173	0.00119	0.00097	0.0307	<0.00010	<0.0010	0.095	0.000027	18.5	0.0019	0.00045	0.00155	0.178	<0.00020	0.0512	22.6	0.0157	<0.000050	0.0058	0.0034		4.04
MWTF-CELL-3	2/2/2022 9:10	ANZ526	M	C206699		0.174	0.00114	0.00065	0.0203	<0.00010	<0.0010	0.108	0.000019	33.2	0.0030	0.00070	0.00229	0.151	<0.00020	0.0803	26.1	0.0115	<0.000050	0.0074	0.0058		4.80
MWTF-CELL-3	2/9/2022 8:55	AOI318	M	C208269		0.112	0.00102	0.00049	0.0268	<0.00010	<0.0010	0.069	0.000029	54.3	0.0020	0.00109	0.00253	0.112	<0.00020	0.0481	19.3	0.0257		0.0047	0.0091		4.57
MWTF-CELL-3	2/16/2022 8:55	AOS651	M	C210024		0.0681	0.00096	0.00074	0.0534	<0.00010	<0.0010	0.053	0.000012	47.9	0.0018	0.00075	0.00213	0.054	<0.00020	0.0217	16.3	0.0301		0.0065	0.0087		4.49
MWTF-CELL-3	2/23/2022 9:05	APC512	M	C211586		0.0774	0.00075	0.00094	0.0358	<0.00010	<0.0010	0.051	0.000017	37.5	0.0016	0.00096	0.00245	0.096	<0.00020	0.0299	17.9	0.0261		0.0053	0.0088		4.12
MWTF-CELL-3	3/2/2022 9:15	APM688	M	C213453		0.0323	0.00056	0.00037	0.0230	<0.00010	<0.0010	0.057	<0.000010	46.5	0.0015	0.00036	0.00184	0.025	<0.00020	0.0338	15.7	0.0108		0.0035	0.0025		3.94
MWTF-CELL-3	3/9/2022 8:55	APV999	M	C215209		0.0566	0.00128	0.00104	0.0189	<0.00010	<0.0010	0.074	<0.000010	17.4	0.0042	<0.00020	0.00125	0.055	<0.00020	0.0447	18.8	0.0044		0.0066	0.0013		3.52

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
MWTF-CELL-3	3/16/2022 9:00	AQE362	M	C217028		0.0927	0.00115	0.00111	0.0201	<0.00010	<0.0010	0.068	<0.000010	14.4	0.0043	<0.00020	0.00105	0.165	<0.00020	0.0557	21.1	0.0076		0.0063	0.0019		3.52
MWTF-CELL-3	3/23/2022 9:10	AQN281	M	C218879		0.224	0.00128	0.00109	0.0524	<0.00010	<0.0010	0.080	0.000027	33.9	0.0045	0.00082	0.00257	0.341	0.00027	0.0360	16.1	0.0249		0.0090	0.0092		4.43
MWTF-CELL-3	3/30/2022 9:00	AQV054	M	C220559		0.0889	0.00108	0.00084	0.0335	<0.00010	<0.0010	0.078	<0.000010	32.9	0.0029	0.00078	0.00250	0.166	<0.00020	0.0579	15.8	0.0167		0.0079	0.0087		3.92
MWTF-CELL-3	4/6/2022 8:55	ARE617	M	C222526		0.0682	0.00068	0.00058	0.0324	<0.00010	<0.0010	0.059	0.000016	32.3	0.0014	0.00081	0.00169	0.122	<0.00020	0.0509	16.3	0.0152		0.0057	0.0096		3.27
MWTF-CELL-3	4/13/2022 8:55	ARN239	M	C224394		0.0955	0.00114	0.00072	0.0342	<0.00010	<0.0010	0.092	<0.000010	28.9	0.0019	0.00040	0.00133	0.166	<0.00020	0.0465	18.5	0.0144		0.0095	0.0049		3.96
MWTF-CELL-3	4/20/2022 9:05	ARV015	M	C225896		0.145	0.00130	0.00091	0.0463	<0.00010	<0.0010	0.072	0.000017	33.4	0.0020	0.00046	0.00191	0.321	0.00023	0.0337	20.7	0.0171		0.0106	0.0051		4.81
MWTF-CELL-3	4/27/2022 9:15	ASD262	M	C227745		0.108	0.00123	0.00102	0.0366	<0.00010	<0.0010	0.080	<0.000010	22.1	0.0030	0.00022	0.00164	0.168	<0.00020	0.0270	17.5	0.0078		0.0102	0.0027		4.33
MWTF-CELL-3	5/3/2022 8:55	ASK913	M	C229394		0.0739	0.00145	0.00059	0.0394	<0.00010	<0.0010	0.133	0.000026	57.4	0.0011	0.00247	0.00187	0.070	<0.00020	0.0868	35.5	0.0349		0.0113	0.0174		5.19
MWTF-CELL-3	5/11/2022 8:55	ASW834	M	C231613		0.0847	0.00156	0.00101	0.0353	<0.00010	<0.0010	0.150	0.000016	40.8	0.0014	0.00108	0.00130	0.187	<0.00020	0.0917	21.6	0.0174		0.0133	0.0098		4.00
MWTF-CELL-3	5/18/2022 9:05	ATH373	M	C233574		0.0504	0.00169	0.00128	0.0355	<0.00010	<0.0010	0.111	<0.000010	30.9	0.0025	0.00060	0.00098	0.051	<0.00020	0.0559	16.9	0.0093		0.0107	0.0063		4.24
MWTF-CELL-3	5/25/2022 9:10	ATQ475	M	C235131		0.0188	0.00219	0.00089	0.0318	<0.00010	<0.0010	0.140	<0.000010	34.5	0.0015	0.00035	0.00073	0.015	<0.00020	0.0642	14.6	0.0047		0.0125	0.0032		4.35
MWTF-CELL-3	6/1/2022 8:55	AUC439	M	C237402		0.0817	0.00207	0.00090	0.0623	<0.00010	<0.0010	0.198	0.000075	68.1	0.0018	0.00378	0.00160	0.173	<0.00020	0.139	22.1	0.0481		0.0139	0.0190		5.63
MWTF-CELL-3	6/8/2022 8:55	AUR913	M	C239868		0.0357	0.00266	0.00119	0.0404	<0.00010	<0.0010	0.272	<0.000010	35.6	0.0035	0.00081	0.00096	0.027	<0.00020	0.114	20.9	0.0092		0.0179	0.0061		6.95
MWTF-CELL-3	6/18/2022 10:00	AVL920	M	C243145	3.2	0.0986	0.00159	0.00104	0.0519	<0.0001	<0.001	0.294	0.000026	55.0	0.0028	0.00086	0.00167	0.214	<0.0002	0.0751	35.0	0.0354	0.0000024	0.018	0.0081	0.022	6.82
MWTF-CELL-3	6/19/2022 7:00	AVL891	M	C243135	2.85	0.0741	0.00147	0.00088	0.0491	<0.0001	<0.001	0.263	0.000021	59.9	0.0027	0.0008	0.00148	0.115	<0.0002	0.0711	34.6	0.0263	<0.0000019	0.0155	0.0079	0.019	6.36
MWTF-CELL-3	6/20/2022 11:05	AVO877	M	C243649	2.67	0.0718	0.0014	0.00087	0.0542	<0.0001	<0.001	0.236	<0.00001	71.7	0.0023	0.00092	0.00155	0.066	<0.0002	0.0687	37.6	0.0246	<0.0000019	0.0142	0.0089	0.023	6.40
MWTF-CELL-3	6/22/2022 9:30	AVQ401	M	C243950		0.0429	0.00139	0.00100	0.0681	<0.00010	<0.0010	0.214	0.000011	84.0	0.0020	0.00068	0.00149	0.042	<0.00020	0.0660	40.1	0.0164		0.0136	0.0076		7.02
MWTF-CELL-3	6/29/2022 8:55	AWE579	M	C246283		0.0682	0.00114	0.00088	0.0446	<0.00010	<0.0010	0.183	<0.000010	42.5	0.0023	0.00032	0.00125	0.199	<0.00020	0.0403	21.8	0.0134		0.0117	0.0035		5.89
MWTF-CELL-3	7/11/2022 12:00	AXC957	M	C250181	2.88	0.0513	0.00183	0.00128	0.0389	<0.0001	<0.001	0.242	0.00001	38.9	0.0036	0.00027	0.0017	0.104	<0.0002	0.0492	29.1	0.0073	0.0000027	0.019	0.0027	0.024	9.55
MWTF-CELL-3	7/19/2022 12:50	AXQ710	M	C252510	2.69	0.123	0.00142	0.00124	0.0302	<0.0001	<0.001	0.186	<0.00001	30.5	0.0038	<0.0002	0.00176	0.048	<0.0002	0.0334	24.0	0.0018	<0.0000019	0.0166	0.0018	0.012	8.04
MWTF-CELL-3	7/28/2022 12:10	AYM158	M	C255903	2.73	0.0928	0.00132	0.00107	0.036	<0.0001	<0.001	0.176	<0.00001	29.2	0.0022	<0.0002	0.00174	0.071	<0.0002	0.027	20.5	0.0043	<0.0000019	0.0154	0.0015	0.013	7.12
MWTF-CELL-3	8/3/2022 11:10	AYX384	M	C257672	2.98	0.115	0.0013	0.00111	0.0286	<0.0001	<0.001	0.171	0.00001	15.8	0.0026	<0.0002	0.00181	0.123	<0.0002	0.0235	15.4	0.0038	<0.0000019	0.0153	0.0013	0.017	6.97
MWTF-CELL-3	8/22/2022 15:00	BAG922	M	C263407	2.20	0.071	0.00151	0.00146	0.0292	<0.0001	<0.001	0.15	<0.00001	11.0	0.002	<0.0002	0.00112	0.022	<0.0002	0.0203	13.2	0.002	<0.0000019	0.0182	0.0013	<0.01	7.23
MWTF-CELL-3	9/4/2022 15:30	BBI408	M	C268301	2.97	0.06	0.00185	0.00182	0.0325	<0.0001	<0.001	0.205	<0.00001	9.62	0.0016	<0.0002	0.00097	0.023	<0.0002	0.0267	12.2	0.0016	<0.0000019	0.02	<0.001	<0.01	7.51
MWTF-CELL-3	9/8/2022 12:15	BBO448	M	C269143	2.26	0.137	0.00208	0.00173	0.0245	<0.0001	<0.001	0.193	<0.00001	10.2	0.0021	<0.0002	0.00112	0.043	<0.0002	0.0263	13.2	0.0011	<0.0000019	0.0202	<0.001	0.012	7.53
MWTF-CELL-3	9/17/2022 12:20	BCF753	M	C272259	2.88	0.0596	0.00125	0.00123	0.0334	<0.0001	<0.001	0.185	0.000014	25.5	0.0015	<0.0002	0.00113	0.06	<0.0002	0.0388	24.7	0.0037	<0.0000019	0.0163	0.0018	0.011	7.32
MWTF-CELL-3	9/22/2022 13:00	BCR618	M	C273969	2.27	0.0505	0.00117	0.0011	0.0518	<0.0001	<0.001	0.146	<0.00001	39.8	0.0036	<0.0002	0.00105	0.022	<0.0002	0.0305	33.9	0.0028	<0.0000019	0.0158	0.0035	0.016	7.80
MWTF-CELL-3	9/30/2022 11:40	BDH546	M	C276348	3.02	0.0677	0.00143	0.0014	0.0393	<0.0001	<0.001	0.152	0.00001	30.0	0.0049	<0.0002	0.00108	0.087	<0.0002	0.0258	25.6	0.0086	<0.0000019	0.0185	0.0022	0.022	7.95
MWTF-CELL-3	10/6/2022 12:25	BDZ974	M	C278888	1.96	0.145	0.0011	0.00116	0.0641	<0.0001	<0.001	0.12	<0.00001	67.6	0.0036	0.0002	0.0016	0.161	<0.0002	0.0191	22.9	0.0077	<0.0000019	0.0134	0.0012	0.024	7.68
MWTF-CELL-3	10/19/2022 11:35	BFA350	M	C282741	2.09	0.672	0.00105	0.00147	0.149	<0.0001	<0.001	0.098	0.000036	97.1	0.004	0.00065	0.00224	0.809	0.00055	0.0167	23.0	0.0317	0.0000028	0.0124	0.0029	0.052	6.43
MWTF-CELL-3	10/29/2022 15:25	BFZ656	M	C286199	1.99	0.227	0.0008	0.00084	0.0873	<0.0001	<0.001	0.067	0.000014	79.5	0.0024	0.00024	0.00125	0.189	<0.0002	0.0118	17.0	0.0078	<0.0000019	0.009	0.002	0.024	4.87
MWTF-CELL-3	11/3/2022 13:00	BGJ745	M	C287759	2.04	0.588	0.00093	0.00095	0.0996	<0.0001	<0.001	0.051	0.000028	70.5	0.0022	0.00047	0.00327	0.599	0.00059	0.0082	14.8	0.0179	0.0000037	0.005	0.0019	0.031	3.67
MWTF-CELL-3	11/9/2022 11:30	BGW285	M	C289508	2.39	0.302	<0.0005	0.00051	0.0692	<0.0001	<0.001	<0.05	0.000022	65.1	0.002	0.00029	0.00149	0.291	0.00034	0.0083	12.3	0.0095	<0.0000019	0.0034	0.0016	0.019	2.69
MWTF-CELL-3	11/19/2022 12:50	BHL413	M	C291899	2.10	0.109	<0.0005	0.00038	0.0649	<0.0001	<0.001	<0.05	0.000031	63.3	<0.001	0.00022	0.00097	0.19	<0.0002	0.0065	12.0	0.0074	<0.0000019	0.0027	0.0016	0.015	2.05
MWTF-CELL-3	11/23/2022 13:15	BHR241	M	C292918	1.51	0.393	<0.0005	0.00052	0.0739	<0.0001	<0.001	<0.05	0.000019	67.8	0.0019	0.00034	0.00181	0.415	0.00028	0.0087	12.4	0.0099	<0.0000019	0.0036	0.0016	0.027	2.37
MWTF-CELL-3	12/2/2022 11:30	BIF819	M	C295193	1.91	0.0791	<0.0005	0.00032	0.0596	<0.0001	<0.001	<0.05	0.000015	65.1	<0.001	<0.0002	0.00062	0.097	<0.0002	0.0063	11.8	0.0042	<0.0000019	0.0026	0.0014	0.011	1.81
MWTF-CELL-3	12/17/2022 11:30	BJL793	M	C299939	1.33	0.141	<0.0005	0.00031	0.0739	<0.0001	<0.001	<0.05	0.000021	71.5	0.0011	0.00027	0.00116	0.185	<0.0002	0.008	11.8	0.0064	<0.0000019	0.0028	0.0022	0.014	2.34
MWTF-CELL-3	12/20/2022 11:20	BJP135	M	C2A0603	1.25	0.163	<0.0005	0.00037	0.066	<0.0001	<0.001	<0.05	0.000022	66.9	0.001	0.00024	0.0013	0.193	<0.0002	0.0075	12.1	0.0068	<0.0000019	0.0027	0.0017	0.02	2.28
MWTF-CELL-3	12/29/2022 13:00	BJT906	M	C2A1753	1.22	0.0813	<0.0005	0.00041	0.0606	<0.0001	<0.001	0.057	<0.00001	66.4	<0.001	<0.0002	0.00069	0.052	<0.0002	0.0102	13.7	0.0025	<0.0000019	0.0047	<0.001	0.011	2.77
MWTF-PAG-POND	1/12/2022 8:50	AMY186	M	C201826		1.60	0.00160	0.00249	0.189	0.00013	<0.0010	0.107	0.000190	80.6	0.0047	0.00331	0.0145	3.42	0.00308	0.0747	30.2	0.105	<0.000050	0.0056	0.0127		4.08
MWTF-PAG-POND	1/19/2022 8:50	ANG682	M	C203398		0.629	0.00121	0.00098	0.146	<0.00010	<0.0010	0.123	0.000015	64.1	0.0021	0.00122	0.00345	0.490	0.00067	0.0698	26.0	0.206	<0.000050	0.0067	0.0051		4.08
MWTF-PAG-POND	1/26/2022 9:30	ANP080	M	C204889		1.64	0.00154	0.00119	0.129	<0.00010	<0.0010	0.115	0.000986	90.1	0.0060	0.0231	0.00815	1.54	0.00092	0.0715	33.8	0.328	<0.000050	0.0101	0.0837		5.21
MWTF-PAG-POND	2/2/2022 9:00	ANZ525	M	C206699		0.317	0.00146	0.00154	0.0918	<0.00010	<0.0010	0.140	0.000062	71.8	0.0054	0.00153	0.00457	0.512	0.00043	0.0998	27.9	0.0346	<0.000050	0.0076	0.0063		5.75
MWTF-PAG-POND	2/9/2022 8:45	AOI317	M	C208269		0.424	0.00074	0.00055	0.0979	<0.00010	<0.0010	0.057	0.000822	102	0.0012	0.0185	0.00639	0.743	0.00033	0.0440	21.1	0.468		0.0040	0.0626		4.34
MWTF-PAG-POND	2/16/2022 8:45	AOS650	M	C210024		0.563	0.00114	0.00094	0.165	<0.00010	<0.0010	<0.050	0.000119	85.1	0.0022	0.00489	0.00619	0.534	0.00054	0.0276	19.4	0.280		0.0067	0.0222		4.86
MWTF-PAG-POND	2/23/2022 9:00	APC511	M	C211586		0.500	0.00068	0.00092	0.117	<0.00010	<0.0010	0.053	0.000110	65.4	0.0018	0.00350	0.00344	0.425	0.00033	0.0308	18.4	0.150		0.0046	0.0154		3.64
MWTF-PAG-POND	3/2/2022 9:00	APM687	M	C213453		3.14	0.00102	0.00279	0.243	0.00016	<0.0010	0.085	0.000134	71.2	0.0048	0.00257	0.00688	4.87	0.00266	0.0556	16.3	0.109		0.0046	0.0088		3.49
MWTF-PAG-POND	3/9/2022 8:50	APV998	M	C215209		0.571	0.00124	0.00186	0.179	<0.00010	<0.0010	0.073	0.000040	62.8	0.0033	0.00138	0.00409	1.11	0.00077	0.0520	22.9	0.0349		0.0058	0.0055		3.13
MWTF-PAG-POND	3/16/2022 8:55	AQE361	M	C217028		0.609	0.00149	0.00192	0.157	<0.00010	<0.0010	0.097	0.000049	66.7	0.0038	0.00224	0.00716	1.59	0.00091	0.0815	27.3	0.0706		0.0102	0.0111		4.32
MWTF-PAG-POND	3/23/2022 9:00	AQN280	M	C218879		3.11	0.00128	0.00247	0.186	0.00014	<0.0010	0.084	0.000217	67.2	0.0082	0.00697	0.00796	3.93	0.00193	0.0442	18.7	0.234		0.0095	0.0280		5.09
MWTF-PAG-POND	3/30/2022 9:20	AQV053	M	C220559		2.06	0.00088	0.00319	0.241	0.00022	<0.0010	0.078	0.000683	91.0	0.0055	0.0140	0.0142	6.65	0.00261	0.0712	21.4	0.401		0.0062	0.0495		3.73
MWTF-PAG-POND	4/6/2022 8:45	ARE616	M	C222526		0.450	0.00135	0.00154	0.124	<0.00010	<0.0010	0.109	0.000106	73.5	0.0034	0.00392	0.00426	1.26	0.00070	0.0587	20.1	0.162		0.0156	0.0165		4.64
MWTF-PAG-POND	4/13/2022 8:00	ARN238	M	C224394		0.530	0.00113	0.00113	0.182	<0.00010	<0.0010	0.092	0.000048	82.3	0.0026	0.00111	0.00509	0.703	0.00059	0.0290	21.6	0.0690		0.0106	0.0064		4.29
MWTF-PAG-POND	4/20/2022 9:00	ARV014	M	C225896		0.773	0.00148	0.00180	0.218	<0.00010	<0.0010	0.068	0.000029	68.6	0.0052	0.00094	0.00405	0.934	0.00057	0.0229	19.0	0.0318		0.0111	0.0053		4.70
MWTF-PAG-POND	4/27/2022 9:00	ASD261	M	C227745		2.00	0.00155	0.00284	0.239	0.00013	<0.0010	0.098	0.000087	64.4	0.0054	0.00259	0.0130	3.35	0.00228	0.0383	18.8	0.0885		0.0112	0.0109		4.62
MWTF-PAG-POND	5/3/2022 8:45	ASK912	M	C229394		0.482	0.00162	0.00125	0.117	<0.00010	<0.0010	0.141	0.000814	74.0	0.0022	0.0313	0.00725	0.417	0.00035	0.0996	28.5	0.400		0.0165	0.106		5.29
MWTF-PAG-POND	5/11/2022 8:45	ASW833	M	C231613		1.09	0.00163	0.00144	0.160	<0.00010	<0.0010	0.167	0.000650	86.0	0.0030	0.0262	0.00787	1.36	0.00067	0.104	27.2	0.363		0.0142	0.0928		4.42
MWTF-PAG-POND	5/18/2022 9:05	ATH372	M	C233574		0.450	0.00150	0.00089	0.151	<0.00010	<0.0010	0.120	0.000047	65.5	0.0028	0.00758	0.00216	0.391	0.00028	0.0588	18.0	0.134		0.0107	0.0333		4.16
MWTF-PAG-POND	5/25/2022 9:00	ATQ474	M	C235131		0.258	0.00244	0.00250	0.132	<0.00010	<0.0010	0.206	0.000044	77.9	0.0028	0.00820	0.00218	0.271	0.00023	0.0834	26.2	0.159		0.0157	0.0419		5.76
MWTF-PAG-POND	6/1/2022 8:45	AUC438	M	C237402		0.276	0.00255	0.00175	0.168	<0.00010	<0.0010	0.251	0.00106	78.3	0.0033	0.0361	0.00552	0.358	0.00034	0.128	25.6	0.431		0.0169	0.124		6.72
MWTF-PAG-POND	6/8/2022 8:45	AUR912	M	C239868		2.12	0.00373	0.00469	0.201	0.00013	<0.0010	0.520	0.000074	43.6	0.0062	0.00324	0.00864	2.88	0.00168	0.0847	17.7	0.0649		0.0270	0.0150		10.4
MWTF-PAG-POND	6/12/2022 11:30	AUY704	M	C241043	3.54	0.364	0.00146	0.00137	0.0903	<0.0001	<0.001	0.297	0.000623	136	0.003	0.0218	0.0029	0.478	0.00025	0.097	56.4	0.581	0.0000021	0.018	0.0718	0.042	6.73
MWTF-PAG-POND	6/22/2022 9:45	AVQ400	M	C243950		0.347	0.00199	0.00245	0.259	<0.00010	<0.0010	0.227	0.000019	100	0.0028	0.00287	0.00351	0.462	0.00034	0.0565	33.0	0.0693		0.0156	0.0215		7.79
MWTF-PAG-POND	6/29/2022 8:45	AWE578	M	C246283		0.684	0.00147	0.00171	0.133	<0.00010	<0.0010	0.263	0.000031	72.1	0.0053	0.00143	0.00572	0.929	0.00078	0.0501	24.2	0.0391		0.0190	0.0086		9.59
MWTF-PAG-POND	7/11/2022 23:25	AXC955	M	C250181	3.01	0.335	0.0015	0.00159	0.129	<0.0001	<0.001	0.232	0.000022	101	0.0047	0.00076	0.00274	0.516	0.00041	0.0442	36.8	0.0235	0.0000056	0.018	0.006	0.055	9.40
MWTF-PAG-POND	7/28/2022 11:20	AYM156	M	C255903	2.51	0.252	0.00149	0.00134	0.0833	<0.0001	<0.001	0.196	<0.00001	64.1	0.0015	0.00033	0.00265	0.274	0.00021	0.027	18.6	0.0087	<0.0000019	0.0173	0.0016	0.022	7.93
MWTF-PAG-POND	8/3/2022 10:40	AYX383	M	C257672	3.42	0.725	0.00101	0.00168	0.111	<0.0001	<0.001	0.128	0.000054	58.3	0.0024	0.00111	0.00362	1.21	0.00071	0.0178	15.3	0.0403	0.0000024	0.0114	0.0047	0.058	5.19
MWTF-PAG-POND	8/22/2022 14:30	BAG921	M	C263407	1.92	1.37	0.00183	0.0027	0.326	<0.0001	<0.001	0.198	<0.00001	54.1	0.003	0.00038	0.00193	0.421	0.00028	0.0275	14.6	0.0047	<0.0000019	0.0213	0.0023	0.031	7.98
MWTF-PAG-POND	9/4/2022 15:00	BBI406	M	C268301	2.61	0.922	0.00216	0.00272	0.21	<0.0001	<0.001	0.203	0.000016	47.0	0.0021	0.0004	0.00248	0.487	0.00036	0.0263	14.5	0.0071	<0.0000019	0.0195	0.0019	0.032	7.57

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
MWTF-PAG-POND	9/8/2022 12:45	BBO449	M	C269143	3.04	1.92	0.00154	0.00214	0.198	<0.0001	<0.001	0.205	0.000021	62.5	0.0029	0.00063	0.00263	0.854	0.00041	0.0387	25.3	0.0153	<0.0000019	0.0184	0.0035	0.048	7.90
MWTF-PAG-POND	9/17/2022 12:00	BCF752	M	C272259	2.47	0.934	0.00126	0.00301	0.322	<0.0001	<0.001	0.14	0.000531	74.0	0.0029	0.00664	0.00537	2.68	0.00082	0.0264	26.7	0.191	<0.0000019	0.0149	0.0247	0.112	6.64
MWTF-PAG-POND	9/22/2022 12:45	BCR617	M	C273969	2.77	0.244	0.00136	0.00145	0.135	<0.0001	<0.001	0.138	0.000035	85.3	0.0022	0.00132	0.00182	0.252	<0.0002	0.0274	38.6	0.0559	<0.0000019	0.0146	0.0079	0.027	7.65
MWTF-PAG-POND	9/30/2022 11:25	BDH547	M	C276348	1.96	0.127	0.00153	0.00196	0.116	<0.0001	<0.001	0.128	<0.00001	61.7	0.0044	0.00023	0.00146	0.148	<0.0002	0.0209	18.1	0.0103	<0.0000019	0.0168	0.0024	0.021	7.12
PRHP-WTF-INFLUENT-PIPE	6/13/2022 12:30	AVD895	M	C241931	3.38	0.472	0.00164	0.00178	0.0931	<0.0001	<0.001	0.288	0.000163	108	0.0037	0.00886	0.00367	0.499	0.00031	0.0839	42.4	0.237	0.0000019	0.0204	0.035	0.045	6.66
PRHP-WTF-INFLUENT-PIPE	6/14/2022 16:05	AVD461	M	C241802																							
PRHP-WTF-INFLUENT-PIPE	6/17/2022 18:20	AVK706	M	C242936																							
PRHP-WTF-INFLUENT-PIPE	6/18/2022 10:35	AVL921	M	C243145																							
PRHP-WTF-REACTOR-EOP	6/13/2022 16:00	AVD896	M	C241931																							
PRHP-WTF-REACTOR-EOP	6/14/2022 15:50	AVD460	M	C241802																							
PRHP-WTF-REACTOR-EOP	6/17/2022 18:30	AVK707	M	C242936																							
PRHP-WTF-REACTOR-EOP	6/18/2022 10:50	AVL922	M	C243145																							
PR-IDZ	1/1/2022 11:45	FJ2200029-005	M	FJ2200029	4.49	0.0330	<0.00010	0.00017	0.0310	<0.000100	<0.000050	<0.010	0.0000202	27.7	<0.00050	<0.00010	0.00066	0.039	<0.000050	0.0012	6.38	0.00224	<0.0000050	0.000775	0.00083	<0.050	0.432
PR-IDZ	1/5/2022 13:25	FJ2200018-002	M	FJ2200018	2.85	0.0312	<0.00010	0.00020	0.0338	<0.000100	<0.000050	<0.010	0.0000170	29.8	<0.00050	<0.00010	0.00070	0.042	<0.000050	0.0019	7.48	0.00325	<0.0000050	0.000972	0.00097	<0.050	0.511
PR-IDZ	1/13/2022 14:00	FJ2200098-002	M	FJ2200098	3.45	0.0339	<0.00010	0.00026	0.0337	<0.000100	<0.000050	<0.010	0.0000191	28.5	<0.00050	<0.00010	0.00075	0.046	<0.000050	0.0011	6.70	0.00207	<0.0000050	0.000919	0.00090	<0.050	0.463
PR-IDZ	1/19/2022 13:00	FJ2200185-003	M	FJ2200185	3.29	0.0292	<0.00010	0.00022	0.0348	<0.000100	<0.000050	<0.010	0.0000156	31.8	<0.00050	<0.00010	0.00072	0.036	<0.000050	0.0014	7.55	0.00209	<0.0000050	0.000986	0.00088	<0.050	0.493
PR-IDZ	1/19/2022 13:30	FJ2200185-004	D	FJ2200185	3.18	0.0245	<0.00010	0.00024	0.0347	<0.000100	<0.000050	<0.010	0.0000139	31.5	<0.00050	<0.00010	0.00072	0.032	<0.000050	0.0013	7.50	0.00184	<0.0000050	0.000932	0.00084	<0.050	0.485
PR-IDZ	1/26/2022 13:30	ANQ897	M	C205279	1.89	0.0312	<0.0005	0.00015	0.0308	<0.0001	<0.001	<0.05	0.000019	30.4	<0.001	<0.0002	0.00065	0.052	<0.0002	<0.002	6.13	0.0021	0.0000031	<0.001	<0.001	<0.01	0.412
PR-IDZ	2/3/2022 14:00	AOC178	M	C207302	3.0	0.0219	<0.0005	0.00018	0.0312	<0.0001	<0.001	<0.05	0.000025	31.3	<0.001	<0.0002	0.00068	0.041	<0.0002	<0.002	6.29	0.002	<0.0000019	<0.001	<0.001	0.016	0.434
PR-IDZ	2/8/2022 14:10	AOI291	M	C208265	2.25	0.0265	<0.0005	0.00019	0.0288	<0.0001	<0.001	<0.05	0.000016	31.6	<0.001	<0.0002	0.00061	0.053	<0.0002	<0.002	5.20	0.002	0.0000023	<0.001	<0.001	<0.01	0.399
PR-IDZ	2/16/2022 13:00	AOU841	M	C210450	2.1	0.0246	<0.0005	0.00033	0.0393	<0.0001	<0.001	<0.05	<0.00001	30.2	<0.001	<0.0002	0.00074	0.039	<0.0002	<0.002	6.32	0.0021	<0.0000019	0.001	<0.001	0.014	0.639
PR-IDZ	2/24/2022 14:00	APF948	M	C212235	2.5	0.0265	<0.0005	0.00017	0.031	<0.0001	<0.001	<0.05	0.000011	29.4	<0.001	<0.0002	0.00063	0.042	<0.0002	<0.002	6.51	0.0019	<0.0000019	<0.001	<0.001	<0.01	0.449
PR-IDZ	3/2/2022 14:25	APO716	M	C213881	2.5	0.0238	<0.0005	<0.0001	0.0288	<0.0001	<0.001	<0.05	<0.00001	36.0	<0.001	<0.0002	0.00051	0.027	<0.0002	<0.002	5.68	0.0012	<0.0000019	<0.001	<0.001	0.011	0.432
PR-IDZ	3/10/2022 11:55	APZ001	M	C215884	2.1	0.0276	<0.0005	0.00017	0.0313	<0.0001	<0.001	<0.05	0.000012	30.8	<0.001	<0.0002	0.00069	0.046	<0.0002	<0.002	6.88	0.002	<0.0000019	<0.001	<0.001	<0.01	0.468
PR-IDZ	3/17/2022 17:00	AQH798	M	C217776	2.06	0.0801	<0.0005	0.00028	0.0369	<0.0001	<0.001	<0.05	0.000013	30.3	<0.001	<0.0002	0.00121	0.16	<0.0002	<0.002	7.10	0.0054	<0.0000019	<0.001	0.0011	0.016	0.551
PR-IDZ	3/23/2022 16:15	AQP258	M	C219363	1.96	0.0712	<0.0005	0.00025	0.0343	<0.0001	<0.001	<0.05	0.00002	30.6	<0.001	<0.0002	0.00096	0.115	<0.0002	<0.002	7.39	0.0048	<0.0000019	<0.001	0.0012	0.016	0.606
PR-IDZ	3/30/2022 13:40	AQX833	M	C221206	1.90	0.0288	<0.0005	0.00024	0.0262	<0.0001	<0.001	<0.05	0.000017	26.9	<0.001	<0.0002	0.00062	0.059	<0.0002	<0.002	5.18	0.0025	<0.0000019	<0.001	<0.001	<0.01	0.365
PR-IDZ	4/7/2022 15:00	ARI196	M	C223271	2.9	0.0432	<0.0005	0.00017	0.0327	<0.0001	<0.001	<0.05	0.000019	33.1	<0.001	<0.0002	0.00082	0.102	<0.0002	<0.002	6.36	0.0041	<0.0000019	<0.001	0.001	<0.01	0.489
PR-IDZ	4/13/2022 15:00	ARP727	M	C224775	1.50	0.0486	<0.0005	0.00019	0.029	<0.0001	<0.001	<0.05	0.000018	28.0	<0.001	<0.0002	0.00065	0.082	<0.0002	<0.002	5.79	0.0027	<0.0000019	<0.001	<0.001	0.013	0.430
PR-IDZ	4/20/2022 13:30	ARW669	M	C226267	2.26	0.0445	<0.0005	0.00021	0.0347	<0.0001	<0.001	<0.05	0.000013	31.2	<0.001	<0.0002	0.00096	0.083	<0.0002	<0.002	7.40	0.0031	<0.0000019	<0.001	<0.001	<0.01	0.511
PR-IDZ	4/28/2022 11:30	ASH218	M	C228650	2.23	0.579	<0.0005	0.00042	0.0431	<0.0001	<0.001	<0.05	0.000044	29.2	0.0011	0.00039	0.00158	0.836	0.00042	0.002	7.15	0.0154	0.0000036	<0.001	0.0021	0.034	0.699
PR-IDZ	5/4/2022 13:10	ASP677	M	C230320	3.16	1.26	<0.0005	0.0008	0.0719	<0.0001	<0.001	<0.05	0.000098	29.9	0.0024	0.00112	0.00382	2.41	0.0013	0.0028	7.57	0.0417	0.0000075	<0.001	0.0044	0.086	1.05
PR-IDZ	5/11/2022 14:15	ASZ425	M	C232133	3.93	1.83	<0.0005	0.0017	0.0941	0.00013	<0.001	<0.05	0.000166	32.9	0.0039	0.00166	0.00564	3.6	0.00193	0.0029	7.58	0.062	0.0000091	<0.001	0.0063	0.125	1.58
PR-IDZ	5/19/2022 14:00	ATL912	M	C234314	4.34	1.59	<0.0005	0.00108	0.0735	<0.0001	<0.001	<0.05	0.000086	30.0	0.0028	0.0008	0.00282	1.79	0.001	0.0039	7.54	0.0286	0.0000057	<0.001	0.0035	0.059	1.07
PR-US-R5A	1/1/2022 10:00	FJ2200029-006	M	FJ2200029	4.67	0.0604	<0.00010	0.00024	0.0368	<0.000100	<0.000050	<0.010	0.0000253	31.6	0.00102	<0.00010	0.00095	0.079	0.000063	0.0014	7.25	0.00329	<0.0000050	0.000875	0.00127	<0.050	0.493
PR-US-R5A	1/13/2022 15:00	FJ2200098-003	M	FJ2200098	4.19	0.0353	<0.00010	0.00028	0.0328	<0.000100	<0.000050	<0.010	0.0000155	27.0	<0.00050	<0.00010	0.00069	0.048	<0.000050	<0.0010	6.75	0.00197	<0.0000050	0.000914	0.00088	<0.050	0.444
PR-US-R5A	1/26/2022 12:45	ANQ898	M	C205279	1.84	0.0343	<0.0005	0.00014	0.0304	<0.0001	<0.001	<0.05	0.000022	29.7	<0.001	<0.0002	0.00063	0.066	<0.0002	<0.002	5.87	0.0025	0.0000029	<0.001	<0.001	<0.01	0.399
PR-US-R5A	2/16/2022 16:00	AOU842	M	C210450	2.3	0.0651	<0.0005	0.00032	0.0426	<0.0001	<0.001	<0.05	0.000029	31.1	<0.001	<0.0002	0.00085	0.11	<0.0002	<0.002	6.45	0.0048	0.0000028	0.001	<0.001	0.019	0.656
PR-US-R5A	2/24/2022 14:00	APF949	M	C212235	2.7	0.0286	<0.0005	0.00017	0.0309	<0.0001	<0.001	<0.05	<0.00001	28.9	<0.001	<0.0002	0.00068	0.041	<0.0002	<0.002	6.41	0.0019	<0.0000019	<0.001	<0.001	<0.01	0.449
PR-US-R5A	3/10/2022 15:20	APZ002	M	C215884	2.2	0.0275	<0.0005	0.00028	0.0325	<0.0001	<0.001	<0.05	0.000012	32.0	<0.001	<0.0002	0.00071	0.04	<0.0002	<0.002	7.03	0.0019	<0.0000019	<0.001	<0.001	<0.01	0.481
PR-US-R5A	3/17/2022 18:30	AQH800	M	C217776	2.14	0.0866	<0.0005	0.00023	0.0339	<0.0001	<0.001	<0.05	0.000014	26.7	<0.001	<0.0002	0.00078	0.129	<0.0002	<0.002	6.45	0.0048	<0.0000019	<0.001	<0.001	<0.01	0.487
PR-US-R5A	3/23/2022 16:15	AQP262	M	C219363	2.48	0.114	<0.0005	0.00029	0.0342	<0.0001	<0.001	<0.05	0.000024	29.9	<0.001	<0.0002	0.001	0.204	<0.0002	<0.002	7.20	0.0069	<0.0000019	<0.001	0.0014	0.015	0.532
PR-US-R5A	4/7/2022 11:00	ARI197	M	C223271	2.5	0.0288	<0.0005	0.00018	0.0331	<0.0001	<0.001	<0.05	0.000016	35.3	<0.001	<0.0002	0.00079	0.064	<0.0002	<0.002	6.55	0.0032	<0.0000019	<0.001	<0.001	<0.01	0.489
PR-US-R5A	4/28/2022 15:00	ASH219	M	C228650	2.13	0.309	<0.0005	0.00037	0.038	<0.0001	<0.001	<0.05	0.000035	28.0	<0.001	0.00023	0.0011	0.459	0.00027	<0.002	6.71	0.0085	0.0000019	<0.001	0.0016	0.025	0.572
PR-US-R5A	5/4/2022 16:00	ASP679	M	C230320	2.54	0.509	<0.0005	0.00039	0.0448	<0.0001	<0.001	<0.05	0.000057	29.1	0.0012	0.00061	0.00173	0.795	0.00044	0.0025	7.27	0.0177	<0.0000019	<0.001	0.0028	0.039	0.800
PR-US-R5A	5/19/2022 15:30	ATL913	M	C234314	2.99	0.72	<0.0005	0.00057	0.0592	<0.0001	<0.001	<0.05	0.000056	35.3	0.0017	0.00047	0.0018	0.936	0.0005	0.0038	8.10	0.0226	0.0000028	<0.001	0.0025	0.031	0.853
QAQC_Curing_Tanks	6/23/2022 15:40	AVV602	M	C244839	2.58	0.151	0.00699	0.00208	0.029	<0.0001	<0.001	0.672	<0.00001	6.69	0.0018	0.00034	0.104	0.866	0.00082	0.115	6.07	0.0175	0.0000031	0.0166	<0.001	0.018	213
RBAC-Sump-BT	1/22/2022 12:45	FJ2200193-003	M	FJ2200193	1.36	0.882	0.00054	0.00106	0.130	<0.000100	<0.000050	0.196	0.000387	40.8	0.00140	0.0111	0.00439	1.04	0.000726	0.162	15.7	0.150	<0.0000050	0.00252	0.0374	0.068	2.78
RSEM-L5E-P2-EOP	1/23/2022 17:35	FJ2200194-003	M	FJ2200194	3.30	1.42	0.00023	0.00168	0.0762	<0.000100	<0.000050	0.012	0.000179	43.9	0.00248	0.00257	0.00651	2.87	0.00180	0.0057	10.4	0.121	<0.0000050	0.00215	0.0104	0.115	2.88
RSEM-L5E-P2-EOP	2/11/2022 12:10	AOM647	M	C208915	3.08	0.207	<0.0005	0.00031	0.0397	<0.0001	<0.001	<0.05	0.000408	106	<0.001	0.00925	0.00447	0.375	0.00024	0.0173	23.3	0.47	<0.0000019	0.003	0.0373	0.03	5.20
RSEM-L5E-P2-EOP	3/23/2022 17:55	AQP259	M	C219363	3.68	0.414	<0.0005	0.00062	0.0471	<0.0001	<0.001	<0.05	0.000172	90.9	0.0015	0.00319	0.00492	0.683	0.00059	0.0119	27.6	0.313	0.0000039	0.0037	0.0159	0.048	5.61
RSEM-L5E-P2-EOP	3/24/2022 17:20	AQP982	M	C219524	2.99	0.335	<0.0005	0.00042	0.0423	<0.0001	<0.001	<0.05	0.000123	69.1	<0.001	0.00263	0.00356	0.363	0.00025	0.0106	19.9	0.224	<0.0000019	0.0029	0.0128	0.032	4.16
RSEM-L5E-P2-EOP	3/25/2022 13:40	AQP918	M	C219519	2.88	0.184	<0.0005	0.00043	0.042	<0.0001	<0.001	<0.05	0.000112	65.6	<0.001	0.0025	0.00382	0.209	<0.0002	0.0103	18.8	0.209	<0.0000019	0.0028	0.0124	0.027	3.95
RSEM-L5E-P2-EOP	4/12/2022 17:15	ARN335	M	C224402	2.38	0.158	<0.0005	0.00032	0.0461	<0.0001	<0.001	<0.05	0.000087	74.5	<0.001	0.00078	0.00225	0.252	<0.0002	0.0079	19.7	0.135	<0.0000019	0.0027	0.0048	0.029	3.32
RSEM-L5E-P2-EOP	4/13/2022 10:45	ARP730	M	C224775	2.28	0.342	<0.0005	0.00043	0.0527	<0.0001	<0.001	<0.05	0.000091	75.5	<0.001	0.00096	0.00266	0.431	0.00028	0.0089	22.3	0.147	<0.0000019	0.0032	0.0054	0.028	3.61
RSEM-L5E-P2-EOP	4/14/2022 11:35	ARQ066	M	C224815	2.00	0.0687	<0.0005	0.00026	0.0452	<0.0001	<0.001	<0.05	0.00005	60.5	<0.001	0.00137	0.00175	0.092	<0.0002	0.0147	13.1	0.108	<0.0000019	0.0027	0.0083	0.016	2.60
RSEM-L5E-P2-EOP	4/15/2022 11:30	ARQ202	M	C224832	1.93	0.112	<0.0005	0.00026	0.0498	<0.0001	<0.001	<0.05	0.000064	57.9	<0.001	0.00149	0.00198	0.107	<0.0002	0.0127	14.2	0.116	<0.0000019	0.0031	0.009	0.015	2.95
RSEM-L5E-P2-EOP	4/16/2022 11:30	ARR880	M	C225206	1.87	0.0421	<0.0005	0.00033	0.053	<0.0001	<0.001	<0.05	0.000066	67.4	<0.001	0.00158	0.00199	0.072	<0.0002	0.0147	16.0	0.124	<0.0000019	0.0034	0.01	0.016	3.13
RSEM-L5E-P2-EOP	4/20/2022 10:40	ARW671	M	C226267	<0.50	0.123	<0.0005	0.00043	0.0449	<0.0001	<0.001	<0.05	0.000052	73.5	<0.001	0.00088	0.00214	0.247	<0.0002	0.0146	21.9	0.0889	<0.0000019	0.0035	0.0069	0.018	3.53
RSEM-L5E-P2-EOP	5/28/2022 10:10	ATX754	M	C236620	3.35	0.164	<0.0005	0.00042	0.024	<0.0001	<0.001	0.066	0.000046	141	0.0011	0.00209	0.00161	0.171	<0.0002	0.0235	63.3	0.089	<0.0000019	0.0044	0.0214	0.036	5.35
RSEM-L5E-P2-EOP	5/29/2022 14:30	ATW970	M	C236421	2.65	0.14	<0.0005	0.00042	0.0654	<0.0001	<0.001	0.115	0.000648	150	<0.001	0.0121	0.0017	0.19	<0.0002	0.0449	49.3	0.367	<0.0000019	0.0048	0.0502	0.023	4.64
RSEM-L5E-P2-EOP	5/30/2022 11:10	ATZ467	M	C236894	2.03	0.121	<0.0005	0.00044	0.0648	<0.0001	<0.001	0.124	0.000897	138	0.0011	0.0161	0.00191	0.181	<0.0002	0.0463	46.6	0.454	<0.0000019	0.0046	0.0625	0.032	4.85
RSEM-L5E-P2-SP	1/24/2022 15:00	FJ2200237-003	M	FJ2200237	6.85	1.45	0.00029	0.00134	0.0657	<0.000100	<0.000050	0.020	0.000296	67.0	0.00243	0.00585	0.00811	2.29	0.00126	0.0098	15.7	0.278	<0.0000050	0.00290	0.0218	0.097	5.34
RSEM-L5E-P2-SP	2/7/2022 6:30	AOE530	M	C207636	4.39	0.238	<0.0005	0.00035	0.04	<0.0001	<0.001	<0.05	0.00142	129	<0.001	0.0257	0.00654	0.495	0.00024	0.0229	28.2	0.702	0.0000028	0.0026	0.0836	0.029	6.17
RSEM-L5E-P2-SP	2/10/2022 12:55	AOM666	M	C208923	4.31	0.714	<0.0005	0.00075	0.0487	<0.0001	<0.001	<0.05	0.000476	107	0.0013	0.00927	0.00592	1.58	0.00085	0.018	22.8	0.451	0.000006	0.003	0.0369	0.063	5.16
RSEM-L5E-P2-SP	2/12/2022 11:10	AOP213	M	C209346	2.61	0.175	<0.0005	0.00027	0.0357	<0.0001	<0.001	<0.05	0.000405	106	<0.001	0.0088	0.00404	0.271	<0.0002	0.0169	22.8	0.449	0.0000036	0.0028	0.0341	0.028	4.79
RSEM-L5E-P2-SP	2/14/2022 10:45	AOQ980	M	C209670	3.65	0.505	<0.0005	0.00056	0.0438	<0.0001	<0.001	<0.05	0.000432	106	0.0012	0.00944	0.00502	0.946	0.00048	0.0174	24.2	0.479	0.0000036	0.003	0.0372	0.044	5.07
RSEM-L5E-P2-SP	3/17/2022 17:00	AQH801	M	C217776	7.04	0.515	<0.0005	0.00068	0.0494	<0.0001	<0.001	<0.05	0.000272	103	0.0011	0.00782	0.00554	0.998	0.00059	0.0217	26.6	0.449	0.0000027	0.0031	0.0336	0.059	6.01
RSEM-L5E-P2-SP	3/18/2022 6:30	AQH795	M	C217775	6.64	0.863	<0.0005	0.00088	0.0506	<0.0001	<0.001	<0.05	0.000167	89.0	0.0018	0.00399	0.00623	1.54	0.00089	0.0155	24.9	0.294	0.0000067	0.0033	0.0194	0.079	5.87

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
RSEM-L5E-P2-SP	3/19/2022 15:30	AQJ972	M	C218236	6.45	0.593	<0.0005	0.00064	0.046	<0.0001	<0.001	<0.05	0.000136	77.6	0.0013	0.00289	0.00515	1.03	0.0006	0.0119	22.3	0.236	0.0000063	0.0033	0.0151	0.063	5.25
RSEM-L5E-P2-SP	3/20/2022 18:00	AQJ916	M	C218219	5.57	0.507	<0.0005	0.00069	0.0498	<0.0001	<0.001	<0.05	0.000206	88.5	0.0012	0.00408	0.00512	0.955	0.00057	0.013	24.5	0.302	0.0000042	0.0035	0.0187	0.059	5.57
RSEM-L5E-P2-SP	3/21/2022 10:30	AQL267	M	C218465	5.14	0.529	<0.0005	0.0006	0.0476	<0.0001	<0.001	<0.05	0.000164	88.7	0.0011	0.00346	0.00493	0.576	0.00038	0.0127	24.7	0.284	0.0000046	0.0035	0.0172	0.046	5.48
RSEM-L5E-P2-SP	3/22/2022 17:40	AQN716	M	C218958	4.36	0.526	<0.0005	0.00051	0.0443	<0.0001	<0.001	<0.05	0.00017	82.2	0.0011	0.00305	0.00404	0.512	0.00031	0.0116	23.0	0.271	0.0000024	0.0033	0.015	0.039	4.91
RSEM-L5E-P2-SP	3/26/2022 18:15	AQS238	M	C219944	3.84	0.127	<0.0005	0.00042	0.0357	<0.0001	<0.001	<0.05	0.000112	85.3	<0.001	0.00185	0.00383	0.307	<0.0002	0.0114	20.0	0.216	<0.0000019	0.003	0.0102	0.029	4.13
RSEM-L5E-P2-SP	3/27/2022 16:10	AQS344	M	C219976	3.35	0.095	<0.0005	0.0004	0.0351	<0.0001	<0.001	<0.05	0.000098	86.2	<0.001	0.0017	0.00369	0.218	<0.0002	0.011	20.1	0.204	<0.0000019	0.003	0.0093	0.029	4.14
RSEM-L5E-P2-SP	3/28/2022 17:20	AQU419	M	C220399	3.65	0.0827	<0.0005	0.00036	0.0339	<0.0001	<0.001	<0.05	0.000095	79.7	<0.001	0.00156	0.00369	0.178	<0.0002	0.01	18.7	0.194	<0.0000019	0.003	0.0088	0.022	3.86
RSEM-L5E-P2-SP	3/29/2022 16:35	AQV264	M	C220606	2.26	0.0601	<0.0005	0.0003	0.0336	<0.0001	<0.001	<0.05	0.000082	68.5	<0.001	0.00127	0.00265	0.096	<0.0002	0.0083	14.9	0.153	<0.0000019	0.0026	0.0068	0.018	3.31
RSEM-L5E-P2-SP	3/30/2022 14:20	AQX837	M	C221206	2.53	0.0658	<0.0005	0.00039	0.0323	<0.0001	<0.001	<0.05	0.000073	62.3	<0.001	0.00107	0.00291	0.097	<0.0002	0.0072	14.7	0.143	<0.0000019	0.0022	0.0061	0.014	2.95
RSEM-L5E-P2-SP	3/31/2022 17:20	AQY796	M	C221428	2.97	0.0867	<0.0005	0.00036	0.0335	<0.0001	<0.001	<0.05	0.000086	73.5	<0.001	0.00125	0.00271	0.174	<0.0002	0.0081	17.0	0.167	<0.0000019	0.0026	0.007	0.018	3.38
RSEM-L5E-P2-SP	3/31/2022 17:30	AQY797	D	C221428	2.97	0.0862	<0.0005	0.00045	0.0351	<0.0001	<0.001	<0.05	0.000096	75.1	<0.001	0.0013	0.00283	0.159	<0.0002	0.0086	18.8	0.178	0.0000031	0.0027	0.0073	0.017	3.56
RSEM-L5E-P2-SP	4/1/2022 13:20	AQY728	M	C221415	2.75	0.0775	<0.0005	0.00045	0.034	<0.0001	<0.001	<0.05	0.000081	69.4	<0.001	0.00115	0.00281	0.126	<0.0002	0.0077	17.0	0.163	0.0000025	0.0025	0.0066	0.015	3.27
RSEM-L5E-P2-SP	4/2/2022 12:35	ARB516	M	C222000	2.87	0.056	<0.0005	0.0003	0.0358	<0.0001	<0.001	<0.05	0.000084	62.4	<0.001	0.001	0.00249	0.088	<0.0002	0.0067	16.2	0.143	<0.0000019	0.0024	0.006	0.017	3.08
RSEM-L5E-P2-SP	4/2/2022 12:45	ARB517	D	C222000	2.90	0.0566	<0.0005	0.0003	0.0379	<0.0001	<0.001	<0.05	0.000094	80.6	<0.001	0.00115	0.00263	0.132	<0.0002	0.0075	17.9	0.162	0.0000021	0.0031	0.0066	0.022	3.86
RSEM-L5E-P2-SP	4/3/2022 11:10	ARB460	M	C221989	2.8	0.0529	<0.0005	0.00027	0.0326	<0.0001	<0.001	<0.05	0.000066	56.3	<0.001	0.00087	0.00222	0.092	<0.0002	0.006	14.2	0.121	<0.0000019	0.0021	0.0049	0.017	2.71
RSEM-L5E-P2-SP	4/4/2022 10:45	ARB189	M	C221904	2.44	0.091	<0.0005	0.00031	0.0376	<0.0001	<0.001	<0.05	0.000102	56.4	<0.001	0.00091	0.00237	0.107	<0.0002	0.0061	15.2	0.128	<0.0000019	0.0023	0.0053	0.017	2.89
RSEM-L5E-P2-SP	4/6/2022 17:30	ARI190	M	C223269	2.65	0.134	<0.0005	0.00035	0.0479	<0.0001	<0.001	<0.05	0.000103	79.2	<0.001	0.00117	0.00292	0.423	<0.0002	0.0069	19.1	0.161	<0.0000019	0.0034	0.0068	0.02	4.02
RSEM-L5E-P2-SP	4/8/2022 10:30	ARI200	M	C223273	2.67	0.114	<0.0005	0.00042	0.0534	<0.0001	<0.001	<0.05	0.000125	84.1	<0.001	0.00126	0.00327	0.272	0.00024	0.0072	21.5	0.182	<0.0000019	0.0037	0.0072	0.018	4.37
RSEM-L5E-P2-SP	4/10/2022 10:30	ARK078	M	C223661	2.76	0.126	<0.0005	0.00032	0.0467	<0.0001	<0.001	<0.05	0.000111	72.8	<0.001	0.00095	0.00258	0.289	0.00022	0.006	18.0	0.148	<0.0000019	0.003	0.0052	0.026	3.49
RSEM-L5E-P2-SP	4/19/2022 12:00	ARV036	M	C225905	1.59	0.044	<0.0005	0.00018	0.0361	<0.0001	<0.001	<0.05	0.000019	78.1	<0.001	0.00024	0.00148	0.068	<0.0002	0.0141	15.9	0.0153	<0.0000019	0.0032	0.0054	0.01	2.97
RSEM-L5E-P2-SP	4/21/2022 11:15	ARX709	M	C226546	1.95	0.0659	<0.0005	0.00031	0.0532	<0.0001	<0.001	<0.05	0.000063	69.1	<0.001	0.00145	0.00206	0.098	<0.0002	0.0159	17.7	0.109	<0.0000019	0.0034	0.0098	0.013	3.35
RSEM-L5E-P2-SP	5/5/2022 13:45	ASR007	M	C230531	2.58	0.0314	<0.0005	0.00024	0.0528	<0.0001	<0.001	0.058	0.000053	106	<0.001	0.00078	0.00178	0.031	<0.0002	0.0193	38.4	0.0287	<0.0000019	0.0042	0.0081	0.018	4.21
RSEM-L5E-P2-SP	5/6/2022 13:15	ASR076	M	C230545	3.26	0.0887	<0.0005	0.00031	0.0477	<0.0001	<0.001	0.054	0.00045	133	<0.001	0.00962	0.00184	0.117	<0.0002	0.0177	52.0	0.247	<0.0000019	0.0046	0.0351	0.022	4.46
RSEM-L5E-P2-SP	5/9/2022 10:35	ASV293	M	C231306	3.05	0.0758	<0.0005	0.0003	0.0474	<0.0001	<0.001	0.05	0.000329	104	<0.001	0.00961	0.00186	0.088	<0.0002	0.0195	53.0	0.271	<0.0000019	0.0043	0.037	0.02	4.46
RSEM-L5E-P2-SP	5/12/2022 11:15	ATA815	M	C232369	3.35	0.0518	<0.0005	0.00034	0.0475	<0.0001	<0.001	<0.05	0.000274	144	<0.001	0.00988	0.00233	0.05	0.0002	0.0154	54.2	0.277	<0.0000019	0.0038	0.0393	0.018	4.67
RSEM-L5E-P2-SP	5/22/2022 15:30	ATO537	M	C234788	3.14	0.0447	<0.0005	0.00044	0.0292	<0.0001	<0.001	<0.05	<0.00001	163	<0.001	0.00338	0.0013	0.019	<0.0002	0.0239	61.1	0.103	<0.0000019	0.0042	0.0262	0.011	4.85
RSEM-L5E-P2-SP	5/25/2022 13:10	ATT371	M	C235730	3.22	0.038	<0.0005	0.00034	0.0203	<0.0001	<0.001	0.052	<0.00001	139	<0.001	0.00214	0.00134	0.02	<0.0002	0.0135	61.0	0.0652	<0.0000019	0.0041	0.0238	0.01	5.03
RSEM-L5E-P2-SP	5/27/2022 10:55	ATV303	M	C236089	3.03	0.0395	<0.0005	0.00029	0.0139	<0.0001	<0.001	0.051	<0.00001	133	<0.001	0.00126	0.00101	0.019	<0.0002	0.0222	62.8	0.0429	<0.0000019	0.004	0.017	0.013	4.47
RSEM-L5E-P2-SP	5/31/2022 15:50	AUC341	M	C237377	1.92	0.0617	<0.0005	0.00028	0.0792	<0.0001	<0.001	0.067	0.00444	228	<0.001	0.0753	0.00305	0.251	<0.0002	0.0768	62.2	2.05	<0.0000019	0.0024	0.254	0.023	4.83
RSEM-L5E-P2-SP	6/2/2022 13:35	AUH702	M	C238258	2.75	0.0469	<0.0005	0.0002	0.0632	<0.0001	<0.001	0.059	0.00416	243	<0.001	0.0703	0.00276	0.235	<0.0002	0.0775	59.7	2.04	<0.0000019	0.0022	0.234	<0.01	4.36
RSEM-L5E-P2-SP	6/5/2022 13:40	AUM445	M	C238986	2.59	0.0383	<0.0005	0.00019	0.0469	<0.0001	<0.001	0.063	0.0031	271	<0.001	0.0579	0.00234	0.133	<0.0002	0.0836	57.2	1.72	<0.0000019	0.0023	0.201	<0.01	4.06
RSEM-L5E-P2-SP	6/11/2022 12:30	AUY736	M	C241062	3.09	0.0325	<0.0005	0.00024	0.0337	<0.0001	<0.001	0.092	0.00153	230	<0.001	0.0399	0.00201	0.052	<0.0002	0.0812	68.3	1.23	<0.0000019	0.0025	0.153	0.016	5.18
RSEM-L5E-P2-SP	6/20/2022 13:35	AVO968	M	C243664	2.96	0.0375	<0.0005	0.00031	0.0224	<0.0001	<0.001	0.09	0.000252	247	<0.001	0.0135	0.00159	0.037	<0.0002	0.064	69.9	0.505	<0.0000019	0.003	0.077	0.01	4.93
RSEM-L5E-P2-SP	6/22/2022 12:05	AVT155	M	C244412	3.23	0.0305	<0.0005	0.0003	0.0222	<0.0001	<0.001	0.091	0.000193	222	<0.001	0.00975	0.0015	0.045	<0.0002	0.0651	68.2	0.369	<0.0000019	0.003	0.0632	<0.01	5.25
RSEM-L5E-P2-SP	7/3/2022 16:00	AWM049	M	C247492	4.62	0.0258	<0.0005	0.00048	0.0335	<0.0001	<0.001	0.133	0.000133	221	<0.001	0.00303	0.00161	0.112	<0.0002	0.0637	70.5	0.129	0.0000026	0.0039	0.0296	0.011	5.36
RSEM-L5E-P2-SP	7/12/2022 14:40	AXE620	M	C250400	3.76	0.027	<0.001	0.00068	0.0348	<0.0002	<0.002	0.172	0.000058	184	<0.002	0.00108	0.0012	0.137	<0.0004	0.0663	78.1	0.0631	<0.0000019	0.0065	0.014	0.036	6.63
RSEM-L5E-P2-SP	8/4/2022 14:00	AYY906	M	C257848	5.86	0.0294	<0.001	0.00089	0.0235	<0.0002	<0.002	0.198	0.00002	157	<0.002	0.00074	0.0014	0.104	<0.0004	0.0677	82.4	0.0624	<0.0000019	0.0082	0.0083	0.021	7.08
RSEM-L5E-P2-SP	8/27/2022 15:00	BAR928	M	C265307	5.62	0.0282	<0.001	0.00094	0.0452	<0.0002	<0.002	0.228	<0.00002	175	<0.002	0.00043	0.0012	0.056	<0.0004	0.0611	97.3	0.0366	<0.0000019	0.0085	0.0095	<0.02	8.02
RSEM-L5W-P2-EOP	3/25/2022 13:25	AQP917	M	C219519	2.51	0.124	<0.0005	0.00029	0.0403	<0.0001	<0.001	<0.05	0.000098	51.8	<0.001	0.00263	0.00345	0.159	<0.0002	0.0103	13.5	0.164	<0.0000019	0.0023	0.0126	0.022	2.90
RSEM-L5W-P2-EOP	3/26/2022 18:35	AQS239	M	C219944	2.24	0.0512	<0.0005	0.00027	0.0387	<0.0001	<0.001	<0.05	0.000076	54.6	<0.001	0.00218	0.00247	0.087	<0.0002	0.0127	11.2	0.136	<0.0000019	0.002	0.0109	0.018	2.50
RSEM-L5W-P2-EOP	5/29/2022 14:10	ATW972	M	C236421	1.96	0.108	<0.0005	0.0359	0.0649	<0.0001	<0.001	0.122	0.00018	139	<0.001	0.00339	0.00152	0.123	<0.0002	0.0416	46.9	0.131	<0.0000019	0.0049	0.0226	0.032	4.87
RSEM-L5W-P2-EOP	5/30/2022 11:30	ATZ468	M	C236894	2.49	0.0841	<0.0005	0.0004	0.0617	<0.0001	<0.001	0.137	0.000147	133	<0.001	0.0023	0.0014	0.077	<0.0002	0.0414	42.7	0.0921	<0.0000019	0.0053	0.0188	0.025	4.75
RSEM-L5W-P2-SP	2/7/2022 6:00	AOE529	M	C207636	3.80	0.273	<0.0005	0.00031	0.0376	<0.0001	<0.001	<0.05	0.000825	104	<0.001	0.0161	0.00549	0.366	0.00025	0.0165	22.7	0.532	0.0000027	0.0026	0.0545	0.021	5.48
RSEM-L5W-P2-SP	2/10/2022 13:00	AOM667	M	C208923	2.48	1.44	<0.0005	0.00144	0.118	0.00011	<0.001	<0.05	0.000294	48.6	0.0027	0.00622	0.00665	3.09	0.00173	0.0089	9.17	0.217	0.0000094	0.0023	0.0214	0.132	3.27
RSEM-L5W-P2-SP	2/14/2022 10:55	AOQ981	M	C209670	2.81	0.386	<0.0005	0.00031	0.0521	<0.0001	<0.001	<0.05	0.000404	76.2	0.0011	0.00822	0.00412	0.424	0.00023	0.0125	14.7	0.316	<0.0000019	0.0026	0.0289	0.042	4.17
RSEM-L5W-P2-SP	3/19/2022 16:30	AQJ973	M	C218236	4.25	0.435	<0.0005	0.00062	0.0526	<0.0001	<0.001	<0.05	0.000172	79.5	0.0012	0.00498	0.0043	0.786	0.00046	0.0159	20.5	0.292	<0.0000019	0.0032	0.0214	0.053	4.74
RSEM-L5W-P2-SP	3/20/2022 18:30	AQJ917	M	C218219	4.16	0.219	<0.0005	0.00047	0.0423	<0.0001	<0.001	<0.05	0.000119	66.5	<0.001	0.00333	0.0035	0.406	0.00025	0.0128	17.6	0.218	0.0000025	0.003	0.0154	0.035	4.01
RSEM-L5W-P2-SP	3/21/2022 10:10	AQL266	M	C218465	3.33	0.517	<0.0005	0.00041	0.0471	<0.0001	<0.001	<0.05	0.000114	63.6	0.0012	0.00325	0.00433	0.46	0.00028	0.0128	16.5	0.204	0.0000048	0.003	0.0151	0.036	3.85
RSEM-L5W-P2-SP	3/22/2022 17:50	AQN717	M	C218958	3.01	0.557	<0.0005	0.00039	0.0448	<0.0001	<0.001	<0.05	0.000104	50.8	0.0011	0.00256	0.00266	0.477	0.00028	0.0105	12.8	0.156	<0.0000019	0.0026	0.0118	0.035	3.04
RSEM-L5W-P2-SP	3/23/2022 18:15	AQP260	M	C219363	1.98	0.165	<0.0005	0.00033	0.0412	<0.0001	<0.001	<0.05	0.000092	54.3	<0.001	0.00286	0.00269	0.265	<0.0002	0.0109	13.9	0.176	0.0000041	0.0025	0.0133	0.025	3.06
RSEM-L5W-P2-SP	3/24/2022 17:35	AQP983	M	C219524	2.52	0.136	<0.0005	0.00034	0.0408	<0.0001	<0.001	<0.05	0.000096	51.9	<0.001	0.0027	0.00267	0.161	<0.0002	0.0105	13.5	0.167	<0.0000019	0.0023	0.0127	0.023	2.95
RSEM-L5W-P2-SP	3/27/2022 16:30	AQS347	M	C219976	2.44	0.0439	<0.0005	0.00029	0.0408	<0.0001	<0.001	<0.05	0.000084	56.1	<0.001	0.0024	0.00251	0.072	<0.0002	0.0128	12.6	0.149	<0.0000019	0.0024	0.0118	0.018	2.67
RSEM-L5W-P2-SP	3/28/2022 17:40	AQU420	M	C220399	2.06	0.043	<0.0005	0.00025	0.037	<0.0001	<0.001	<0.05	0.000063	49.9	<0.001	0.00182	0.00319	0.092	<0.0002	0.0108	9.78	0.113	<0.0000019	0.002	0.009	0.018	2.21
RSEM-L5W-P2-SP	3/29/2022 16:55	AQV265	M	C220606	1.56	0.0409	<0.0005	0.00024	0.0355	<0.0001	<0.001	<0.05	0.000065	47.2	<0.001	0.00172	0.00234	0.075	<0.0002	0.0102	9.04	0.106	<0.0000019	0.0018	0.0085	0.015	2.08
RSEM-L5W-P2-SP	3/30/2022 14:50	AQX838	M	C221206	1.47	0.0414	<0.0005	0.0002	0.034	<0.0001	<0.001	<0.05	0.000058	43.0	<0.001	0.00152	0.00212	0.054	<0.0002	0.0091	8.28	0.0953	<0.0000019	0.0017	0.0077	<0.01	1.89
RSEM-L5W-P2-SP	3/31/2022 17:40	AQY798	M	C221428	0.97	0.0484	<0.0005	0.0002	0.0306	<0.0001	<0.001	<0.05	0.000042	32.5	<0.001	0.00104	0.00122	0.055	<0.0002	0.0067	6.44	0.0623	<0.0000019	0.0014	0.0054	0.011	1.46
RSEM-L5W-P2-SP	4/1/2022 13:30	AQY729	M	C221415	1.26	0.0605	<0.0005	0.00032	0.0308	<0.0001	<0.001	<0.05	0.00005	40.9	<0.001	0.00135	0.0016	0.081	<0.0002	0.0088	7.89	0.086	0.0000026	0.0016	0.0069	0.01	1.72
RSEM-L5W-P2-SP	4/2/2022 12:55	ARB518	M	C222000	1.89	0.0362	<0.0005	0.00021	0.0365	<0.0001	<0.001	<0.05	0.000091	48.4	<0.001	0.00149	0.00176	0.073	<0.0002	0.0091	9.19	0.0959	<0.0000019	0.0022	0.0077	0.018	2.23
RSEM-L5W-P2-SP	4/3/2022 11:05	ARB461	M	C221989	1.4	0.0534	<0.0005	0.00018	0.0323	<0.0001	<0.001	<0.05	0.000051	38.2	<0.001	0.00121	0.00143	0.063	<0.0002	0.0078	7.82	0.0814	<0.0000019	0.0015	0.0064	0.018	1.71
RSEM-L5W-P2-SP	4/4/2022 11:00	ARB190	M	C221904	1.70	0.0407	<0.0005	0.00017	0.0353	<0.0001	<0.001	<0.05	0.000052	42.7	<0.001	0.00127	0.00151	0.065	<0.0002	0.0079	8.41	0.0802	<0.0000019	0.0019	0.0068	0.013	2.01
RSEM-L5W-P2-SP	4/6/2022 18:00	ARI191	M	C223269	1.00	0.0451	<0.0005	0.00021	0.0445	<0.0001	<0.001	<0.05	0.000067	57.5	<0.001	0.0017	0.00196	0.083	<0.0002	0.0101	10.7	0.111	<0.0000019	0.0026	0.0091	0.012	2.55
RSEM-L5W-P2-SP	4/8/2022 11:00	ARI201	M	C223273	1.84	0.0604	<0.0005	0.00025	0.0495	<0.0001	<0.001	<0.05	0.000075	60.5	<0.001	0.00183	0.00209	0.118	<0.0002	0.0114	11.7	0.13	<0.0000019	0.0029	0.0099	0.015	2.79
RSEM-L5W-P2-SP	4/10/2022 11:00	ARK079	M	C223661	2.08	0.0699	<0.0005	0.00026	0.0458	<0.0001	<0.001	<0.05	0.00007	58.5	<0.001	0.00161	0.00183	0.129	<0.0002	0.0112	11.6	0.121	<0.0000019	0.0028	0.009	0.018	2.60
RSEM-L5W-P2-SP	4/12/2022 17:30	ARN336	M	C224402	1.67	0.0976	<0.0005	0.00027	0.0458	<0.0001	<0.001	<0.05	0.000051	59.6	<0.001	0.00141	0.00175	0.147	<0.0002	0.0152	12.9	0.111	<0.0000019	0.0027	0.0083	0.023	2.57
RSEM-L5W-P2-SP	5/5/2022 13:55	ASR008	M	C230531	2.67	0.0545	<0.0005	0.00021	0.0491	<0.0001	<0.001	0.054	0.00029	120	<0.001	0.00772	0.0019	0.057	<0.0002	0.015	53.6	0.204	<0.0000019	0.0041	0.0275	0.015	4.57
RSEM-L5W-P2-SP	5/9/2022 10:45	ASV294	M	C231306	1.95	0.0564	<0.0005	0.00028	0.0505	<0.0001	<0.001	0.073	0.00006	119	<0.001	0.00142	0.00179	0.09	<0.0002	0.0219	37.3	0.0404	<0.0000019	0.0042	0.0099	0.019	3.77
RSEM-L5W-P2-SP	5/12/2022 11:30	ATA816	M	C232369	4.06	0.0188	<0.0005	0.00028	0.0526	<0.0001	<0.001	0.055	0.000074	117	<0.001	0.00145	0.00163	0.032	<0.0002	0.0153	37.5	0.0361	<0.0000019	0.0039	0.012	0.016	4.14
RSEM-L5W-P2-SP	5/22/2022 16:00	ATO538	M	C234788	2.89	0.0512	<0.0005	0.00013	0.0544	<0.0001	<0.001	0.074	0.000028	132	<0.001	0.00063	0.00144	0.049	<0.0002	0.0406	47.8	0.0144	<0.0000019	0.0049	0.0094	0.012	4.78
RSEM-L5W-P2-SP	5/25/2022 13:25	ATT372	M	C235730	2.75	0.0332	<0.0005	0.00036	0.0519	<0.0001	<0.001	0.12	0.000033	143	0.0013	0.00048	0.00167	0.041	<0.0002	0.0256	47.6	0.0099	<0.0000019	0.005	0.0103	0.012	5.25

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
RSEM-L5W-P2-SP	5/27/2022 10:40	ATV302	M	C236089	2.58	0.026	<0.0005	0.0003	0.0473	<0.0001	<0.001	0.12	0.000023	133	<0.001	0.00038	0.00121	0.03	<0.0002	0.043	51.0	0.007	<0.0000019	0.0049	0.0083	<0.01	4.55
RSEM-L5W-P2-SP	5/28/2022 9:45	ATX753	M	C236620	2.29	0.0618	<0.0005	0.00048	0.0515	<0.0001	<0.001	0.124	0.000024	136	<0.001	0.0004	0.00151	0.076	<0.0002	0.0373	48.6	0.0083	<0.0000019	0.0051	0.0091	0.02	4.85
RSEM-L5W-P2-SP	5/31/2022 15:35	AUC342	M	C237377	2.15	0.0791	<0.0005	0.00036	0.0595	<0.0001	<0.001	0.13	0.00081	163	<0.001	0.0131	0.00171	0.236	<0.0002	0.0553	45.9	0.399	<0.0000019	0.0051	0.0555	0.012	4.41
RSEM-L5W-P2-SP	6/2/2022 13:50	AUH703	M	C238258	2.49	0.0306	<0.0005	0.00029	0.0705	<0.0001	<0.001	0.102	0.00221	223	<0.001	0.0387	0.00203	0.078	<0.0002	0.0706	55.0	1.18	<0.0000019	0.0046	0.14	<0.01	4.53
RSEM-L5W-P2-SP	6/5/2022 14:00	AUM446	M	C238986	2.28	0.0171	<0.0005	0.00027	0.0593	<0.0001	<0.001	0.124	0.00136	228	<0.001	0.0237	0.00143	0.026	<0.0002	0.0734	47.1	0.761	<0.0000019	0.0045	0.0981	<0.01	4.17
RSEM-L5W-P2-SP	6/11/2022 13:00	AUY737	M	C241062	2.28	0.0178	<0.0005	0.00032	0.0562	<0.0001	<0.001	0.194	0.000655	176	<0.001	0.0118	0.00129	0.03	<0.0002	0.0811	56.9	0.365	<0.0000019	0.0052	0.069	0.013	5.50
RSEM-L5W-P2-SP	6/22/2022 12:15	AVT156	M	C244412	3.04	0.0116	<0.0005	0.00033	0.0459	<0.0001	<0.001	0.218	0.000029	195	<0.001	0.00306	0.00133	0.019	<0.0002	0.0908	63.8	0.0564	0.0000034	0.006	0.0461	<0.01	6.26
RSEM-L5W-P2-SP	7/3/2022 16:30	AWM050	M	C247492	2.93	0.0251	<0.0005	0.00037	0.0396	<0.0001	<0.001	0.237	0.00001	174	<0.001	0.00084	0.00131	0.044	<0.0002	0.0931	59.2	0.0166	0.0000023	0.0061	0.0268	<0.01	5.67
RSEM-L5W-P2-SP	7/12/2022 14:55	AXE621	M	C250400	2.92	0.029	<0.0025	<0.0005	0.0397	<0.0005	<0.005	0.265	<0.00005	164	<0.005	<0.001	<0.0025	0.065	<0.001	0.101	68.5	0.0102	<0.0000019	0.008	0.0207	<0.05	6.88
RSEM-L5W-P2-SP	8/4/2022 14:10	AYY907	M	C257848	6.23	0.0604	<0.001	0.00063	0.0167	<0.0002	<0.002	0.296	<0.00002	113	<0.002	0.00049	0.0015	0.159	<0.0004	0.108	66.9	0.0422	<0.0000019	0.0092	0.008	0.022	6.79
RSEM-L5W-P2-SP	8/27/2022 15:30	BAR929	M	C265307	8.07	0.0201	<0.001	0.00135	0.0278	<0.0002	<0.002	0.39	<0.00002	117	<0.002	0.00094	0.0014	0.059	<0.0004	0.128	82.4	0.0678	<0.0000019	0.0113	0.009	<0.02	7.69
RSEM-L6-EOP	4/24/2022 10:30	ASA414	M	C227083	1.43	0.0381	<0.0005	0.00025	0.0771	<0.0001	<0.001	<0.05	0.000034	51.2	<0.001	0.00025	0.00134	0.058	<0.0002	0.0054	11.6	0.0614	<0.0000019	0.0044	0.0014	0.015	2.82
RSEM-L6-EOP	5/17/2022 12:30	ATH852	M	C233625	2.31	0.046	<0.0005	0.00027	0.09	<0.0001	<0.001	<0.05	0.000018	75.5	<0.001	<0.0002	0.00119	0.08	<0.0002	0.0123	23.5	0.0074	<0.0000019	0.0047	0.0014	0.015	3.75
RSEM-L6-EOP	5/18/2022 12:30	ATJ926	M	C234012	2.17	0.0366	<0.0005	0.00022	0.0768	<0.0001	<0.001	<0.05	0.000025	71.1	<0.001	<0.0002	0.00112	0.078	<0.0002	0.0107	21.3	0.011	<0.0000019	0.0046	0.0013	0.012	2.87
RSEM-L6-EOP	6/5/2022 11:20	AUM442	M	C238986	2.35	0.026	0.00053	0.00035	0.093	<0.0001	<0.001	0.054	0.000015	69.3	<0.001	<0.0002	0.00111	0.038	<0.0002	0.0113	13.8	0.0159	<0.0000019	0.0047	0.0012	<0.01	2.63
RSEM-L6-SP	3/19/2022 12:50	AQJ975	M	C218236	3.54	0.371	<0.0005	0.00081	0.109	<0.0001	<0.001	<0.05	0.000083	47.5	0.0013	0.00061	0.00268	0.912	0.00051	0.005	7.32	0.0734	0.0000035	0.0059	0.0028	0.059	3.57
RSEM-L6-SP	3/21/2022 11:45	AQL271	M	C218465	3.20	0.27	<0.0005	0.00043	0.101	<0.0001	<0.001	<0.05	0.000082	46.3	0.0011	0.00047	0.00222	0.512	0.00034	0.0049	7.36	0.084	0.0000043	0.0053	0.0023	0.046	3.34
RSEM-L6-SP	4/19/2022 12:50	ARV037	M	C225905	1.81	0.0387	<0.0005	0.00024	0.0786	<0.0001	<0.001	<0.05	0.000046	38.7	<0.001	0.00026	0.00104	0.093	<0.0002	0.0052	10.4	0.0738	<0.0000019	0.0045	0.0015	0.012	2.71
RSEM-L6-SP	4/21/2022 12:20	ARX710	M	C226546	1.82	0.0276	<0.0005	0.00022	0.0847	<0.0001	<0.001	<0.05	0.000038	54.9	<0.001	0.00028	0.00119	0.057	<0.0002	0.0059	12.2	0.0795	<0.0000019	0.0048	0.0025	<0.01	3.05
RSEM-L6-SP	4/23/2022 15:40	ARZ188	M	C226855	1.86	0.0379	<0.0005	0.0003	0.0771	<0.0001	<0.001	<0.05	0.000033	51.0	<0.001	0.00026	0.00115	0.068	<0.0002	0.0054	11.4	0.0672	<0.0000019	0.0044	0.0015	0.018	2.84
RSEM-L6-SP	5/7/2022 10:15	ASS945	M	C230886	2.52	0.0882	<0.0005	0.00035	0.0862	<0.0001	<0.001	<0.05	0.000028	71.3	<0.001	0.00027	0.00129	0.19	<0.0002	0.0088	22.0	0.0274	<0.0000019	0.0041	0.0017	0.031	3.59
RSEM-L6-SP	5/31/2022 10:50	AUC337	M	C237377	1.32	0.0698	<0.0005	0.00038	0.102	<0.0001	<0.001	<0.05	0.000032	69.9	<0.001	0.00021	0.00156	0.177	<0.0002	0.01	14.1	0.0395	<0.0000019	0.0044	0.0013	0.017	2.81
RSEM-L6-SP	6/4/2022 10:00	AUL722	M	C238905	2.28	0.0363	0.00052	0.00034	0.0919	<0.0001	<0.001	0.051	0.000042	68.1	<0.001	0.00052	0.00133	0.051	<0.0002	0.0108	13.5	0.0189	0.0000026	0.0046	0.0025	0.01	2.59
RSEM-L6-SP	10/7/2022 12:20	BEA027	M	C278893	4.67	0.0282	<0.0005	0.00069	0.0728	<0.0001	<0.001	0.117	<0.00001	104	<0.001	<0.0002	0.00152	0.048	<0.0002	0.0297	47.6	0.0049	<0.0000019	0.0084	0.0016	0.015	6.28
RSEM-L6-SP	10/22/2022 10:25	BFI045	M	C283756	4.40	0.052	<0.0005	0.00072	0.0766	<0.0001	<0.001	0.123	0.000012	112	<0.001	<0.0002	0.00147	0.102	<0.0002	0.0331	50.9	0.0065	<0.0000019	0.0084	0.0024	0.017	6.31
RSEM-R5A-P2-A-EOP	3/21/2022 14:25	AQL268	M	C218465	1.11	1.13	<0.0005	0.00051	0.152	<0.0001	<0.001	<0.05	0.000037	33.5	0.0021	0.00118	0.00163	0.696	0.00042	0.0086	6.29	0.0454	0.0000035	0.003	0.0051	0.038	1.92
RSEM-R5A-P2-A-EOP	3/22/2022 18:20	AQN714	M	C218958	1.49	0.798	<0.0005	0.00036	0.0901	<0.0001	<0.001	<0.05	0.00065	53.8	0.0016	0.018	0.0022	0.686	0.0004	0.0247	15.1	0.319	0.000003	0.0025	0.0554	0.035	1.98
RSEM-R5A-P2-A-EOP	3/23/2022 17:15	AQP261	M	C219363	1.68	0.21	<0.0005	0.00026	0.046	<0.0001	<0.001	<0.05	0.000352	41.5	<0.001	0.00932	0.00173	0.312	<0.0002	0.0121	11.8	0.157	<0.0000019	0.0013	0.0297	0.017	1.04
RSEM-R5A-P2-A-EOP	3/24/2022 14:25	AQP980	M	C219524	1.87	0.196	<0.0005	0.00031	0.0429	<0.0001	<0.001	<0.05	0.00028	42.3	<0.001	0.0083	0.00135	0.25	<0.0002	0.0125	12.3	0.152	<0.0000019	0.0015	0.0263	0.018	1.05
RSEM-R5A-P2-A-EOP	3/25/2022 12:20	AQP913	M	C219519	1.80	0.461	<0.0005	0.00047	0.0484	<0.0001	<0.001	<0.05	0.000196	42.4	0.0011	0.0053	0.0016	0.555	0.00034	0.011	11.8	0.132	<0.0000019	0.0015	0.018	0.034	1.18
RSEM-R5A-P2-A-EOP	5/17/2022 16:30	ATH853	M	C233625	2.80	0.274	0.00257	0.00189	0.0777	<0.0001	<0.001	0.172	0.000114	171	0.004	0.00697	0.00181	0.413	0.00029	0.125	48.5	0.229	0.0000037	0.0217	0.0436	0.038	6.99
RSEM-R5A-P2-A-EOP	5/19/2022 16:00	ATL915	M	C234314	2.03	0.572	0.00248	0.00194	0.074	<0.0001	<0.001	0.184	0.000133	108	0.0027	0.00602	0.00193	0.618	0.00044	0.119	31.3	0.185	0.0000045	0.0271	0.0321	0.04	5.55
RSEM-R5A-P2-A-EOP	5/20/2022 11:00	ATL360	M	C234241	1.43	0.253	0.00223	0.00253	0.0688	<0.0001	<0.001	0.219	0.000152	91.0	0.0014	0.00617	0.00163	0.542	0.00035	0.117	24.2	0.186	0.0000043	0.0306	0.0301	0.024	4.26
RSEM-R5A-P2-A-EOP	5/21/2022 13:30	ATN139	M	C234510	2.34	0.182	0.00204	0.00268	0.0769	<0.0001	<0.001	0.228	0.000153	82.7	<0.001	0.0057	0.00131	0.194	0.00026	0.0933	23.1	0.186	0.0000023	0.0321	0.0289	0.024	4.76
RSEM-R5A-P2-A-EOP	5/29/2022 18:40	ATW971	M	C236421	1.00	0.877	0.00182	0.00178	0.084	<0.0001	<0.001	0.219	0.000163	54.7	0.0035	0.00917	0.00198	0.63	0.00038	0.115	21.7	0.151	0.0000039	0.0128	0.0338	0.069	6.03
RSEM-R5A-P2-A-EOP	5/30/2022 12:30	ATZ469	M	C236894	1.67	1.01	0.0018	0.00151	0.0967	<0.0001	<0.001	0.229	0.000242	72.1	0.003	0.0136	0.00175	0.504	0.00033	0.129	21.4	0.234	0.0000047	0.0132	0.0505	0.053	6.19
RSEM-R5A-P2-A-EOP	5/31/2022 13:40	AUC338	M	C237377	0.98	0.238	0.00187	0.00141	0.0858	<0.0001	<0.001	0.234	0.000255	84.6	0.0015	0.0147	0.00133	0.429	0.00024	0.155	22.1	0.259	<0.0000019	0.0136	0.0538	0.027	5.38
RSEM-R5A-P2-A-EOP	6/2/2022 13:50	AUH704	M	C238258	1.82	0.187	0.00173	0.00136	0.0803	<0.0001	<0.001	0.216	0.000142	85.8	0.0012	0.0093	0.00108	0.298	<0.0002	0.15	20.6	0.159	<0.0000019	0.0119	0.0386	0.021	4.41
RSEM-R5A-P2-A-EOP	6/3/2022 13:20	AUH663	M	C238247	1.42	0.2	0.00182	0.0014	0.0815	<0.0001	<0.001	0.216	0.000083	79.7	0.0013	0.00623	0.00114	0.255	<0.0002	0.143	20.1	0.0927	<0.0000019	0.0118	0.0301	0.022	4.47
RSEM-R5A-P2-A-EOP	6/4/2022 14:25	AUL723	M	C238905	1.58	0.209	0.00179	0.0014	0.0873	<0.0001	<0.001	0.204	0.000018	72.4	0.0011	0.00374	0.00112	0.237	<0.0002	0.131	20.3	0.0471	0.0000022	0.011	0.0221	0.02	4.24
RSEM-R5A-P2-A-EOP	6/5/2022 11:55	AUM444	M	C238986	1.71	0.254	0.00168	0.00137	0.0847	<0.0001	<0.001	0.201	<0.00001	69.5	0.0012	0.00204	0.00131	0.403	0.00021	0.122	19.3	0.0295	0.0000027	0.0101	0.0148	0.026	4.06
RSEM-R5A-P2-A-EOP	6/6/2022 11:30	AUO791	M	C239365	1.77	0.622	0.00163	0.00157	0.0997	<0.0001	<0.001	0.194	0.000015	58.1	0.0017	0.00123	0.00151	0.75	0.00036	0.101	19.4	0.0398	0.0000026	0.0081	0.0081	0.042	4.05
RSEM-R5A-P2-A-EOP	6/13/2022 17:20	AVO969	M	C243664	2.13	0.24	0.00166	0.00138	0.0761	<0.0001	<0.001	0.241	<0.00001	49.0	0.0015	0.00036	0.0014	0.224	<0.0002	0.111	18.0	0.0057	0.0000024	0.0112	0.0046	0.025	4.27
RSEM-R5A-P2-A-EOP	6/14/2022 11:30	AVD544	M	C241829	1.54	0.208	0.00174	0.00204	0.118	<0.0001	<0.001	0.226	<0.00001	48.7	0.0017	0.00046	0.0011	0.192	<0.0002	0.103	18.2	0.0049	<0.0000019	0.0091	0.0051	0.02	4.17
RSEM-R5A-P2-A-EOP	6/15/2022 14:40	AVG249	M	C242252	1.56	0.296	0.00165	0.00204	0.123	<0.0001	<0.001	0.224	<0.00001	48.2	0.0016	0.00056	0.00132	0.322	0.00022	0.102	17.8	0.0069	0.0000022	0.0085	0.0052	0.027	4.04
RSEM-R5A-P2-A-EOP	6/16/2022 14:00	AVK124	M	C242788	1.10	0.432	0.00166	0.00195	0.119	<0.0001	<0.001	0.23	0.000023	46.6	0.0018	0.00059	0.00143	0.376	0.00024	0.105	17.5	0.0084	0.0000026	0.0083	0.0051	0.035	4.07
RSEM-R5A-P2-A-EOP	6/17/2022 13:10	AVK725	M	C242942	1.56	0.521	0.00062	0.0013	0.135	<0.0001	<0.001	0.093	0.000053	76.0	0.0016	0.00091	0.00207	1.07	0.0006	0.0383	18.4	0.0494	<0.0000019	0.0052	0.005	0.06	4.40
RSEM-R5A-P2-A-EOP	6/18/2022 14:35	AVL990	M	C243162	1.30	0.388	0.00154	0.00205	0.096	<0.0001	<0.001	0.235	0.000012	72.4	0.002	0.00122	0.00151	0.413	0.00026	0.121	18.1	0.038	0.0000034	0.0099	0.0072	0.044	4.98
RSEM-R5A-P2-A-EOP	6/19/2022 13:35	AVM020	M	C243177	1.54	0.602	0.00175	0.00266	0.103	<0.0001	<0.001	0.232	0.000011	72.6	0.0028	0.0012	0.00197	0.831	0.0004	0.106	19.1	0.0352	0.000003	0.0114	0.0073	0.057	5.33
RSEM-R5A-P2-A-EOP	6/20/2022 12:45	AVO966	M	C243664	1.44	0.904	0.00186	0.00256	0.0986	<0.0001	<0.001	0.242	<0.00001	57.4	0.0032	0.00075	0.00162	0.438	0.00025	0.119	20.0	0.0136	0.0000039	0.0121	0.006	0.033	5.47
RSEM-R5A-P2-A-EOP	6/21/2022 13:00	AVQ612	M	C244010	1.55	0.475	0.00067	0.00127	0.127	<0.0001	<0.001	0.106	0.000041	77.2	0.0018	0.00096	0.00231	0.859	0.00045	0.0431	18.7	0.0287	0.0000054	0.0057	0.0056	0.047	4.05
RSEM-R5A-P2-A-EOP	6/23/2022 13:00	AVV598	M	C244839	1.81	0.428	0.00138	0.00155	0.0783	<0.0001	<0.001	0.251	0.000018	64.4	0.0017	0.00068	0.00212	0.641	0.00038	0.103	21.1	0.0203	0.0000043	0.0112	0.005	0.044	4.91
RSEM-R5A-P2-A-EOP	6/24/2022 12:00	AVV587	M	C244835	2.01	0.396	0.00124	0.00125	0.0708	<0.0001	<0.001	0.273	0.000028	74.1	0.0017	0.0007	0.00239	0.663	0.00043	0.102	23.4	0.0235	0.0000052	0.0116	0.0054	0.045	5.08
RSEM-R5A-P2-A-EOP	6/26/2022 12:15	AVZ578	M	C245500	0.85	0.443	0.00155	0.00265	0.124	<0.0001	<0.001	0.216	<0.00001	38.6	0.0017	0.0005	0.00159	0.383	0.00026	0.1	17.2	0.0101	0.0000035	0.0086	0.004	0.029	3.96
RSEM-R5A-P2-A-EOP	6/27/2022 11:20	AVY534	M	C245274	0.89	0.736	0.00163	0.00304	0.143	<0.0001	<0.001	0.235	<0.00001	38.3	0.0019	0.00067	0.00191	0.627	0.00042	0.105	17.0	0.0156	0.0000051	0.0086	0.0048	0.043	4.04
RSEM-R5A-P2-A-EOP	7/10/2022 15:55	AWZ488	M	C249617	1.43	1.06	0.00163	0.00276	0.17	<0.0001	<0.001	0.239	0.000016	40.0	0.0019	0.00089	0.00249	0.885	0.00065	0.0939	18.9	0.0179	0.0000046	0.01	0.0058	0.06	4.39
RSEM-R5A-P2-A-EOP	7/12/2022 10:25	AXE617	M	C250400	1.37	0.458	0.00164	0.00214	0.113	<0.0001	<0.001	0.269	<0.00001	37.6	0.0011	0.0004	0.00153	0.32	0.00023	0.111	18.4	0.01	0.0000037	0.0103	0.0037	0.028	4.21
RSEM-R5A-P2-A-EOP	7/15/2022 13:30	AXJ366	M	C251330	2.23	0.186	0.00158	0.00172	0.104	<0.0001	<0.001	0.251	0.00001	41.6	0.0013	0.00036	0.0015	0.197	<0.0002	0.0886	23.6	0.0099	0.0000025	0.0127	0.0033	0.025	5.74
RSEM-R5A-P2-A-EOP	7/16/2022 13:20	AXN332	M	C251927	2.18	0.406	0.00166	0.00176	0.106	<0.0001	<0.001	0.204	0.000019	41.6	0.0022	0.00054	0.00197	0.504	0.00038	0.0664	24.0	0.0157	0.0000049	0.0132	0.0037	0.041	5.88
RSEM-R5A-P2-A-EOP	7/17/2022 11:55	AXN588	M	C251966	2.48	0.32	0.00216	0.00182	0.0932	<0.0001	<0.001	0.215	<0.00001	38.5	0.0024	0.0004	0.00179	0.304	0.00025	0.0704	23.6	0.011	0.0000041	0.0137	0.003	0.03	5.83
RSEM-R5A-P2-A-EOP	7/28/2022 14:30	AYM154	M	C255903	1.52	1.1	0.0025	0.00297	0.154	<0.0001	<0.001	0.268	<0.00001	27.9	0.0023	0.00044	0.00147	0.341	0.00026	0.103	17.0	0.0055	<0.0000019	0.0095	0.0035	0.021	4.19
RSEM-R5A-P2-A-EOP	7/29/2022 11:45	AYM049	M	C255900	2.75	0.35	0.00165	0.00189	0.0995	<0.0001	<0.001	0.219	<0.00001	34.7	0.0021	0.0003	0.00141	0.215	<0.0002	0.0618	22.3	0.0105	<0.0000019	0.0135	0.0024	0.019	6.01
RSEM-R5A-P2-A-EOP	8/3/2022 13:10	AYX382	M	C257672	2.60	0.126	0.00198	0.00207	0.124	<0.0001	<0.001	0.281	0.000038	68.2	0.0019	0.0024	0.00191	0.102	<0.0002	0.0972	25.0	0.0562	<0.0000019	0.0107	0.0142	0.015	5.33
RSEM-R5A-P2-A-EOP	8/4/2022 11:45	AYY905	M	C257848	2.77	0.259	0.00196	0.00187	0.115	<0.0001	<0.001	0.279	0.000053	67.2	0.0015	0.00235	0.00171	0.181	<0.0002	0.11	23.1	0.0488	<0.0000019	0.0106	0.013	0.019	4.91
RSEM-R5A-P2-A-EOP	8/18/2022 15:30	BAA276	M	C262439	2.50	1.03	0.00213	0.00247	0.0942	<0.0001	<0.001	0.287	<0.00001	45.8	0.0029	0.00041	0.0016	0.304	0.0002	0.0968	20.1	0.0075	<0.0000019	0.0126	0.0038	0.02	6.01
RSEM-R5A-P2-A-EOP	8/19/2022 11:00	BAA262	M	C262436	2.50	0.604	0.00202	0.00255	0.101	<0.0001	<0.001	0.305	<0.00001	46.2	0.0021	0.00042	0.00172	0.293	0.00023	0.1	21.1	0.0105	<0.0000019	0.0121	0.0037	0.024	6.04
RSEM-R5A-P2-A-EOP	9/9/2022 12:35	BBS003	M	C269764	2.65	0.727	0.00095	0.00171	0.0675	<0.0001	<0.001	0.109	0.000011	26.6	0.0017	0.00037	0.00139	0.292	<0.0002	0.0272	9.41	0.005	<0.0000019	0.0059	0.0017	0.017	1.78
RSEM-R5A-P2-A-EOP	9/10/2022 14:00	BBR902	M	C269730	1.94	0.174	0.00197	0.00249	0.0681	<0.0001	<0.001	0.248	<0.00001	22.5	0.0016	0.00022	0.0016	0.138	<0.0002	0.0555	16.2	0.0085	<0.0000019	0.0161	0.0018	0.023	5.41
RSEM-R5A-P2-A-EOP	9/11/2022 16:20	BBR961	M	C269754	3.05	0.215	0.00184	0.00224	0.0673	<0.0001	<0.001	0.236	0.000017	22.9	0.0017	0.00029	0.00174	0.204	<0.0002	0.0512	16.4	0.0114	<0.0000019	0.0167	0.002	0.026	5.77

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
RSEM-R5A-P2-A-EOP	9/18/2022 14:30	BCF724	M	C272251	2.58	0.402	0.00205	0.00301	0.103	<0.0001	<0.001	0.238	0.00002	57.6	0.0026	0.00092	0.00242	0.524	0.00038	0.0706	25.5	0.0338	0.0000027	0.0168	0.0054	0.039	8.06
RSEM-R5A-P2-A-EOP	9/19/2022 10:20	BCI770	M	C272683	3.55	0.121	0.00165	0.00207	0.0594	<0.0001	<0.001	0.218	<0.00001	38.7	0.0021	0.00031	0.00125	0.097	<0.0002	0.0511	19.7	0.0132	<0.0000019	0.0166	0.0025	0.015	7.43
RSEM-R5A-P2-A-EOP	9/30/2022 12:20	BDH545	M	C276348	2.71	0.146	0.00162	0.00178	0.075	<0.0001	<0.001	0.2	0.000011	35.6	0.0024	0.00023	0.00151	0.167	<0.0002	0.0492	25.4	0.006	<0.0000019	0.0156	0.0028	0.021	6.98
RSEM-R5A-P2-A-EOP	10/1/2022 13:30	BDL250	M	C276877	2.12	0.173	0.00174	0.00197	0.0759	<0.0001	<0.001	0.21	0.00001	35.1	0.0026	0.00025	0.0016	0.157	<0.0002	0.0579	25.1	0.0087	<0.0000019	0.0153	0.0028	0.023	6.87
RSEM-R5A-P2-A-EOP	10/19/2022 15:30	BFA347	M	C282741	1.91	0.347	0.00143	0.00145	0.117	<0.0001	<0.001	0.148	0.000016	52.9	0.0027	<0.0002	0.00144	0.188	<0.0002	0.0443	17.9	0.0068	0.0000033	0.0104	0.0021	0.022	4.03
RSEM-R5A-P2-A-EOP	10/28/2022 10:00	BFU723	M	C285458	1.87	1.23	0.00162	0.00207	0.108	<0.0001	<0.001	0.137	0.000022	60.5	0.0043	0.00061	0.00283	0.781	0.00056	0.0397	19.7	0.0126	<0.0000019	0.0123	0.0037	0.046	6.19
RSEM-R5A-P2-A-EOP	10/29/2022 10:35	BFZ655	M	C286199	2.16	0.709	0.00149	0.00176	0.0941	<0.0001	<0.001	0.124	0.000015	61.8	0.0036	0.0005	0.0019	0.428	0.00033	0.0395	20.6	0.0112	0.000003	0.011	0.0033	0.032	5.83
RSEM-R5A-P2-A-SP	3/17/2022 19:00	AQH802	M	C217776	1.73	12.6	0.00056	0.0107	0.717	0.00086	<0.001	<0.05	0.000534	28.1	0.022	0.0118	0.0339	23.8	0.0138	0.0196	6.85	0.524	0.0000681	0.0039	0.0348	0.827	5.25
RSEM-R5A-P2-A-SP	3/20/2022 11:20	AQJ911	M	C218219	0.98	1.04	<0.0005	0.00079	0.164	<0.0001	<0.001	<0.05	0.000084	32.5	0.0019	0.00227	0.0025	1.17	0.0007	0.0098	6.63	0.077	0.0000059	0.0029	0.0086	0.064	2.02
RSEM-R5A-P2-A-SP	4/29/2022 11:00	ASH018	M	C228622	3.48	0.946	0.00211	0.00276	0.132	<0.0001	<0.001	0.269	0.000065	72.7	0.0051	0.00487	0.00312	0.978	0.00068	0.161	19.9	0.127	0.0000122	0.0357	0.0256	0.079	6.55
RSEM-R5A-P2-A-SP	5/6/2022 12:05	ASR073	M	C230545	2.26	1.35	0.00203	0.00314	0.14	0.00011	<0.001	0.238	0.00022	99.0	0.0036	0.0106	0.00502	1.72	0.00112	0.142	29.7	0.256	0.0000084	0.0285	0.0472	0.117	6.54
RSEM-R5A-P2-A-SP	5/18/2022 16:30	ATJ928	M	C234012	2.62	0.1	0.00202	0.00109	0.0553	<0.0001	<0.001	0.236	0.000105	177	0.003	0.00455	0.00143	0.154	<0.0002	0.118	49.3	0.153	<0.0000019	0.0206	0.0326	0.013	5.65
RSEM-R5A-P2-A-SP	5/28/2022 12:45	ATX752	M	C236620	1.60	1.23	0.00105	0.00143	0.127	<0.0001	<0.001	0.135	0.000078	108	0.0031	0.00296	0.00188	1.09	0.00058	0.0727	23.5	0.138	0.0000035	0.0077	0.0162	0.065	6.46
RSEM-R5A-P2-A-SP	6/1/2022 13:20	AUE683	M	C237797	1.81	0.103	0.00186	0.00132	0.0739	<0.0001	<0.001	0.218	0.000188	88.4	0.0012	0.0108	0.00168	0.138	<0.0002	0.15	20.7	0.199	<0.0000019	0.0133	0.0423	0.016	4.69
RSEM-R5A-P2-A-SP	6/7/2022 13:00	AUT414	M	C240162	1.46	0.15	0.00168	0.00132	0.0815	<0.0001	<0.001	0.187	<0.00001	58.8	0.001	0.0008	0.00081	0.134	<0.0002	0.0905	18.7	0.0267	<0.0000019	0.0083	0.0066	0.029	3.92
RSEM-R5A-P2-A-SP	6/8/2022 16:00	AUT296	M	C240147	1.43	0.104	0.00178	0.00134	0.0808	<0.0001	<0.001	0.191	<0.00001	59.8	<0.001	0.00062	0.00078	0.08	<0.0002	0.0958	19.7	0.013	<0.0000019	0.0089	0.0067	0.016	4.17
RSEM-R5A-P2-A-SP	6/10/2022 11:30	AUV212	M	C240508	1.47	0.14	0.00174	0.00141	0.0762	<0.0001	<0.001	0.216	<0.00001	54.6	<0.001	0.00047	0.00093	0.117	<0.0002	0.102	21.1	0.0068	<0.0000019	0.0098	0.0063	0.025	4.55
RSEM-R5A-P2-A-SP	6/22/2022 13:10	AVT154	M	C244412	1.49	0.399	0.00176	0.00227	0.0843	<0.0001	<0.001	0.241	<0.00001	46.5	0.0017	0.00057	0.00151	0.432	0.00024	0.113	18.3	0.0134	0.0000027	0.0105	0.0039	0.035	4.57
RSEM-R5A-P2-A-SP	6/25/2022 11:50	AVZ708	M	C245512	2.21	0.4	0.00118	0.00107	0.0648	<0.0001	<0.001	0.243	0.000026	75.8	0.0015	0.00055	0.00199	0.414	0.0003	0.0907	23.9	0.0176	0.0000039	0.0118	0.0047	0.032	5.13
RSEM-R5A-P2-A-SP	6/28/2022 14:00	AWH754	M	C246896	1.16	0.392	0.0017	0.0023	0.121	<0.0001	<0.001	0.254	0.000017	49.1	<0.001	0.00055	0.00165	0.54	0.00032	0.121	18.2	0.0141	0.000003	0.0083	0.0043	0.039	3.94
RSEM-R5A-P2-A-SP	7/9/2022 13:15	AWZ516	M	C249625	1.32	0.696	0.00167	0.00265	0.149	<0.0001	<0.001	0.261	<0.00001	36.4	0.0015	0.00066	0.00191	0.573	0.0004	0.109	18.4	0.0119	0.0000032	0.0091	0.0052	0.036	4.19
RSEM-R5A-P2-A-SP	7/11/2022 15:25	AXC659	M	C250105	1.78	0.6	0.00178	0.00263	0.142	<0.0001	<0.001	0.28	<0.00001	40.5	0.0015	0.00056	0.00178	0.479	0.00034	0.12	19.9	0.0126	0.0000043	0.0104	0.0048	0.036	4.41
RSEM-R5A-P2-A-SP	7/13/2022 14:05	AXH416	M	C250934	1.88	1.29	0.00168	0.00279	0.179	<0.0001	<0.001	0.255	0.000034	35.9	0.002	0.00103	0.00313	1.12	0.00093	0.109	18.1	0.0278	0.0000064	0.0091	0.006	0.072	4.18
RSEM-R5A-P2-A-SP	7/14/2022 11:10	AXJ118	M	C251290	2.78	0.151	0.0016	0.00181	0.0999	<0.0001	<0.001	0.24	<0.00001	43.1	0.0012	0.00037	0.00145	0.17	<0.0002	0.0809	23.8	0.0092	0.0000036	0.0131	0.0032	0.021	5.85
RSEM-R5A-P2-A-SP	7/30/2022 14:00	AYP673	M	C256352	2.11	1.22	0.00237	0.00303	0.143	<0.0001	<0.001	0.297	0.000014	27.6	0.0028	0.00056	0.00208	0.576	0.00043	0.108	17.4	0.0128	<0.0000019	0.0107	0.0034	0.036	4.48
RSEM-R5A-P2-A-SP	8/6/2022 15:10	AZA355	M	C258076	2.01	0.56	0.00182	0.00167	0.149	<0.0001	<0.001	0.254	0.000022	57.6	0.002	0.00077	0.0018	0.337	0.00022	0.0922	20.0	0.0116	<0.0000019	0.0112	0.0058	0.027	5.64
RSEM-R5A-P2-A-SP	8/17/2022 12:30	BAA265	M	C262437	2.83	1.1	0.002	0.00318	0.143	<0.0001	<0.001	0.303	0.000047	50.2	0.0039	0.00116	0.0036	1.66	0.00108	0.101	21.2	0.035	<0.0000019	0.0128	0.0061	0.078	6.59
RSEM-R5A-P2-A-SP	8/20/2022 16:30	BAD642	M	C262969	4.59	0.109	0.00189	0.00188	0.0777	<0.0001	<0.001	0.323	0.000018	47.4	0.0015	0.00023	0.00149	0.114	<0.0002	0.0992	19.9	0.0086	<0.0000019	0.0123	0.0026	0.017	5.59
RSEM-R5A-P2-A-SP	8/21/2022 16:40	BAD603	M	C262959	2.26	3.12	0.00174	0.00282	0.155	<0.0001	<0.001	0.207	0.000027	40.8	0.0056	0.00089	0.00334	1.28	0.00085	0.0647	20.7	0.0262	<0.0000019	0.0113	0.0053	0.065	6.36
RSEM-R5A-P2-A-SP	8/22/2022 17:00	BAG920	M	C263407	2.66	0.539	0.00174	0.00207	0.0954	<0.0001	<0.001	0.188	<0.00001	42.6	0.0017	0.00036	0.00187	0.284	<0.0002	0.0613	20.8	0.0115	<0.0000019	0.0115	0.0032	0.026	5.59
RSEM-R5A-P2-A-SP	9/29/2022 17:30	BDH542	M	C276348	2.50	0.674	0.00249	0.00385	0.129	<0.0001	<0.001	0.275	0.00002	32.1	0.0033	0.00072	0.00325	0.856	0.00067	0.0942	21.6	0.0136	0.0000046	0.0152	0.0043	0.054	6.65
RSEM-R5A-P2-A-SP	10/14/2022 15:45	BER009	M	C281389	2.33	0.694	0.00292	0.00397	0.143	<0.0001	<0.001	0.285	0.000032	32.2	0.0068	0.00092	0.00389	1.22	0.00089	0.0847	20.0	0.0208	0.0000062	0.0158	0.0046	0.059	5.61
RSEM-R5A-P2-A-SP	10/15/2022 17:30	BER010	M	C281389	2.02	1.58	0.00261	0.00501	0.237	0.00014	<0.001	0.277	0.000053	32.3	0.0075	0.00179	0.00678	2.59	0.00208	0.0805	20.1	0.0334	0.000012	0.0147	0.0074	0.125	5.46
RSEM-R5A-P2-A-SP	10/16/2022 17:30	BER096	M	C281399	1.67	0.528	0.00287	0.00399	0.13	<0.0001	<0.001	0.272	0.00002	30.7	0.0055	0.00068	0.00304	0.71	0.00064	0.0881	18.9	0.0136	0.0000055	0.0156	0.0042	0.047	5.25
RSEM-R5A-P2-A-SP	10/17/2022 9:30	BER152	M	C281421	1.54	0.992	0.00269	0.00382	0.11	<0.0001	<0.001	0.287	0.000017	31.9	0.0062	0.00059	0.00287	0.609	0.00049	0.0801	19.5	0.0126	0.0000044	0.0157	0.004	0.043	5.33
RSEM-R5A-P2-A-SP	10/18/2022 13:45	BEX621	M	C282315	2.22	0.175	0.00302	0.00357	0.0903	<0.0001	<0.001	0.283	0.000013	32.0	0.005	0.00041	0.00207	0.245	0.00025	0.0837	19.9	0.0092	<0.0000019	0.0166	0.0032	0.015	4.98
RSEM-R5A-P2-A-SP	10/30/2022 13:20	BFZ647	M	C286196	2.11	1.25	0.00227	0.00238	0.0854	<0.0001	<0.001	0.213	0.000018	42.0	0.0046	0.00055	0.00251	0.742	0.00072	0.0691	19.3	0.0117	0.0000034	0.014	0.004	0.04	5.52
RSEM-R5A-P2-B-EOP	3/20/2022 11:40	AQJ913	M	C218219	0.84	1.18	<0.0005	0.00073	0.159	<0.0001	<0.001	<0.05	0.000226	35.4	0.0021	0.00644	0.00293	1.28	0.00077	0.0138	8.24	0.138	0.0000081	0.0027	0.0211	0.067	2.03
RSEM-R5A-P2-B-EOP	3/21/2022 14:55	AQL269	M	C218465	0.69	0.924	<0.0005	0.00038	0.114	<0.0001	<0.001	<0.05	0.00102	53.0	0.002	0.0239	0.0031	0.836	0.00046	0.0275	15.5	0.356	0.0000057	0.0023	0.0742	0.042	2.02
RSEM-R5A-P2-B-SP	3/17/2022 19:30	AQH803	M	C217776	1.52	7.25	<0.0005	0.00614	0.482	0.00054	<0.001	<0.05	0.000343	21.3	0.0129	0.00737	0.0179	12.5	0.0075	0.0139	4.92	0.293	0.000008	0.0034	0.0226	0.462	3.80
RSEM-R5A-P2-B-SP	3/19/2022 16:05	AQJ974	M	C218236	1.11	1.81	<0.0005	0.00105	0.181	0.0001	<0.001	<0.05	0.000094	25.2	0.0031	0.00232	0.00363	1.87	0.00116	0.0087	5.11	0.0755	0.0000059	0.0026	0.0087	0.094	2.09
RSEM-R5A-P2-B-SP	5/6/2022 12:15	ASR074	M	C230545	2.29	0.351	0.00089	0.00058	0.0598	<0.0001	<0.001	0.183	0.00133	178	0.0017	0.0515	0.00426	0.441	0.00027	0.132	66.1	0.941	0.000016	0.0104	0.182	0.039	5.83
RSEM-R5A-P2-B-SP	5/31/2022 13:55	AUC339	M	C237377	3.18	0.103	0.00128	0.00079	0.0707	<0.0001	<0.001	0.211	0.000546	149	0.0023	0.0153	0.00144	0.197	<0.0002	0.113	36.9	0.327	<0.0000019	0.0159	0.0634	0.016	5.48
RSEM-R5A-P2-B-SP	6/4/2022 14:25	AUL724	M	C238905	2.12	0.121	0.00151	0.00095	0.0548	<0.0001	<0.001	0.209	0.000077	103	0.0019	0.00246	0.00119	0.174	<0.0002	0.116	23.0	0.0559	0.0000032	0.0147	0.019	0.016	4.62
RSEM-R5A-P2-B-SP	6/19/2022 14:00	AVM018	M	C243177	1.49	0.15	0.00108	0.00083	0.0638	<0.0001	<0.001	0.237	0.000038	97.5	0.0011	0.00076	0.0017	0.274	<0.0002	0.0952	22.8	0.0291	0.0000042	0.0116	0.0057	0.025	4.86
RSEM-R5A-P2-C-SP	3/20/2022 12:25	AQJ914	M	C218219	1.43	1.11	<0.0005	0.00074	0.135	<0.0001	<0.001	<0.05	0.000409	27.7	0.002	0.01	0.0034	1.24	0.00075	0.0112	6.95	0.169	0.0000062	0.0021	0.031	0.061	1.67
RSEM-R5A-P2-C-SP	5/6/2022 12:30	ASR075	M	C230545	2.76	0.277	0.00257	0.00369	0.0722	<0.0001	<0.001	0.225	0.000182	68.1	0.004	0.0082	0.00254	0.188	<0.0002	0.106	20.2	0.164	0.0000058	0.0321	0.0337	0.027	4.67
RSEM-R5A-P2-C-SP	5/31/2022 13:55	AUC340	M	C237377	1.27	0.11	0.00076	0.00031	0.0723	0.00016	<0.001	0.225	0.00378	142	<0.001	0.0664	0.00803	0.191	<0.0002	0.126	43.3	0.878	<0.0000019	0.0105	0.219	<0.01	4.23
RSEM-R5A-P2-C-SP	6/4/2022 14:25	AUL725	M	C238905	2.07	0.0706	0.00104	0.00058	0.0643	<0.0001	<0.001	0.224	0.00177	152	0.001	0.0335	0.00252	0.075	<0.0002	0.125	37.5	0.507	<0.0000019	0.0133	0.117	<0.01	4.38
RSEM-R5A-P2-D-SP	5/7/2022 14:35	ASS947	M	C230886	1.72	0.366	0.00119	0.00104	0.0645	0.00025	<0.001	0.211	0.00508	147	<0.001	0.13	0.0276	0.2	<0.0002	0.159	98.4	1.73	0.0000071	0.0136	0.413	0.026	5.68
RSEM-R5A-P2-D-SP	6/1/2022 13:45	AUE684	M	C237797	1.57	17.3	<0.0005	<0.0001	0.077	0.00591	<0.001	0.354	0.0306	382	0.0051	0.612	0.268	12.3	0.00042	0.294	253	6.77	0.0000084	<0.001	1.98	0.035	5.43
RSEM-R5B-P2-Sump	3/21/2022 16:30	AQL264	M	C218465	3.30	0.666	0.00061	0.00069	0.111	<0.0001	<0.001	0.062	0.000403	51.7	0.0014	0.0182	0.00279	0.53	0.0003	0.0392	16.0	0.349	0.0000069	0.0096	0.0617	0.042	6.55
RSEM-R5B-P2-Sump	3/30/2022 11:55	AQX831	M	C221206	2.28	0.211	0.00092	0.0008	0.0976	<0.0001	<0.001	0.085	0.000126	61.9	<0.001	0.00753	0.00145	0.292	<0.0002	0.0404	13.5	0.223	0.0000035	0.0116	0.0297	0.019	5.58
RSEM-R5B-P2-Sump	4/6/2022 16:20	ARI189	M	C223269	1.46	0.193	0.00137	0.00101	0.127	<0.0001	<0.001	0.092	0.000083	57.6	<0.001	0.00491	0.00159	0.426	0.00023	0.0391	15.1	0.176	0.0000033	0.0185	0.0247	0.024	6.53
RSEM-R5B-P2-Sump	4/13/2022 16:35	ARP729	M	C224775	1.69	0.179	0.00128	0.00075	0.102	<0.0001	<0.001	0.093	0.000031	47.6	<0.001	0.00204	0.00098	0.222	<0.0002	0.0406	13.2	0.096	<0.0000019	0.0134	0.0134	0.022	4.77
RSEM-R5B-P2-Sump	4/19/2022 16:00	ARV038	M	C225905	1.35	0.31	0.00145	0.00114	0.116	<0.0001	<0.001	0.087	0.000045	36.3	0.0015	0.00196	0.00139	0.522	0.00032	0.0367	15.0	0.0881	0.000003	0.0149	0.014	0.03	5.43
RSEM-R5B-P2-Sump	5/3/2022 10:30	ASO450	M	C230063	1.38	0.128	0.00199	0.00117	0.0907	<0.0001	<0.001	0.158	0.000908	62.4	<0.001	0.0306	0.00451	0.06	<0.0002	0.118	25.5	0.347	0.0000041	0.0209	0.0997	0.016	5.11
RSEM-R5B-P2-Sump	5/7/2022 13:55	ASS946	M	C230886	1.27	1.29	0.00203	0.0022	0.129	<0.0001	<0.001	0.161	0.000561	74.6	0.0031	0.0333	0.00408	2.25	0.0011	0.136	28.8	0.462	0.0000064	0.0181	0.109	0.098	5.91
RSEM-R5B-P2-Sump	5/10/2022 13:45	ASX009	M	C231638	1.37	0.223	0.00206	0.0014	0.0758	<0.0001	<0.001	0.2	0.000313	74.6	0.0013	0.0267	0.00141	0.262	<0.0002	0.149	28.1	0.396	0.0000035	0.0187	0.0921	0.03	5.46
RSEM-R5B-P2-Sump	5/13/2022 12:55	ATB016	M	C232410	1.89	0.1	0.00206	0.00162	0.0766	<0.0001	<0.001	0.167	0.000128	72.2	0.0016	0.0219	0.00083	0.117	<0.0002	0.111	24.9	0.336	0.0000022	0.0171	0.0778	0.024	5.34
RSEM-R5B-P2-Sump	5/16/2022 10:55	ATC673	M	C232726	1.76	0.445	0.00196	0.00227	0.105	<0.0001	<0.001	0.152	0.000098	65.6	0.0019	0.0168	0.00114	0.359	0.00024	0.0863	21.7	0.265	0.0000022	0.0135	0.0603	0.036	4.68
RSEM-R5B-P2-Sump	5/19/2022 16:30	ATL914	M	C234314	1.28	0.27	0.00243	0.00204	0.102	<0.0001	<0.001	0.158	0.000138	83.9	0.0021	0.0154	0.00096	0.164	<0.0002	0.156	25.4	0.278	0.0000019	0.0173	0.0601	0.022	5.33
RSEM-R5B-P2-Sump	5/22/2022 12:00	ATO536	M	C234788	1.49	0.363	0.00237	0.00194	0.114	<0.0001	<0.001	0.143	0.000076	70.0	0.0024	0.0116	0.00092	0.154	<0.0002	0.146	24.8	0.202	0.0000023	0.0164	0.0496	0.02	5.22
RSEM-R5B-P2-Sump	5/25/2022 12:00	ATT370	M	C235730	1.54	0.16	0.00259	0.00236	0.107	<0.0001	<0.001	0.206	0.000049	65.3	0.0018	0.00846	0.00139	0.229	0.00023	0.112	23.3	0.159	0.0000021	0.0162	0.0409	0.027	4.83
RSEM-R5B-P2-Sump	5/28/2022 14:10	ATX751	M	C236620	1.45	2.43	0.00174	0.00264	0.137	0.0001	<0.001	0.21	0.000076	76.2	0.0052	0.00359	0.00327	2.38	0.00119	0.115	22.2	0.136	0.0000068	0.0126	0.0202	0.117	6.34
RSEM-R5B-P2-Sump	5/29/2022 15:30	ATW987	M	C236421	1.32	2.07	0.00191	0.00132	0.124	<0.0001	<0.001	0.244	0.000295	73.8	0.0041	0.0159	0.00238	0.789	0.00047	0.139	23.0	0.272	0.0000049	0.0139	0.0578	0.056	6.50
RSEM-R5B-P2-Sump	6/1/2022 12:45	AUE682	M	C237797	1.73	0.323	0.00177	0.00157	0.112	<0.0001	<0.001	0.207	0.000155	82.7	0.0015	0.0104	0.0016	0.524	0.00032	0.144	20.2	0.168	<0.0000019	0.0118	0.0404	0.032	4.42
RSEM-R5B-P2-Sump	6/5/2022 12:25	AUM443	M	C238986	1.59	2.03	0.00148	0.00234	0.141	0.00012	<0.001	0.192	0.000062	69.7	0.0039	0.00244	0.00381	2.81	0.00128	0.117	19.1	0.078	0.0000088	0.0089	0.0129	0.095	4.07
RSEM-R5B-P2-Sump	6/11/2022 13:00	AUY738	M	C241062	1.86	0.34	0.0017	0.0023	0.127	<0.0001	<0.001	0.233	<0.00001	51.6	0.002	0.00086	0.00165	0.462	0.00035	0.109	19.6	0.0117	0.0000045	0.0089	0.0064	0.062	4.55

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
RSEM-R5B-P2-Sump	6/15/2022 14:10	AVG250	M	C242252	1.30	0.246	0.00156	0.00194	0.115	<0.0001	<0.001	0.217	<0.00001	47.2	0.0015	0.00051	0.00124	0.256	<0.0002	0.0984	17.0	0.006	<0.0000019	0.008	0.0049	0.027	3.81
RSEM-R5B-P2-Sump	6/18/2022 14:00	AVL991	M	C243162	1.39	0.309	0.00154	0.00211	0.0987	<0.0001	<0.001	0.232	<0.00001	69.1	0.0018	0.00127	0.00194	0.416	0.00027	0.121	17.9	0.0379	0.0000038	0.0097	0.0074	0.045	4.96
RSEM-R5B-P2-Sump	6/23/2022 13:45	AVV599	M	C244839	1.42	0.487	0.0014	0.00215	0.0924	<0.0001	<0.001	0.215	<0.00001	37.4	0.0016	0.00062	0.00189	0.598	0.00038	0.102	17.0	0.0139	0.0000033	0.0078	0.0041	0.044	3.95
RSEM-R5B-P2-Sump	6/26/2022 11:55	AVZ579	M	C245500	1.41	0.478	0.00157	0.00287	0.137	<0.0001	<0.001	0.221	<0.00001	38.8	0.0017	0.0006	0.00155	0.469	0.00031	0.102	16.7	0.0088	0.0000048	0.0081	0.0044	0.037	3.84
RSEM-R5B-P2-Sump	7/3/2022 15:00	AWM048	M	C247492	1.78	0.392	0.00167	0.00253	0.133	<0.0001	<0.001	0.245	<0.00001	36.5	<0.001	0.00053	0.0015	0.363	0.00027	0.108	16.6	0.0067	0.0000024	0.008	0.0041	0.05	3.62
RSEM-R5B-P2-Sump	7/5/2022 13:30	AWR508	M	C248315	1.61	0.825	0.00166	0.00231	0.126	<0.0001	<0.001	0.235	<0.00001	35.4	0.0012	0.00043	0.00134	0.329	0.00024	0.106	16.4	0.0054	0.0000029	0.0079	0.0037	0.022	3.65
RSEM-R5B-P2-Sump	7/8/2022 12:35	AWW524	M	C249170	1.39	0.457	0.00169	0.00274	0.148	<0.0001	<0.001	0.204	<0.00001	35.6	0.0019	0.00064	0.0025	0.519	0.00038	0.0814	18.8	0.0099	0.0000026	0.0092	0.0054	0.043	4.17
RSEM-R5B-P2-Sump	7/13/2022 13:35	AXH417	M	C250934	1.10	1.57	0.00161	0.00325	0.239	<0.0001	<0.001	0.237	0.000051	36.8	0.0026	0.00151	0.00379	1.72	0.00135	0.106	17.5	0.0312	0.0000078	0.0084	0.0077	0.093	4.03
RSEM-R5B-P2-Sump	7/16/2022 12:50	AXN333	M	C251927	1.32	1.94	0.00342	0.00429	0.268	0.00014	<0.001	0.224	0.000054	31.4	0.0054	0.00202	0.00717	2.5	0.00212	0.0953	16.7	0.0395	0.0000125	0.0108	0.0078	0.145	4.41
RSEM-R5B-P2-Sump	7/23/2022 13:00	AYB215	M	C254120	1.96	0.444	0.00284	0.00363	0.15	<0.0001	<0.001	0.296	<0.00001	27.7	0.0017	0.00052	0.00191	0.43	0.00032	0.111	16.8	0.0062	0.0000036	0.0102	0.0034	0.036	4.00
RSEM-R5B-P2-Sump	7/28/2022 14:00	AYM155	M	C255903	1.61	1.31	0.00248	0.00305	0.161	<0.0001	<0.001	0.27	<0.00001	27.4	0.0026	0.00048	0.00159	0.397	0.00028	0.102	17.4	0.0053	<0.0000019	0.0095	0.0036	0.026	4.39
RSEM-R5B-P2-Sump	8/2/2022 13:05	AYU377	M	C257067	2.2	0.0936	0.00165	0.00218	0.141	<0.0001	<0.001	0.251	0.000015	63.4	0.0014	0.00094	0.00173	0.122	<0.0002	0.0867	21.9	0.029	<0.0000019	0.01	0.0059	0.015	5.30
RSEM-R5B-P2-Sump	8/6/2022 14:45	AZA358	M	C258076	2.37	0.635	0.00218	0.00246	0.0953	<0.0001	<0.001	0.313	0.000017	70.6	0.0028	0.00114	0.00158	0.233	<0.0002	0.111	22.1	0.0189	<0.0000019	0.0145	0.0084	0.024	7.01
RSEM-R5B-P2-Sump	8/14/2022 16:30	AZR294	M	C260829	<0.50	0.528	0.00197	0.00258	0.0993	<0.0001	<0.001	0.228	0.000012	43.2	0.0025	0.00057	0.00204	0.424	0.00029	0.0845	20.6	0.0145	<0.0000019	0.0121	0.005	0.033	5.83
RSEM-R5B-P2-Sump	8/27/2022 14:30	BAR927	M	C265307	2.56	3.52	0.0027	0.00431	0.218	0.00014	<0.001	0.429	0.000014	28.0	0.0058	0.0008	0.00344	1.28	0.00086	0.0989	19.3	0.0121	<0.0000019	0.0147	0.0042	0.063	5.54
RSEM-R5B-P2-Sump	9/5/2022 16:00	BBI329	M	C268286	2.45	2.3	0.00289	0.00582	0.185	0.00011	<0.001	0.378	0.000026	29.4	0.0054	0.00112	0.00454	1.5	0.00107	0.093	18.8	0.0193	0.0000021	0.0191	0.0048	0.073	5.53
RSEM-R5B-P2-Sump	9/8/2022 11:55	BBO447	M	C269143	2.68	4.52	0.00299	0.00502	0.183	0.00014	<0.001	0.333	0.000013	28.0	0.0077	0.00078	0.0034	1.19	0.00078	0.0865	18.9	0.0102	<0.0000019	0.0183	0.004	0.052	5.84
RSEM-R5B-P2-Sump	9/15/2022 14:35	BCC126	M	C271667	2.11	3.44	0.00273	0.00513	0.139	0.00012	<0.001	0.31	<0.00001	25.9	0.0055	0.00059	0.00249	0.863	0.00056	0.0821	20.6	0.0095	<0.0000019	0.0138	0.0036	0.043	5.05
RSEM-R5B-P2-Sump	9/24/2022 12:20	BCV562	M	C274577	3.05	0.563	0.00262	0.00414	0.131	<0.0001	<0.001	0.26	0.000011	32.4	0.0034	0.00071	0.00298	0.741	0.0006	0.0946	18.8	0.0104	<0.0000019	0.0166	0.004	0.048	7.24
RSEM-R5B-P2-Sump	9/28/2022 15:40	BDE182	M	C276033	2.06	0.8	0.00239	0.00349	0.123	<0.0001	<0.001	0.266	0.000011	29.4	0.0032	0.00052	0.00249	0.623	0.00052	0.0952	20.2	0.0066	<0.0000019	0.0142	0.0036	0.043	6.39
RSEM-R5B-P2-Sump	10/4/2022 11:50	BDR440	M	C277814	3.05	3.44	0.00205	0.00513	0.26	0.00016	<0.001	0.273	0.000047	34.4	0.0068	0.00169	0.00602	2.77	0.00193	0.0826	22.4	0.0383	<0.000019	0.0131	0.0082	0.159	5.79
RSEM-R5B-P2-Sump	10/9/2022 11:45	BED927	M	C279394	1.77	0.519	0.00257	0.00334	0.089	<0.0001	<0.001	0.237	<0.00001	24.4	0.0055	0.0004	0.00216	0.407	0.0003	0.0736	19.0	0.0065	0.0000031	0.0139	0.0033	0.03	5.12
RSEM-R5B-P2-Sump	10/13/2022 16:40	BEN621	M	C280837	2.68	2.39	0.00284	0.00372	0.138	<0.0001	<0.001	0.231	0.000014	26.7	0.0088	0.00075	0.0034	1.23	0.0008	0.0721	18.7	0.015	0.0000043	0.0144	0.0042	0.059	5.65
RSEM-R5B-P2-Sump	10/20/2022 12:15	BFD238	M	C283174	1.94	2	0.00275	0.00572	0.225	0.00017	<0.001	0.261	0.000051	28.7	0.0065	0.00171	0.00717	2.81	0.00203	0.0909	20.4	0.0368	<0.000019	0.0147	0.0077	0.146	5.74
RSEM-R5B-P2-Sump	10/25/2022 14:35	BFP709	M	C284665	1.90	0.71	0.00281	0.00423	0.133	<0.0001	<0.001	0.232	0.000022	35.0	0.004	0.00087	0.0038	1.08	0.00078	0.0789	19.5	0.0164	0.0000041	0.0139	0.0046	0.064	4.76
RSEM-R6E-EOP	1/23/2022 11:15	FJ2200194-002	M	FJ2200194	2.54	1.14	0.00023	0.00132	0.0814	<0.000100	<0.000050	0.011	0.0000876	31.8	0.00267	0.00115	0.00333	2.75	0.00112	0.0038	6.85	0.0712	<0.0000050	0.00166	0.00453	0.126	1.39
RSEM-R6E-EOP	2/8/2022 11:35	AOI289	M	C208265	4.60	0.542	<0.0005	0.00087	0.113	<0.0001	<0.001	<0.05	0.000033	53.9	0.0026	0.00105	0.00254	1.76	0.0006	0.0134	9.94	0.0915	<0.0000019	0.0052	0.0054	0.073	3.71
RSEM-R6E-EOP	2/12/2022 13:50	AOP216	M	C209346	2.56	0.1	0.00059	0.00027	0.0584	<0.0001	<0.001	<0.05	0.000029	50.3	0.0012	0.00062	0.00139	0.156	<0.0002	0.022	12.0	0.0462	<0.0000019	0.0047	0.0051	0.018	3.42
RSEM-R6E-EOP	2/13/2022 10:35	AOP245	M	C209355	2.45	0.0762	<0.0005	0.00032	0.061	<0.0001	<0.001	<0.05	0.000011	46.3	<0.001	0.00044	0.00091	0.097	<0.0002	0.0135	7.48	0.0381	0.0000024	0.0045	0.0042	0.024	3.40
RSEM-R6E-EOP	2/14/2022 13:00	AOQ978	M	C209670	2.47	0.0967	<0.0005	0.00034	0.0682	<0.0001	<0.001	<0.05	0.000015	47.5	<0.001	0.0005	0.00091	0.132	<0.0002	0.0142	8.43	0.0417	<0.0000019	0.0049	0.0045	<0.01	3.60
RSEM-R6E-EOP	2/15/2022 15:45	AOS723	M	C210043	2.47	0.213	0.00052	0.00058	0.0927	<0.0001	<0.001	<0.05	0.000034	48.5	0.0013	0.0011	0.00171	0.437	0.00027	0.013	8.61	0.069	0.0000031	0.006	0.006	0.036	4.20
RSEM-R6E-EOP	2/16/2022 10:30	AOU839	M	C210450	1.9	0.0547	0.00061	0.00049	0.0892	<0.0001	<0.001	<0.05	0.000023	50.6	0.0012	0.00047	0.00104	0.064	<0.0002	0.0163	8.90	0.0419	0.000003	0.0067	0.0051	0.02	4.40
RSEM-R6E-EOP	3/16/2022 7:00	AQE821	M	C217156	3.3	0.0639	0.00119	0.00093	0.0215	<0.0001	<0.001	0.067	<0.00001	19.4	0.0033	0.00022	0.00121	0.066	<0.0002	0.0481	18.9	0.0105	<0.0000019	0.0063	0.002	<0.01	3.71
RSEM-R6E-EOP	3/17/2022 16:30	AQH796	M	C217776	3.00	3.89	0.00076	0.00439	0.254	0.00031	<0.001	<0.05	0.000559	79.3	0.0111	0.0067	0.0142	12.1	0.00597	0.0273	15.1	0.482	0.0000527	0.0045	0.0224	0.713	4.68
RSEM-R6E-EOP	3/18/2022 5:00	AQH793	M	C217775	3.82	0.102	<0.0005	0.00054	0.094	<0.0001	<0.001	0.054	0.000037	72.5	<0.001	0.00254	0.00125	0.202	<0.0002	0.0219	17.1	0.239	0.0000035	0.0072	0.0096	0.031	5.71
RSEM-R6E-EOP	4/6/2022 12:30	ARI187	M	C223269	1.13	0.1	<0.0005	0.00051	0.121	<0.0001	<0.001	<0.05	0.000026	53.8	<0.001	0.00113	0.00159	0.239	<0.0002	0.0128	10.2	0.101	<0.0000019	0.0044	0.0077	0.027	2.94
RSEM-R6E-EOP	4/8/2022 12:30	ARI202	M	C223273	1.04	0.606	<0.0005	0.00113	0.145	<0.0001	<0.001	<0.05	0.000067	67.4	0.0017	0.00196	0.00282	2.01	0.00085	0.0166	13.6	0.167	0.0000058	0.0051	0.0107	0.083	3.51
RSEM-R6E-EOP	4/10/2022 12:30	ARK076	M	C223661	1.85	0.0869	<0.0005	0.00046	0.108	<0.0001	<0.001	<0.05	0.000021	66.7	<0.001	0.00113	0.00122	0.251	<0.0002	0.0158	13.2	0.121	<0.0000019	0.0051	0.0082	0.021	3.39
RSEM-R6E-EOP	4/11/2022 9:30	ARK111	M	C223675	1.64	0.0685	<0.0005	0.0004	0.107	<0.0001	<0.001	<0.05	0.000019	66.7	<0.001	0.00107	0.00096	0.184	<0.0002	0.0161	13.3	0.117	0.000002	0.0052	0.0069	0.019	3.36
RSEM-R6E-EOP	4/12/2022 10:20	ARN333	M	C224402	1.25	0.099	<0.0005	0.00043	0.115	<0.0001	<0.001	0.053	0.000019	66.8	<0.001	0.00107	0.00085	0.194	<0.0002	0.0188	14.1	0.114	<0.0000019	0.0046	0.0067	0.024	3.19
RSEM-R6E-EOP	4/13/2022 12:00	ARP725	M	C224775	1.20	0.0758	<0.0005	0.00045	0.126	<0.0001	<0.001	0.055	0.000019	67.8	<0.001	0.00109	0.00085	0.157	<0.0002	0.0193	14.7	0.118	<0.0000019	0.0047	0.007	0.027	3.27
RSEM-R6E-EOP	4/14/2022 9:25	ARQ064	M	C224815	1.35	0.0676	<0.0005	0.00044	0.13	<0.0001	<0.001	0.054	0.000017	68.6	<0.001	0.00109	0.00082	0.13	<0.0002	0.0191	14.9	0.12	<0.0000019	0.0049	0.0073	0.024	3.37
RSEM-R6E-EOP	4/15/2022 13:35	ARQ198	M	C224832	1.32	0.112	<0.0005	0.00049	0.141	<0.0001	<0.001	<0.05	0.000022	67.1	<0.001	0.00117	0.00087	0.162	<0.0002	0.0158	15.9	0.129	<0.0000019	0.0055	0.0078	0.015	3.65
RSEM-R6E-EOP	4/15/2022 13:45	ARQ199	D	C224832	1.36	0.0938	<0.0005	0.00049	0.145	<0.0001	<0.001	<0.05	0.000022	68.5	<0.001	0.00121	0.0009	0.136	<0.0002	0.016	16.2	0.132	<0.0000019	0.0056	0.008	0.015	3.76
RSEM-R6E-EOP	4/16/2022 13:35	ARR878	M	C225206	1.60	0.0588	<0.0005	0.00041	0.125	<0.0001	<0.001	0.052	0.000013	71.1	<0.001	0.00106	0.00073	0.111	<0.0002	0.0188	15.2	0.115	<0.0000019	0.0047	0.0071	0.013	3.27
RSEM-R6E-EOP	4/17/2022 16:55	ARR903	M	C225213	1.69	0.052	<0.0005	0.00052	0.157	<0.0001	<0.001	<0.05	0.00002	79.1	<0.001	0.00125	0.00096	0.139	<0.0002	0.0175	19.1	0.137	<0.0000019	0.0057	0.0088	0.017	4.02
RSEM-R6E-EOP	4/18/2022 13:45	ARU247	M	C225693	1.42	0.0562	<0.0005	0.00046	0.152	<0.0001	<0.001	<0.05	0.00002	75.7	<0.001	0.00117	0.00087	0.122	<0.0002	0.0164	17.6	0.127	0.0000021	0.0053	0.008	0.016	3.68
RSEM-R6E-EOP	4/19/2022 13:30	ARV034	M	C225905	1.47	0.0499	<0.0005	0.0005	0.152	<0.0001	<0.001	0.05	0.000015	87.1	<0.001	0.00108	0.00085	0.108	<0.0002	0.0158	17.2	0.123	<0.0000019	0.005	0.0078	0.015	3.59
RSEM-R6E-EOP	4/20/2022 12:25	ARW667	M	C226267	0.79	0.04	<0.0005	0.0006	0.161	<0.0001	<0.001	0.054	0.000021	78.7	<0.001	0.0012	0.00091	0.084	<0.0002	0.0172	19.4	0.137	0.0000019	0.0053	0.0084	0.017	3.91
RSEM-R6E-EOP	4/21/2022 13:15	ARX706	M	C226546	1.24	0.0421	0.0005	0.00076	0.178	<0.0001	<0.001	0.055	0.000019	84.7	<0.001	0.00123	0.00098	0.091	<0.0002	0.0182	20.8	0.143	<0.0000019	0.0057	0.0087	0.016	4.16
RSEM-R6E-EOP	4/22/2022 11:25	ARX719	M	C226550	2.03	0.0424	<0.0005	0.00053	0.176	<0.0001	<0.001	0.052	0.000018	80.8	<0.001	0.00115	0.00098	0.099	<0.0002	0.0171	19.8	0.137	<0.0000019	0.0055	0.0083	0.016	3.93
RSEM-R6E-EOP	4/22/2022 11:35	ARX720	D	C226550	1.33	0.0447	<0.0005	0.00066	0.174	<0.0001	<0.001	0.052	0.000013	80.5	<0.001	0.00113	0.00096	0.103	<0.0002	0.0171	19.6	0.136	<0.0000019	0.0054	0.0082	0.017	3.90
RSEM-R6E-EOP	4/23/2022 15:20	ARZ185	M	C226855	1.93	0.143	<0.0005	0.00063	0.168	<0.0001	<0.001	0.054	0.000021	74.4	<0.001	0.00119	0.00135	0.285	<0.0002	0.0163	18.3	0.129	0.0000021	0.005	0.0081	0.027	3.68
RSEM-R6E-EOP	4/24/2022 11:10	ASA415	M	C227083	1.90	0.0707	<0.0005	0.00046	0.153	<0.0001	<0.001	<0.05	0.000015	71.4	<0.001	0.00099	0.00107	0.173	<0.0002	0.0147	17.4	0.123	<0.0000019	0.0046	0.0069	0.023	3.50
RSEM-R6E-EOP	4/24/2022 11:20	ASA416	D	C227083	1.84	0.0795	<0.0005	0.00055	0.157	<0.0001	<0.001	<0.05	0.000018	72.4	<0.001	0.00099	0.00108	0.179	<0.0002	0.0151	17.8	0.125	0.0000023	0.0047	0.007	0.022	3.56
RSEM-R6E-EOP	4/25/2022 11:10	ASA412	M	C227083	1.85	0.0768	<0.0005	0.00059	0.151	<0.0001	<0.001	<0.05	0.000016	68.3	<0.001	0.00089	0.00101	0.174	<0.0002	0.0138	16.9	0.115	<0.0000019	0.0044	0.0066	0.022	3.30
RSEM-R6E-EOP	4/26/2022 11:30	ASD456	M	C227799	1.81	0.0741	<0.0005	0.00063	0.151	<0.0001	<0.001	0.054	0.000017	68.1	<0.001	0.0009	0.00118	0.199	<0.0002	0.016	17.2	0.115	<0.0000019	0.0044	0.0066	0.028	3.35
RSEM-R6E-EOP	4/27/2022 11:30	ASH196	M	C228648	1.53	0.0918	<0.0005	0.00057	0.152	<0.0001	<0.001	<0.05	0.000021	68.5	<0.001	0.0009	0.00123	0.187	<0.0002	0.0152	17.4	0.117	<0.0000019	0.0042	0.0068	0.023	3.32
RSEM-R6E-EOP	4/28/2022 12:00	ASH216	M	C228650	1.55	0.74	<0.0005	0.00097	0.148	<0.0001	<0.001	0.055	0.00005	73.2	0.0016	0.00122	0.00251	1.26	0.00058	0.0158	17.8	0.141	0.000004	0.0043	0.0076	0.07	3.96
RSEM-R6E-EOP	4/29/2022 9:30	ASH016	M	C228622	1.85	0.547	<0.0005	0.00072	0.127	<0.0001	<0.001	0.056	0.000071	75.6	0.0014	0.00286	0.00159	0.814	0.00039	0.0206	18.4	0.157	0.0000031	0.0048	0.0142	0.051	4.48
RSEM-R6E-EOP	4/30/2022 11:30	ASL379	M	C229488	1.57	0.196	<0.0005	0.00058	0.116	<0.0001	<0.001	0.056	0.000169	81.4	<0.001	0.00953	0.00169	0.319	<0.0002	0.0308	20.9	0.254	0.0000024	0.0044	0.0371	0.03	4.20
RSEM-R6E-EOP	5/1/2022 10:30	ASL426	M	C229493	1.68	0.154	<0.0005	0.00044	0.123	<0.0001	<0.001	0.062	0.000248	98.3	<0.001	0.0163	0.00114	0.248	<0.0002	0.0436	25.9	0.358	0.000002	0.0045	0.0622	0.027	4.39
RSEM-R6E-EOP	5/2/2022 10:30	ASL339	M	C229475	1.49	0.101	<0.0005	0.00055	0.131	<0.0001	<0.001	0.064	0.000239	94.8	<0.001	0.0152	0.00125	0.142	<0.0002	0.0455	27.6	0.346	<0.0000019	0.0047	0.0607	0.021	4.44
RSEM-R6E-EOP	5/3/2022 14:15	ASO447	M	C230063	1.50	0.23	<0.0005	0.00041	0.132	<0.0001	<0.001	0.072	0.000205	97.9	<0.001	0.015	0.00151	0.402	0.0002	0.0482	30.4	0.352	<0.0000019	0.0044	0.0636	0.034	4.54
RSEM-R6E-EOP	5/4/2022 12:10	ASP675	M	C230320	1.75	0.14	<0.0005	0.00023	0.124	<0.0001	<0.001	0.062	0.000156	96.4	<0.001	0.012	0.00136	0.27	<0.0002	0.0476	29.5	0.304	<0.0000019	0.0042	0.0566	0.027	4.43
RSEM-R6E-EOP	5/5/2022 11:05	ASR003	M	C230531	1.85	0.0804	<0.0005	0.00027	0.121	<0.0001	<0.001	0.067	0.000109	90.6	<0.001	0.00948	0.00111	0.109	<0.0002	0.0466	29.1	0.249	<0.0000019	0.0041	0.0496	0.022	4.41
RSEM-R6E-EOP	5/5/2022 11:15	ASR004	D	C230531	1.65	0.0744	<0.0005	0.00025	0.119	<0.0001	<0.001	0.063	0.000107	95.1	<0.001	0.00935	0.00109	0.109	<0.0002	0.046	28.5	0.248	<0.0000019	0.0041	0.0493	0.02	4.35
RSEM-R6E-EOP	5/6/2022 10:20	ASR071	M	C230545	1.61	0.115	<0.0005	0.00037	0.119	<0.0001	<0.001	0.072	0.000103	97.2	<0.001	0.00914	0.00152	0.198	<0.0002	0.0451	29.5	0.267	<0.0000019	0.0042	0.047	0.022	4.39
RSEM-R6E-EOP	5/7/2022 11:15	ASS942	M	C230886	1.64	0.184	<0.0005	0.00047	0.119	<0.0001	<0.001	0.066	0.000077	97.2	0.001	0.00692	0.00127	0.263	<0.0002	0.0428	29.0	0.223	<0.0000019	0.0047	0.0391	0.03	4.94

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
RSEM-R6E-EOP	5/8/2022 14:35	ASS883	M	C230861	1.53	0.109	<0.0005	0.00037	0.11	<0.0001	<0.001	0.067	0.000056	94.4	<0.001	0.00516	0.00127	0.157	<0.0002	0.0405	27.6	0.17	<0.0000019	0.005	0.0328	0.024	5.07
RSEM-R6E-EOP	5/9/2022 13:40	ASV291	M	C231306	1.71	0.126	<0.0005	0.00034	0.0959	<0.0001	<0.001	0.078	0.000061	98.6	<0.001	0.0041	0.00097	0.198	<0.0002	0.0422	24.1	0.135	<0.0000019	0.0052	0.0272	0.025	4.41
RSEM-R6E-EOP	5/10/2022 10:50	ASX003	M	C231638	1.46	0.0796	<0.0005	0.00037	0.098	<0.0001	<0.001	0.072	0.000062	93.2	0.0014	0.00536	0.0011	0.118	<0.0002	0.0366	25.5	0.152	<0.0000019	0.0049	0.0344	0.019	4.65
RSEM-R6E-EOP	5/11/2022 12:15	ASZ423	M	C232133	2.12	0.0883	<0.0005	0.00044	0.0975	<0.0001	<0.001	0.08	0.000095	95.0	<0.001	0.0073	0.00114	0.113	<0.0002	0.0432	25.9	0.176	<0.0000019	0.0052	0.039	0.017	4.73
RSEM-R6E-EOP	5/12/2022 13:55	ATA813	M	C232369	1.69	0.073	<0.0005	0.00041	0.0896	<0.0001	<0.001	0.078	0.000104	94.5	0.0011	0.00777	0.00105	0.078	<0.0002	0.0397	26.1	0.176	<0.0000019	0.0047	0.0416	0.02	4.53
RSEM-R6E-EOP	5/13/2022 11:00	ATB011	M	C232410	1.70	0.0604	<0.0005	0.00042	0.0898	<0.0001	<0.001	0.076	0.000093	96.9	0.0013	0.00816	0.00119	0.049	<0.0002	0.0403	27.1	0.179	<0.0000019	0.0047	0.0437	0.021	4.70
RSEM-R6E-EOP	5/14/2022 14:25	ATD058	M	C232817	1.03	0.0581	<0.0005	0.00042	0.0826	<0.0001	<0.001	0.071	0.000057	92.8	0.0011	0.00599	0.00108	0.059	<0.0002	0.032	24.3	0.146	<0.0000019	0.004	0.0369	0.02	4.46
RSEM-R6E-EOP	5/15/2022 11:30	ATD050	M	C232812	2.20	0.0682	<0.0005	0.00027	0.0803	<0.0001	<0.001	0.076	0.000079	92.9	<0.001	0.00545	0.0014	0.076	<0.0002	0.0355	25.8	0.129	<0.0000019	0.0041	0.0349	0.017	4.27
RSEM-R6E-EOP	5/16/2022 10:00	ATC671	M	C232726	1.58	0.0725	<0.0005	0.00076	0.0806	<0.0001	<0.001	0.076	0.000092	95.5	0.0012	0.00603	0.0012	0.066	<0.0002	0.0332	26.3	0.146	<0.0000019	0.004	0.0372	0.023	4.44
RSEM-R6E-EOP	5/17/2022 11:30	ATH850	M	C233625	1.86	0.0859	<0.0005	0.00035	0.105	<0.0001	<0.001	0.07	0.000077	122	<0.001	0.00576	0.00113	0.076	<0.0002	0.0612	33.4	0.15	<0.0000019	0.0045	0.0364	0.018	5.53
RSEM-R6E-EOP	5/18/2022 11:30	ATJ924	M	C234012	1.42	0.0712	<0.0005	0.00023	0.101	<0.0001	<0.001	0.103	0.000059	139	<0.001	0.00414	0.00084	0.082	<0.0002	0.0577	31.6	0.113	<0.0000019	0.0041	0.0278	<0.01	4.89
RSEM-R6E-EOP	5/19/2022 12:30	ATL910	M	C234314	1.11	0.087	<0.0005	0.0002	0.118	<0.0001	<0.001	0.082	0.000043	152	<0.001	0.00408	0.00087	0.08	<0.0002	0.0598	34.5	0.105	<0.0000019	0.0052	0.029	0.012	6.41
RSEM-R6E-EOP	5/20/2022 10:00	ATL358	M	C234241	1.18	0.0652	<0.0005	0.00024	0.106	<0.0001	<0.001	0.099	0.000027	141	<0.001	0.00327	0.00075	0.065	<0.0002	0.0542	31.6	0.0853	<0.0000019	0.0037	0.0237	0.01	5.08
RSEM-R6E-EOP	5/21/2022 10:00	ATN137	M	C234510	1.49	0.186	<0.0005	0.00052	0.116	<0.0001	<0.001	0.092	0.000041	123	<0.001	0.0032	0.0026	0.268	0.00027	0.0399	31.4	0.0862	<0.0000019	0.0037	0.0214	0.028	5.37
RSEM-R6E-EOP	5/22/2022 14:30	ATO534	M	C234788	1.33	0.0782	<0.0005	0.00042	0.113	<0.0001	<0.001	0.06	0.000013	112	<0.001	0.00211	0.00075	0.063	<0.0002	0.0411	28.8	0.0535	<0.0000019	0.0032	0.0165	0.011	4.94
RSEM-R6E-EOP	5/23/2022 10:30	ATO583	M	C234797	1.41	0.117	<0.0005	0.00039	0.116	<0.0001	<0.001	0.07	0.000012	109	<0.001	0.00176	0.00083	0.121	<0.0002	0.0362	27.5	0.0461	0.000002	0.003	0.0144	0.013	4.79
RSEM-R6E-EOP	5/24/2022 10:30	ATR509	M	C235358	1.93	0.0687	<0.0005	0.0003	0.118	<0.0001	<0.001	0.077	<0.00001	108	<0.001	0.0014	0.00098	0.073	<0.0002	0.0195	27.5	0.0368	<0.0000019	0.0029	0.0136	0.016	4.84
RSEM-R6E-EOP	5/25/2022 15:15	ATT368	M	C235730	1.55	0.0681	<0.0005	0.0003	0.125	<0.0001	<0.001	0.079	<0.00001	106	<0.001	0.00105	0.00075	0.073	<0.0002	0.0221	27.4	0.0311	<0.0000019	0.0029	0.0111	0.013	4.65
RSEM-R6E-EOP	5/26/2022 15:10	ATV282	M	C236083	2.00	0.0676	<0.0005	0.0003	0.108	<0.0001	<0.001	0.061	<0.00001	99.9	<0.001	0.00074	0.00057	0.072	<0.0002	0.0214	24.0	0.0227	<0.0000019	0.0024	0.0075	0.015	3.69
RSEM-R6E-EOP	5/26/2022 15:20	ATV283	D	C236083	1.99	0.0456	<0.0005	0.00031	0.113	<0.0001	<0.001	0.065	<0.00001	103	<0.001	0.00078	0.0006	0.073	<0.0002	0.0227	24.9	0.0233	<0.0000019	0.0025	0.0079	0.014	3.86
RSEM-R6E-EOP	5/27/2022 13:25	ATV300	M	C236089	1.51	0.0514	<0.0005	0.00029	0.108	<0.0001	<0.001	0.06	<0.00001	99.1	<0.001	0.00062	0.00055	0.047	<0.0002	0.0199	23.2	0.0188	<0.0000019	0.0022	0.0066	0.015	3.54
RSEM-R6E-EOP	5/28/2022 16:15	ATX746	M	C236620	1.80	0.304	<0.0005	0.00062	0.129	<0.0001	<0.001	0.073	0.000089	137	0.0011	0.00253	0.00124	0.378	0.00022	0.0315	25.4	0.138	<0.0000019	0.0032	0.0145	0.04	6.44
RSEM-R6E-EOP	5/29/2022 17:30	ATW968	M	C236421	0.77	0.237	<0.0005	0.00029	0.12	<0.0001	<0.001	0.071	0.000378	125	0.001	0.015	0.00152	0.235	<0.0002	0.0524	26.5	0.348	0.0000021	0.0036	0.06	0.036	5.60
RSEM-R6E-EOP	5/30/2022 16:10	ATZ465	M	C236894	1.15	0.182	<0.0005	0.00045	0.117	<0.0001	<0.001	0.075	0.000386	104	<0.001	0.0151	0.00141	0.144	<0.0002	0.0514	25.1	0.293	0.0000022	0.0041	0.0584	0.028	4.60
RSEM-R6E-EOP	5/31/2022 11:10	AUC335	M	C237377	1.23	0.129	<0.0005	0.00036	0.118	<0.0001	<0.001	0.086	0.000309	112	<0.001	0.0118	0.00112	0.135	<0.0002	0.057	23.6	0.242	<0.0000019	0.0044	0.0465	0.014	4.11
RSEM-R6E-EOP	6/1/2022 11:10	AUE680	M	C237797	1.39	0.131	<0.0005	0.0004	0.129	<0.0001	<0.001	0.083	0.00017	114	<0.001	0.0071	0.00104	0.177	<0.0002	0.0497	21.1	0.16	<0.0000019	0.0043	0.0301	0.014	3.58
RSEM-R6E-EOP	6/2/2022 10:30	AUH700	M	C238258	1.65	0.0789	<0.0005	0.00031	0.136	<0.0001	<0.001	0.065	0.000056	105	<0.001	0.00315	0.00083	0.079	<0.0002	0.033	18.7	0.0724	0.0000021	0.0035	0.0159	<0.01	3.35
RSEM-R6E-EOP	6/3/2022 11:55	AUH661	M	C238247	1.15	0.0592	<0.0005	0.00031	0.142	<0.0001	<0.001	0.062	0.00002	107	<0.001	0.00176	0.00079	0.066	<0.0002	0.0282	19.0	0.0387	<0.0000019	0.0032	0.011	0.01	3.37
RSEM-R6E-EOP	6/4/2022 10:25	AUL720	M	C238905	1.61	0.0651	<0.0005	0.00033	0.152	<0.0001	<0.001	0.058	0.000026	126	<0.001	0.00135	0.00078	0.099	<0.0002	0.0249	20.3	0.0322	<0.0000019	0.0032	0.0093	0.011	3.44
RSEM-R6E-EOP	6/5/2022 11:45	AUM440	M	C238986	1.57	0.0578	<0.0005	0.00033	0.151	<0.0001	<0.001	0.053	0.000014	102	<0.001	0.00077	0.00077	0.107	<0.0002	0.019	18.3	0.0181	0.000002	0.0029	0.0063	0.011	3.26
RSEM-R6E-EOP	6/6/2022 10:40	AUO789	M	C239365	1.62	0.0477	<0.0005	0.00026	0.14	<0.0001	<0.001	0.067	0.000013	92.2	<0.001	0.00063	0.00065	0.066	<0.0002	0.0167	18.4	0.0175	<0.0000019	0.0023	0.0051	0.01	3.25
RSEM-R6E-EOP	6/7/2022 11:30	AUT412	M	C240162	1.49	0.0402	<0.0005	0.00024	0.136	<0.0001	<0.001	0.059	0.000013	87.2	<0.001	0.0005	0.00067	0.06	<0.0002	0.0137	17.9	0.0114	<0.0000019	0.0023	0.0041	<0.01	3.31
RSEM-R6E-EOP	6/8/2022 12:30	AUT294	M	C240147	1.65	0.0459	<0.0005	0.00027	0.149	<0.0001	<0.001	0.066	0.000017	93.9	<0.001	0.00054	0.00069	0.066	<0.0002	0.0153	19.2	0.0145	<0.0000019	0.0026	0.0045	0.012	3.57
RSEM-R6E-EOP	6/9/2022 13:00	AUV205	M	C240504	1.33	0.0502	<0.0005	0.00036	0.149	<0.0001	<0.001	<0.05	0.000017	93.3	<0.001	0.00058	0.00095	0.057	<0.0002	0.014	19.9	0.0153	<0.0000019	0.0029	0.0049	0.019	3.97
RSEM-R6E-EOP	6/10/2022 10:30	AUV210	M	C240508	1.36	0.0482	<0.0005	0.00036	0.147	<0.0001	<0.001	0.054	0.000012	93.1	<0.001	0.00066	0.00095	0.033	<0.0002	0.0141	19.7	0.015	<0.0000019	0.003	0.0052	0.014	4.01
RSEM-R6E-EOP	6/11/2022 9:30	AUY734	M	C241062	1.26	0.0401	<0.0005	0.00032	0.149	<0.0001	<0.001	0.059	0.000018	89.8	<0.001	0.00046	0.00149	0.037	<0.0002	0.0142	20.3	0.0166	0.0000026	0.0027	0.0043	0.016	3.92
RSEM-R6E-EOP	6/12/2022 10:00	AUY702	M	C241043	1.82	0.0343	<0.0005	0.00031	0.146	<0.0001	<0.001	0.065	0.000018	85.2	<0.001	0.00035	0.00087	0.036	<0.0002	0.0129	19.7	0.014	0.0000029	0.0027	0.0033	0.015	3.76
RSEM-R6E-EOP	6/13/2022 11:30	AVD503	M	C241814	1.60	0.0527	<0.0005	0.00028	0.15	<0.0001	<0.001	0.053	0.000031	83.5	<0.001	0.00041	0.00102	0.094	<0.0002	0.0124	17.4	0.0147	<0.0000019	0.0027	0.0031	<0.01	3.46
RSEM-R6E-EOP	6/14/2022 10:00	AVD542	M	C241829	1.54	0.033	<0.0005	0.00025	0.14	<0.0001	<0.001	0.051	0.00003	80.3	<0.001	0.00029	0.00118	0.047	<0.0002	0.0118	16.3	0.0095	<0.0000019	0.0026	0.0027	<0.01	3.25
RSEM-R6E-EOP	6/15/2022 11:45	AVG247	M	C242252	1.41	0.0305	<0.0005	0.00024	0.136	<0.0001	<0.001	0.053	0.00004	78.0	<0.001	0.00026	0.00095	0.052	<0.0002	0.011	15.7	0.0075	0.0000029	0.0026	0.0027	<0.01	3.15
RSEM-R6E-EOP	6/16/2022 12:35	AVK122	M	C242788	1.34	0.0416	<0.0005	0.00024	0.132	<0.0001	<0.001	<0.05	0.000039	77.6	<0.001	0.0003	0.00151	0.062	<0.0002	0.011	15.6	0.0106	<0.0000019	0.0029	0.0027	0.012	3.21
RSEM-R6E-EOP	6/17/2022 11:25	AVK723	M	C242942	1.43	0.172	<0.0005	0.00055	0.135	<0.0001	<0.001	<0.05	0.000053	88.6	<0.001	0.00059	0.00139	0.356	0.00026	0.0113	19.3	0.0419	<0.0000019	0.0037	0.0035	0.032	4.32
RSEM-R6E-EOP	6/18/2022 12:35	AVL988	M	C243162	0.95	0.0789	<0.0005	0.00035	0.117	<0.0001	<0.001	0.058	0.00004	106	<0.001	0.00057	0.0011	0.119	<0.0002	0.0111	17.8	0.0416	<0.0000019	0.0038	0.0036	0.018	4.40
RSEM-R6E-EOP	6/19/2022 11:30	AVM016	M	C243177	1.24	0.0898	<0.0005	0.0003	0.118	<0.0001	<0.001	0.054	0.000041	103	<0.001	0.00078	0.00119	0.13	<0.0002	0.014	17.1	0.0371	0.0000022	0.004	0.0048	0.014	4.04
RSEM-R6E-EOP	6/19/2022 11:40	AVM017	D	C243177	0.50	0.0826	<0.0005	0.00031	0.119	<0.0001	<0.001	0.059	0.000042	104	<0.001	0.00077	0.00117	0.114	<0.0002	0.0146	17.2	0.0368	0.0000025	0.0041	0.0048	0.013	4.09
RSEM-R6E-EOP	6/20/2022 10:40	AVO964	M	C243664	1.60	0.0903	<0.0005	0.00028	0.119	<0.0001	<0.001	0.053	0.000044	88.8	<0.001	0.00086	0.00116	0.074	<0.0002	0.0127	17.5	0.0295	<0.0000019	0.0038	0.0053	0.013	3.94
RSEM-R6E-EOP	6/21/2022 11:25	AVQ610	M	C244010	1.69	0.0851	<0.0005	0.00032	0.126	<0.0001	<0.001	0.05	0.000026	91.2	<0.001	0.00069	0.00105	0.079	<0.0002	0.0141	19.0	0.0213	<0.0000019	0.0039	0.005	<0.01	3.83
RSEM-R6E-EOP	6/22/2022 10:55	AVT152	M	C244412	1.21	0.061	<0.0005	0.00031	0.126	<0.0001	<0.001	0.052	0.000017	82.6	<0.001	0.00049	0.0009	0.065	<0.0002	0.0132	18.6	0.0174	0.0000036	0.0036	0.0043	0.013	3.63
RSEM-R6E-EOP	6/23/2022 11:05	AVV596	M	C244839	1.68	0.0604	<0.0005	0.00031	0.125	<0.0001	<0.001	0.051	0.000016	75.8	<0.001	0.00042	0.00103	0.071	<0.0002	0.0121	16.7	0.0237	<0.0000019	0.0032	0.0038	0.012	3.38
RSEM-R6E-EOP	6/24/2022 10:50	AVV585	M	C244835	1.51	0.0544	<0.0005	0.00036	0.124	<0.0001	<0.001	0.056	0.00002	77.9	<0.001	0.00059	0.00089	0.073	<0.0002	0.0125	17.0	0.0397	0.0000022	0.0031	0.0042	0.015	3.45
RSEM-R6E-EOP	6/24/2022 11:00	AVV586	D	C244835	1.73	0.0585	<0.0005	0.00036	0.129	<0.0001	<0.001	<0.05	0.000018	75.7	<0.001	0.00061	0.00089	0.074	<0.0002	0.0119	17.4	0.0408	<0.0000019	0.0032	0.0043	0.011	3.53
RSEM-R6E-EOP	6/25/2022 10:30	AVZ706	M	C245512	1.59	0.0567	<0.0005	0.00026	0.117	<0.0001	<0.001	0.05	0.000019	75.7	<0.001	0.00045	0.00084	0.055	<0.0002	0.0117	16.3	0.0132	0.0000022	0.0029	0.0038	0.012	3.20
RSEM-R6E-EOP	6/26/2022 9:55	AVZ576	M	C245500	1.04	0.0823	<0.0005	0.00032	0.124	<0.0001	<0.001	0.054	0.000018	76.9	<0.001	0.00045	0.00091	0.105	<0.0002	0.0121	17.6	0.0144	<0.0000019	0.0031	0.0038	0.014	3.45
RSEM-R6E-EOP	6/26/2022 10:05	AVZ577	D	C245500	1.03	0.0693	<0.0005	0.00032	0.122	<0.0001	<0.001	0.051	0.000014	74.7	0.002	0.00044	0.00089	0.094	<0.0002	0.0116	16.9	0.014	<0.0000019	0.0031	0.0037	0.016	3.35
RSEM-R6E-EOP	6/27/2022 10:15	AVY532	M	C245274	0.73	0.0491	<0.0005	0.00031	0.112	<0.0001	<0.001	0.051	0.000013	74.3	<0.001	0.00032	0.0008	0.057	<0.0002	0.0112	16.2	0.0118	0.0000023	0.003	0.0031	<0.01	3.15
RSEM-R6E-EOP	6/28/2022 12:30	AWH752	M	C246896	1.70	0.0768	<0.0005	0.00044	0.132	<0.0001	<0.001	0.055	0.000028	79.2	<0.001	0.00035	0.00205	0.126	<0.0002	0.011	17.4	0.0238	<0.0000019	0.0034	0.0027	0.015	3.46
RSEM-R6E-EOP	6/29/2022 14:30	AWH757	M	C246898	1.43	0.0458	<0.0005	0.00036	0.131	<0.0001	<0.001	0.05	0.000022	81.5	<0.001	0.00037	0.00081	0.091	<0.0002	0.0109	16.5	0.0312	0.000002	0.0035	0.0023	<0.01	3.27
RSEM-R6E-EOP	6/30/2022 12:30	AWH755	M	C246897	1.64	0.0817	<0.0005	0.00041	0.137	<0.0001	<0.001	0.055	0.000018	83.5	<0.001	0.00033	0.00086	0.193	<0.0002	0.0116	17.2	0.0152	0.0000023	0.0036	0.0023	0.015	3.36
RSEM-R6E-EOP	7/1/2022 12:30	AWJ893	M	C247203	1.27	0.0716	<0.0005	0.00038	0.13	<0.0001	<0.001	<0.05	0.000019	67.3	<0.001	0.00028	0.00082	0.081	<0.0002	0.0099	17.4	0.0148	<0.0000019	0.0039	0.0023	<0.01	3.42
RSEM-R6E-EOP	7/2/2022 12:00	AWJ848	M	C247196	1.39	0.0608	<0.0005	0.00053	0.136	<0.0001	<0.001	<0.05	0.000015	68.9	<0.001	0.00038	0.0008	0.08	<0.0002	0.01	18.5	0.0547	<0.0000019	0.0041	0.0027	<0.01	3.56
RSEM-R6E-EOP	7/3/2022 11:00	AWM045	M	C247492	1.61	0.0521	<0.0005	0.00043	0.132	<0.0001	<0.001	0.054	0.000014	78.2	<0.001	0.00035	0.00074	0.099	<0.0002	0.0112	17.0	0.0366	0.0000022	0.0036	0.0024	0.01	3.22
RSEM-R6E-EOP	7/4/2022 10:00	AWM515	M	C247552	1.67	0.0663	<0.0005	0.00037	0.128	<0.0001	<0.001	0.055	0.000014	76.3	<0.001	0.00028	0.00088	0.131	<0.0002	0.0111	17.0	0.0148	<0.0000019	0.0035	0.0024	<0.01	3.14
RSEM-R6E-EOP	7/5/2022 10:00	AWR506	M	C248315	1.50	0.0606	<0.0005	0.00034	0.126	<0.0001	<0.001	0.055	0.00001	78.0	<0.001	0.00027	0.00066	0.067	<0.0002	0.0109	17.3	0.0136	<0.0000019	0.0035	0.0022	<0.01	3.08
RSEM-R6E-EOP	7/6/2022 14:05	AWV908	M	C249077	1.66	0.0501	<0.0005	0.00049	0.127	<0.0001	<0.001	<0.05	0.000012	71.4	<0.001	0.00031	0.00085	0.095	<0.0002	0.0097	19.0	0.0204	<0.0000019	0.0041	0.0028	0.018	3.58
RSEM-R6E-EOP	7/6/2022 14:15	AWV909	D	C249077	1.62	0.0544	<0.0005	0.00048	0.128	<0.0001	<0.001	<0.05	0.000011	70.5	<0.001	0.00031	0.00079	0.1	<0.0002	0.011	19.1	0.0201	0.0000024	0.004	0.0027	0.015	3.56
RSEM-R6E-EOP	7/7/2022 11:45	AWW342	M	C249139	1.64	0.0459	<0.0005	0.00052	0.129	<0.0001	<0.001	0.051	0.000012	72.1	<0.001	0.00028	0.00126	0.082	<0.0002	0.011	19.7	0.0165	0.000002	0.0042	0.0027	0.018	3.65
RSEM-R6E-EOP	7/8/2022 11:35	AWW521	M	C249170	1.65	0.0635	<0.0005	0.00055	0.137	<0.0001	<0.001	0.056	0.000012	75.5	0.0182	0.0005	0.00159	0.192	<0.0002	0.0123	20.7	0.0214	<0.0000019	0.007	0.0135	0.019	3.93
RSEM-R6E-EOP	7/9/2022 10:30	AWZ514	M	C249625	1.99	0.0488	<0.0005	0.00057	0.125	<0.0001	<0.001	0.055	<0.00001	69.3	<0.001	0.00026	0.00092	0.094	<0.0002	0.0115	19.0	0.0219	<0.0000019	0.0039	0.0024	0.014	3.62
RSEM-R6E-EOP	7/9/2022 10:40	AWZ515	D	C249625	1.39	0.056	<0.0005	0.00054	0.127	<0.0001	<0.001	0.054	<0.00001	69.0	<0.001	0.00026	0.00082	0.091	<0.0002	0.0117	19.1	0.0221	<0.0000019	0.0039	0.0026	0.014	3.72

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
RSEM-R6E-EOP	7/10/2022 14:10	AWZ486	M	C249617	1.40	0.0559	<0.0005	0.00056	0.119	<0.0001	<0.001	<0.05	0.000012	63.0	<0.001	0.00024	0.00079	0.104	<0.0002	0.0094	18.3	0.0143	<0.0000019	0.0038	0.0023	0.015	3.56
RSEM-R6E-EOP	7/11/2022 12:35	AXC657	M	C250105	1.56	0.0547	<0.0005	0.00055	0.124	<0.0001	<0.001	0.054	0.00001	67.5	<0.001	0.00021	0.00087	0.107	<0.0002	0.0118	19.3	0.0134	0.000002	0.0037	0.0023	0.013	3.71
RSEM-R6E-EOP	7/12/2022 12:05	AXE615	M	C250400	1.61	0.0542	<0.0005	0.00053	0.122	<0.0001	<0.001	0.054	<0.00001	65.9	0.001	0.00021	0.00084	0.104	<0.0002	0.0119	19.3	0.0111	<0.0000019	0.0037	0.0022	0.012	3.66
RSEM-R6E-EOP	7/12/2022 12:15	AXE616	D	C250400	1.47	0.0542	<0.0005	0.00056	0.125	<0.0001	<0.001	0.056	<0.00001	68.4	<0.001	0.00021	0.00085	0.1	<0.0002	0.0122	19.5	0.0114	<0.0000019	0.0037	0.0021	0.012	3.72
RSEM-R6E-EOP	7/13/2022 11:25	AXH414	M	C250934	1.61	0.0686	<0.0005	0.00049	0.124	<0.0001	<0.001	<0.05	0.000011	61.1	<0.001	0.00024	0.0008	0.086	<0.0002	0.0107	17.8	0.0208	<0.0000019	0.0033	0.002	<0.01	3.49
RSEM-R6E-EOP	7/14/2022 11:10	AXJ116	M	C251290	1.47	0.0717	<0.0005	0.00055	0.141	<0.0001	<0.001	0.055	0.000016	68.3	<0.001	0.00024	0.00086	0.09	<0.0002	0.012	19.8	0.0186	<0.0000019	0.0037	0.0021	<0.01	3.84
RSEM-R6E-EOP	7/14/2022 11:20	AXJ117	D	C251290	1.59	0.0615	<0.0005	0.00056	0.134	<0.0001	<0.001	0.052	0.000014	65.9	<0.001	0.00023	0.00079	0.086	<0.0002	0.0112	18.8	0.0176	<0.0000019	0.0034	0.0021	<0.01	3.63
RSEM-R6E-EOP	7/15/2022 13:10	AXJ364	M	C251330	1.52	0.0866	<0.0005	0.00049	0.13	<0.0001	<0.001	0.053	0.000014	63.1	<0.001	<0.0002	0.00103	0.091	<0.0002	0.011	18.5	0.0097	<0.0000019	0.0035	0.002	0.01	3.60
RSEM-R6E-EOP	7/16/2022 11:30	AXN330	M	C251927	1.50	0.0756	<0.0005	0.00048	0.122	<0.0001	<0.001	<0.05	0.000013	63.8	<0.001	0.00023	0.00161	0.083	<0.0002	0.0097	18.1	0.014	0.0000023	0.0034	0.002	0.012	3.44
RSEM-R6E-EOP	7/17/2022 10:30	AXN586	M	C251966	1.54	0.0553	<0.0005	0.00047	0.118	<0.0001	<0.001	<0.05	0.000013	64.2	<0.001	<0.0002	0.00083	0.081	<0.0002	0.0094	18.3	0.0119	<0.0000019	0.0033	0.0018	<0.01	3.41
RSEM-R6E-EOP	7/17/2022 10:40	AXN587	D	C251966	1.93	0.0587	<0.0005	0.0005	0.126	<0.0001	<0.001	<0.05	0.000011	66.4	<0.001	<0.0002	0.00087	0.084	<0.0002	0.0096	18.8	0.0123	0.0000021	0.0036	0.002	<0.01	3.57
RSEM-R6E-EOP	7/18/2022 14:00	AXQ723	M	C252515	1.82	0.0697	<0.0005	0.00053	0.124	<0.0001	<0.001	0.054	0.000025	60.6	<0.001	0.0002	0.00086	0.079	<0.0002	0.011	18.1	0.0106	<0.0000019	0.0036	0.0018	0.011	3.45
RSEM-R6E-EOP	7/19/2022 12:00	AXQ708	M	C252510	1.26	0.0526	<0.0005	0.00051	0.124	<0.0001	<0.001	<0.05	0.000014	66.6	<0.001	<0.0002	0.00088	0.077	<0.0002	0.0096	19.3	0.0106	<0.0000019	0.0035	0.0019	0.012	3.66
RSEM-R6E-EOP	7/20/2022 14:00	AXX165	M	C253451	1.95	0.0593	<0.0005	0.00053	0.126	<0.0001	<0.001	0.06	0.000012	64.1	<0.001	0.0002	0.00079	0.083	<0.0002	0.0113	18.9	0.0182	<0.0000019	0.0036	0.0018	<0.01	3.77
RSEM-R6E-EOP	7/21/2022 13:00	AXX154	M	C253447	1.18	0.0559	<0.0005	0.00048	0.131	<0.0001	<0.001	0.055	0.000013	69.0	<0.001	0.00022	0.00075	0.081	<0.0002	0.0111	19.5	0.0274	<0.0000019	0.0032	0.0019	<0.01	3.63
RSEM-R6E-EOP	7/22/2022 10:00	AXX133	M	C253442	1.86	0.0545	<0.0005	0.00049	0.138	<0.0001	<0.001	0.055	0.000013	72.8	<0.001	0.00025	0.00071	0.075	<0.0002	0.0114	20.6	0.0285	<0.0000019	0.003	0.0019	<0.01	3.64
RSEM-R6E-EOP	7/23/2022 9:30	AYB213	M	C254120	2.01	0.0496	<0.0005	0.00042	0.136	<0.0001	<0.001	<0.05	<0.00001	66.1	<0.001	<0.0002	0.00065	0.06	<0.0002	0.0104	19.9	0.007	<0.0000019	0.003	0.0016	0.016	3.39
RSEM-R6E-EOP	7/24/2022 12:30	AYC676	M	C254290	2.18	0.0573	<0.0005	0.00042	0.138	<0.0001	<0.001	0.105	<0.00001	69.6	<0.001	<0.0002	0.00068	0.078	<0.0002	0.0107	20.4	0.0092	<0.0000019	0.0032	0.0016	0.017	3.27
RSEM-R6E-EOP	7/24/2022 13:00	AYC679	D	C254290	1.92	0.0729	<0.0005	0.0004	0.14	<0.0001	<0.001	0.053	<0.00001	69.7	<0.001	<0.0002	0.00071	0.09	<0.0002	0.0103	20.4	0.0095	<0.0000019	0.003	0.0016	0.01	3.35
RSEM-R6E-EOP	7/25/2022 9:00	AYC674	M	C254289	1.12	0.0647	<0.0005	0.00043	0.142	<0.0001	<0.001	0.203	<0.00001	70.4	<0.001	<0.0002	0.00071	0.089	<0.0002	0.0104	20.4	0.0131	<0.0000019	0.0034	0.0016	0.017	3.41
RSEM-R6E-EOP	7/26/2022 11:15	AYG701	M	C254966	2.27	0.0541	<0.0005	0.00042	0.131	<0.0001	<0.001	0.051	<0.00001	72.5	<0.001	<0.0002	0.00069	0.088	<0.0002	0.0104	21.5	0.0091	<0.0000019	0.0036	0.0016	<0.01	3.45
RSEM-R6E-EOP	7/27/2022 11:40	AYK060	M	C255556	1.50	0.0705	<0.0005	0.00047	0.126	<0.0001	<0.001	<0.05	0.000011	67.8	<0.001	0.00022	0.00083	0.141	<0.0002	0.0105	21.8	0.0123	<0.0000019	0.0036	0.0018	0.014	3.67
RSEM-R6E-EOP	7/27/2022 11:50	AYK061	D	C255556	1.74	0.0517	<0.0005	0.00043	0.123	<0.0001	<0.001	<0.05	0.000011	65.4	<0.001	<0.0002	0.00074	0.078	<0.0002	0.0101	21.3	0.0097	<0.0000019	0.0035	0.0016	<0.01	3.63
RSEM-R6E-EOP	7/28/2022 12:40	AYM152	M	C255903	1.43	0.0646	<0.0005	0.00046	0.121	<0.0001	<0.001	<0.05	<0.00001	58.5	<0.001	<0.0002	0.00072	0.104	<0.0002	0.0094	18.2	0.0078	<0.0000019	0.0036	0.0013	<0.01	3.25
RSEM-R6E-EOP	7/29/2022 12:20	AYM047	M	C255900	1.28	0.0661	<0.0005	0.00046	0.126	<0.0001	<0.001	<0.05	<0.00001	60.2	<0.001	<0.0002	0.00074	0.096	<0.0002	0.0095	18.7	0.0066	<0.0000019	0.0037	0.0013	<0.01	3.40
RSEM-R6E-EOP	7/30/2022 12:05	AYP671	M	C256352	1.96	0.0616	<0.0005	0.00051	0.13	<0.0001	<0.001	0.052	<0.00001	63.2	<0.001	<0.0002	0.00073	0.085	<0.0002	0.0105	19.0	0.0076	<0.0000019	0.0041	0.0012	<0.01	3.57
RSEM-R6E-EOP	7/31/2022 11:45	AYO872	M	C256301	2.2	0.0555	<0.0005	0.00054	0.131	<0.0001	<0.001	0.051	0.000012	64.9	<0.001	<0.0002	0.00076	0.077	<0.0002	0.0103	18.8	0.013	<0.0000019	0.0041	0.0014	0.012	3.54
RSEM-R6E-EOP	7/31/2022 11:55	AYO873	D	C256301	2.3	0.0509	<0.0005	0.00055	0.134	<0.0001	<0.001	0.053	0.000011	65.2	<0.001	<0.0002	0.0008	0.077	<0.0002	0.0105	19.0	0.013	<0.0000019	0.0043	0.0015	0.011	3.55
RSEM-R6E-EOP	8/1/2022 11:55	AYR821	M	C256691	1.6	0.124	<0.0005	0.00056	0.106	<0.0001	<0.001	0.055	<0.00001	63.3	<0.001	<0.0002	0.00067	0.067	<0.0002	0.0103	19.4	0.0263	<0.0000019	0.0037	0.0034	0.01	3.55
RSEM-R6E-EOP	8/2/2022 11:35	AYU375	M	C257067	1.9	0.0724	<0.0005	0.00071	0.146	<0.0001	<0.001	0.062	0.000031	127	<0.001	0.00051	0.00088	0.117	<0.0002	0.0185	23.6	0.0717	<0.0000019	0.0046	0.0044	0.011	6.36
RSEM-R6E-EOP	8/2/2022 11:45	AYU376	D	C257067	2.0	0.0763	<0.0005	0.00071	0.15	<0.0001	<0.001	0.065	0.000033	129	<0.001	0.0005	0.00098	0.109	<0.0002	0.0191	24.4	0.0735	<0.0000019	0.0046	0.0044	0.012	6.57
RSEM-R6E-EOP	8/3/2022 11:50	AYX380	M	C257672	2.48	0.0584	<0.0005	0.00057	0.132	<0.0001	<0.001	0.066	0.000025	118	<0.001	0.00031	0.0008	0.082	<0.0002	0.0175	22.8	0.0274	<0.0000019	0.0046	0.0036	0.014	5.70
RSEM-R6E-EOP	8/4/2022 11:00	AYY903	M	C257848	2.05	0.131	<0.0005	0.00063	0.141	<0.0001	<0.001	0.067	0.000022	112	<0.001	0.00027	0.00091	0.294	<0.0002	0.0162	20.8	0.0186	<0.0000019	0.0048	0.0022	0.019	5.34
RSEM-R6E-EOP	8/5/2022 10:10	AYY783	M	C257846	2.25	0.0634	<0.0005	0.00056	0.123	<0.0001	<0.001	0.063	0.000014	109	<0.001	<0.0002	0.00075	0.097	<0.0002	0.0153	21.4	0.0125	<0.0000019	0.0046	0.0027	0.01	4.91
RSEM-R6E-EOP	8/6/2022 11:20	AZA353	M	C258076	1.72	0.0548	<0.0005	0.00045	0.143	<0.0001	<0.001	0.064	<0.00001	94.7	<0.001	<0.0002	0.00055	0.074	<0.0002	0.0159	21.5	0.0081	<0.0000019	0.0043	0.0017	<0.01	4.68
RSEM-R6E-EOP	8/6/2022 11:20	AZA354	D	C258076	1.77	0.061	<0.0005	0.00046	0.144	<0.0001	<0.001	0.064	<0.00001	94.6	<0.001	<0.0002	0.00057	0.081	<0.0002	0.0153	21.4	0.0081	<0.0000019	0.0043	0.0017	0.011	4.64
RSEM-R6E-EOP	8/7/2022 12:10	AZC300	M	C258444	1.99	0.0594	<0.0005	0.00045	0.129	<0.0001	<0.001	<0.05	<0.00001	76.7	<0.001	<0.0002	0.00063	0.081	<0.0002	0.0109	19.6	0.0061	<0.0000019	0.0041	0.0014	0.01	4.04
RSEM-R6E-EOP	8/8/2022 16:00	AZK277	M	C259762	1.70	0.0764	<0.0005	0.00045	0.11	<0.0001	<0.001	0.059	<0.00001	64.7	<0.001	<0.0002	0.00058	0.108	<0.0002	0.0149	20.5	0.0047	<0.0000019	0.004	0.0011	0.011	3.85
RSEM-R6E-EOP	8/9/2022 13:00	AZK373	M	C259776	1.99	0.0618	<0.0005	0.00043	0.119	<0.0001	<0.001	0.066	<0.00001	69.3	<0.001	<0.0002	0.00055	0.085	<0.0002	0.0146	20.3	0.0059	<0.0000019	0.0041	0.0012	0.01	3.92
RSEM-R6E-EOP	8/10/2022 15:00	AZL947	M	C259983	1.96	0.0691	<0.0005	0.00042	0.095	<0.0001	<0.001	0.064	<0.00001	56.7	<0.001	<0.0002	0.00058	0.083	<0.0002	0.015	19.5	0.0043	<0.0000019	0.0038	0.0011	<0.01	3.61
RSEM-R6E-EOP	8/11/2022 13:30	AZL943	M	C259981	2.25	0.0621	<0.0005	0.00041	0.0837	<0.0001	<0.001	0.063	<0.00001	54.6	<0.001	<0.0002	0.0006	0.07	<0.0002	0.0151	19.7	0.0038	<0.0000019	0.0036	0.0015	<0.01	3.52
RSEM-R6E-EOP	8/12/2022 12:00	AZL945	M	C259982	2.17	0.0499	<0.0005	0.00043	0.0798	<0.0001	<0.001	0.051	<0.00001	47.7	<0.001	<0.0002	0.00057	0.062	<0.0002	0.0135	18.5	0.0032	<0.0000019	0.0035	0.001	<0.01	3.35
RSEM-R6E-EOP	8/13/2022 10:00	AZR090	M	C260796	1.90	0.0694	<0.0005	0.00048	0.0713	<0.0001	<0.001	0.053	<0.00001	47.9	<0.001	<0.0002	0.00069	0.123	<0.0002	0.0151	20.2	0.006	<0.0000019	0.0036	0.0012	0.014	3.68
RSEM-R6E-EOP	8/14/2022 14:30	AZR292	M	C260829	1.79	0.0838	<0.0005	0.00057	0.0764	<0.0001	<0.001	0.053	0.000018	49.7	<0.001	<0.0002	0.00073	0.129	<0.0002	0.016	18.9	0.013	<0.0000019	0.0034	0.0012	0.013	3.31
RSEM-R6E-EOP	8/14/2022 14:40	AZR295	D	C260829	1.62	0.0733	<0.0005	0.00055	0.0757	<0.0001	<0.001	0.062	<0.00001	50.2	<0.001	<0.0002	0.00073	0.117	<0.0002	0.0159	20.0	0.0136	<0.0000019	0.0033	0.0013	0.016	3.42
RSEM-R6E-EOP	8/15/2022 14:30	AZW324	M	C261663	2.09	0.0526	<0.0005	0.00059	0.0922	<0.0001	<0.001	0.06	<0.00001	69.8	<0.001	<0.0002	0.00067	0.077	<0.0002	0.0168	20.2	0.015	<0.0000019	0.0036	0.0015	0.011	4.32
RSEM-R6E-EOP	8/16/2022 13:00	AZW500	M	C261690	2.57	0.0634	<0.0005	0.00053	0.0893	<0.0001	<0.001	0.06	<0.00001	60.7	<0.001	0.00033	0.00067	0.092	<0.0002	0.0183	19.8	0.0064	<0.0000019	0.0039	0.0013	<0.01	3.98
RSEM-R6E-EOP	8/17/2022 13:30	BAA263	M	C262437	2.17	0.0568	<0.0005	0.00053	0.0834	<0.0001	<0.001	0.063	<0.00001	56.4	<0.001	<0.0002	0.00062	0.078	<0.0002	0.0176	19.9	0.0051	<0.0000019	0.0038	0.0012	<0.01	4.06
RSEM-R6E-EOP	8/18/2022 13:00	BAA274	M	C262439	2.28	0.0616	<0.0005	0.00053	0.0739	<0.0001	<0.001	0.055	<0.00001	50.0	<0.001	<0.0002	0.00062	0.067	<0.0002	0.0146	18.3	0.0049	<0.0000019	0.0037	0.0011	<0.01	3.79
RSEM-R6E-EOP	8/19/2022 10:00	BAA260	M	C262436	2.21	0.0537	<0.0005	0.00059	0.077	<0.0001	<0.001	0.062	<0.00001	49.5	<0.001	<0.0002	0.00063	0.078	<0.0002	0.0175	19.6	0.0053	<0.0000019	0.0039	0.0012	<0.01	4.01
RSEM-R6E-EOP	8/20/2022 11:30	BAD640	M	C262969	2.93	0.05	<0.0005	0.00062	0.073	<0.0001	<0.001	0.06	<0.00001	46.9	<0.001	<0.0002	0.00075	0.071	<0.0002	0.0143	18.0	0.0059	<0.0000019	0.0036	0.0017	<0.01	3.82
RSEM-R6E-EOP	8/21/2022 11:00	BAD601	M	C262959	2.44	0.0524	<0.0005	0.00065	0.074	<0.0001	<0.001	0.056	<0.00001	43.9	<0.001	<0.0002	0.00083	0.086	<0.0002	0.0132	18.3	0.0057	<0.0000019	0.0038	0.0012	<0.01	3.88
RSEM-R6E-EOP	8/22/2022 13:30	BAG918	M	C263407	2.08	0.0579	<0.0005	0.00068	0.0774	<0.0001	<0.001	0.056	<0.00001	43.8	<0.001	<0.0002	0.00071	0.103	<0.0002	0.0126	17.9	0.0093	<0.0000019	0.0037	0.0012	<0.01	3.84
RSEM-R6E-EOP	8/23/2022 13:30	BAM964	M	C264451	2.65	0.0501	<0.0005	0.00075	0.0814	<0.0001	<0.001	0.063	<0.00001	42.8	<0.001	<0.0002	0.00063	0.101	<0.0002	0.0141	18.1	0.0094	<0.0000019	0.0037	0.0012	<0.01	3.86
RSEM-R6E-EOP	8/23/2022 14:00	BAM967	D	C264451	2.55	0.0499	<0.0005	0.00069	0.0801	<0.0001	<0.001	0.064	<0.00001	42.8	<0.001	<0.0002	0.00064	0.092	<0.0002	0.0133	17.9	0.0089	<0.0000019	0.0038	0.0012	<0.01	3.82
RSEM-R6E-EOP	8/24/2022 13:30	BAM915	M	C264441	3.15	0.0523	<0.0005	0.00069	0.0805	<0.0001	<0.001	0.061	<0.00001	43.8	<0.001	<0.0002	0.00067	0.093	<0.0002	0.0141	18.4	0.0087	<0.0000019	0.0038	0.0012	<0.01	3.82
RSEM-R6E-EOP	8/25/2022 15:15	BAO144	M	C264632	4.19	0.0606	<0.0005	0.00083	0.0844	<0.0001	<0.001	0.06	<0.00001	44.6	<0.001	<0.0002	0.0007	0.137	<0.0002	0.0141	18.2	0.0114	<0.0000019	0.0035	0.0013	0.011	3.94
RSEM-R6E-EOP	8/26/2022 6:30	BAO137	M	C264629	3.84	0.0666	<0.0005	0.00078	0.0944	<0.0001	<0.001	0.066	<0.00001	46.3	<0.001	<0.0002	0.00065	0.12	<0.0002	0.0142	19.2	0.0102	<0.0000019	0.0037	0.0014	<0.01	3.79
RSEM-R6E-EOP	8/27/2022 12:30	BAR925	M	C265307	2.75	0.064	<0.0005	0.00087	0.106	<0.0001	<0.001	0.061	0.00001	48.7	<0.001	<0.0002	0.00062	0.144	<0.0002	0.0137	18.6	0.0237	<0.0000019	0.0036	0.0015	<0.01	3.79
RSEM-R6E-EOP	8/28/2022 14:00	BAR946	M	C265316	2.50	0.0613	<0.0005	0.00073	0.112	<0.0001	<0.001	0.051	<0.00001	52.2	<0.001	<0.0002	0.00062	0.136	<0.0002	0.0119	17.9	0.0085	<0.0000019	0.0033	0.0014	<0.01	3.68
RSEM-R6E-EOP	8/29/2022 14:10	BAU337	D	C265774	3.87	0.0589	<0.0005	0.00066	0.122	<0.0001	<0.001	0.055	<0.00001	57.6	<0.001	<0.0002	0.00056	0.138	<0.0002	0.0127	18.3	0.0072	<0.0000019	0.0031	0.0013	<0.01	3.54
RSEM-R6E-EOP	8/29/2022 14:30	BAU335	M	C265774	2.53	0.0577	<0.0005	0.00068	0.121	<0.0001	<0.001	0.058	<0.00001	57.0	<0.001	<0.0002	0.00057	0.127	<0.0002	0.0128	18.0	0.0069	<0.0000019	0.0032	0.0012	<0.01	3.55
RSEM-R6E-EOP	8/30/2022 13:30	BBA809	M	C266812	2.67	0.0552	<0.0005	0.00061	0.127	<0.0001	<0.001	<0.05	<0.00001	57.5	<0.001	<0.0002	0.00051	0.125	<0.0002	0.0105	17.6	0.0108	<0.0000019	0.0029	0.0012	<0.01	3.31
RSEM-R6E-EOP	8/31/2022 14:10	BBA806	M	C266810	2.54	0.0495	<0.0005	0.00066	0.134	<0.0001	<0.001	<0.05	0.00001	60.7	<0.001	<0.0002	0.00087	0.116	<0.0002	0.0128	18.6	0.0085	<0.0000019	0.0036	0.0012	<0.01	3.69
RSEM-R6E-EOP	9/1/2022 13:00	BBC912	M	C267169	2.54	0.0509	<0.0005	0.00064	0.132	<0.0001	<0.001	0.061	<0.00001	59.0	<0.001	<0.0002	0.00057	0.095	<0.0002	0.0124	17.6	0.008	<0.0000019	0.0038	0.0011	<0.01	3.62
RSEM-R6E-EOP	9/2/2022 9:00	BBC920	M	C267172	2.53	0.0352	<0.0005	0.00059	0.137	<0.0001	<0.001	<0.05	<0.00001	66.1	<0.001	<0.0002	0.00061	0.09	<0.0002	0.0114	18.2	0.0093	<0.0000019	0.0033	0.001	<0.01	3.58
RSEM-R6E-EOP	9/3/2022 14:30	BBE154	M	C267383	3.15	0.0707	<0.0005	0.00051	0.139	<0.0001	<0.001	<0.05	0.000011	60.0	<0.001	<0.0002	0.00056	0.108	<0.0002	0.0116	17.4	0.0064	<0.0000019	0.0032	0.001	<0.01	3.31
RSEM-R6E-EOP	9/4/2022 14:00	BBI404	M	C268301	1.97	0.098	<0.0005	0.0005	0.137	<0.0001	<0.001	<0.05	0.000011	61.9	<0.001	<0.0002	0.00076	0.209	<0.0002	0.0098	16.9	0.0134	0.0000023	0.0029	0.0012	0.012	3.22

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
RSEM-R6E-EOP	9/4/2022 14:10	BBI407	D	C268301	1.61	0.0669	<0.0005	0.00046	0.137	<0.0001	<0.001	<0.05	<0.00001	63.3	<0.001	<0.0002	0.00071	0.121	<0.0002	0.0101	17.2	0.0096	<0.0000019	0.0031	<0.001	<0.01	3.29
RSEM-R6E-EOP	9/5/2022 13:00	BBI327	M	C268286	2.35	0.0383	<0.0005	0.00044	0.138	<0.0001	<0.001	<0.05	<0.00001	61.6	<0.001	<0.0002	0.00054	0.081	<0.0002	0.0099	16.7	0.0081	<0.0000019	0.0029	<0.001	<0.01	3.33
RSEM-R6E-EOP	9/6/2022 15:15	BBI318	M	C268280	1.91	0.0315	<0.0005	0.00042	0.132	<0.0001	<0.001	<0.05	<0.00001	58.7	<0.001	<0.0002	<0.0005	0.063	<0.0002	0.0099	16.9	0.0039	<0.0000019	0.0029	<0.001	<0.01	3.25
RSEM-R6E-EOP	9/7/2022 11:50	BBM321	M	C268788	1.13	0.0582	<0.0005	0.00042	0.149	<0.0001	<0.001	<0.05	<0.00001	58.7	<0.001	<0.0002	0.00052	0.094	<0.0002	0.0102	16.7	0.006	<0.0000019	0.0029	<0.001	<0.01	3.11
RSEM-R6E-EOP	9/7/2022 12:00	BBM322	D	C268788	2.01	0.0569	<0.0005	0.00042	0.156	<0.0001	<0.001	<0.05	<0.00001	63.5	<0.001	0.00022	0.00061	0.099	<0.0002	0.0102	16.3	0.0065	<0.0000019	0.003	<0.001	<0.01	3.28
RSEM-R6E-EOP	9/8/2022 13:30	BBO445	M	C269143	1.99	0.11	<0.0005	0.00039	0.151	<0.0001	<0.001	<0.05	0.000011	64.8	<0.001	<0.0002	0.00056	0.138	<0.0002	0.0087	15.0	0.0081	<0.0000019	0.0026	<0.001	<0.01	2.95
RSEM-R6E-EOP	9/9/2022 10:30	BBS001	M	C269764	1.66	0.0939	<0.0005	0.00038	0.148	<0.0001	<0.001	<0.05	0.000011	68.1	<0.001	0.00029	0.00056	0.136	<0.0002	0.008	14.8	0.0076	<0.0000019	0.0024	0.001	0.012	2.78
RSEM-R6E-EOP	9/10/2022 12:20	BBR900	M	C269730	1.78	0.1	<0.0005	0.00038	0.14	<0.0001	<0.001	<0.05	0.000013	67.1	<0.001	0.00023	<0.0005	0.145	<0.0002	0.008	14.9	0.0081	<0.0000019	0.0022	0.001	0.011	2.76
RSEM-R6E-EOP	9/10/2022 12:30	BBR901	D	C269730	1.95	0.0962	<0.0005	0.00039	0.14	<0.0001	<0.001	<0.05	0.000013	65.1	<0.001	0.00023	<0.0005	0.141	<0.0002	0.008	14.7	0.0081	<0.0000019	0.0023	0.001	0.011	2.74
RSEM-R6E-EOP	9/11/2022 14:30	BBR959	M	C269754	1.96	0.0628	<0.0005	0.00033	0.13	<0.0001	<0.001	<0.05	0.000015	65.1	<0.001	0.0002	<0.0005	0.096	<0.0002	0.0081	14.3	0.0067	<0.0000019	0.0021	<0.001	<0.01	2.67
RSEM-R6E-EOP	9/12/2022 11:50	BBU605	M	C270263	1.60	0.0713	<0.0005	0.0003	0.137	<0.0001	<0.001	<0.05	0.000011	63.7	<0.001	<0.0002	<0.0005	0.104	<0.0002	0.0087	15.1	0.0075	<0.0000019	0.0021	<0.001	<0.01	2.87
RSEM-R6E-EOP	9/13/2022 14:10	BBX514	M	C270776	1.30	0.075	<0.0005	0.00031	0.138	<0.0001	<0.001	<0.05	0.000013	65.3	<0.001	<0.0002	<0.0005	0.129	<0.0002	0.0079	14.6	0.0088	<0.0000019	0.002	<0.001	0.013	2.80
RSEM-R6E-EOP	9/14/2022 10:05	BBZ913	M	C271275	2.00	0.106	<0.0005	0.0004	0.154	<0.0001	<0.001	<0.05	0.000014	65.4	<0.001	0.0003	0.00071	0.217	<0.0002	0.0087	14.8	0.013	0.0000047	0.002	0.0012	0.017	2.85
RSEM-R6E-EOP	9/14/2022 10:15	BBZ914	D	C271275	1.71	0.105	<0.0005	0.00037	0.151	<0.0001	<0.001	<0.05	0.000017	64.6	<0.001	0.00029	0.00067	0.205	<0.0002	0.0085	14.6	0.013	<0.0000019	0.0019	0.0012	0.016	2.83
RSEM-R6E-EOP	9/15/2022 9:30	BCC124	M	C271667	1.54	0.0873	<0.0005	0.00031	0.146	<0.0001	<0.001	<0.05	0.000013	63.7	<0.001	0.00021	<0.0005	0.117	<0.0002	0.0082	14.5	0.0106	0.0000022	0.0019	0.0011	<0.01	2.76
RSEM-R6E-EOP	9/16/2022 12:40	BCF677	M	C272242	1.45	0.0468	<0.0005	0.0003	0.151	<0.0001	<0.001	<0.05	0.000011	65.3	<0.001	<0.0002	<0.0005	0.086	<0.0002	0.0074	15.0	0.0089	0.0000025	0.0024	<0.001	<0.01	2.87
RSEM-R6E-EOP	9/16/2022 12:50	BCF678	D	C272242	1.76	0.0469	<0.0005	0.0003	0.155	<0.0001	<0.001	<0.05	0.000011	68.9	<0.001	<0.0002	<0.0005	0.083	<0.0002	0.0078	15.6	0.0091	0.0000022	0.0025	0.001	<0.01	2.98
RSEM-R6E-EOP	9/17/2022 11:10	BCF750	M	C272259	1.64	0.068	<0.0005	0.00038	0.165	<0.0001	<0.001	<0.05	0.000017	92.8	<0.001	0.00026	0.00068	0.123	<0.0002	0.0137	18.6	0.0168	<0.0000019	0.0039	0.0019	0.01	4.70
RSEM-R6E-EOP	9/18/2022 11:10	BCF722	M	C272251	2.07	0.0915	<0.0005	0.00036	0.14	<0.0001	<0.001	<0.05	0.00002	95.8	<0.001	0.00022	0.00073	0.158	<0.0002	0.0142	18.3	0.0166	<0.0000019	0.004	0.0019	0.01	4.98
RSEM-R6E-EOP	9/19/2022 9:20	BCI768	M	C272683	1.34	0.0877	<0.0005	0.00033	0.128	<0.0001	<0.001	<0.05	0.000013	84.9	<0.001	<0.0002	<0.0005	0.125	<0.0002	0.0117	17.4	0.0126	<0.0000019	0.0035	0.0016	<0.01	4.21
RSEM-R6E-EOP	9/20/2022 14:50	BCL543	M	C273070	1.59	0.0827	<0.0005	0.00029	0.119	<0.0001	<0.001	<0.05	0.000013	68.3	<0.001	<0.0002	<0.0005	0.141	<0.0002	0.0089	15.0	0.0098	<0.0000019	0.003	0.0012	0.01	3.35
RSEM-R6E-EOP	9/21/2022 13:15	BCR697	M	C273972	2.12	0.0604	<0.0005	0.00027	0.126	<0.0001	<0.001	<0.05	0.000012	66.5	<0.001	<0.0002	0.00051	0.083	<0.0002	0.0092	14.8	0.0077	<0.0000019	0.003	0.0012	<0.01	3.18
RSEM-R6E-EOP	9/22/2022 14:30	BCR616	D	C273969	1.36	0.0848	<0.0005	0.00028	0.124	<0.0001	<0.001	<0.05	<0.00001	61.9	<0.001	<0.0002	0.00061	0.092	<0.0002	0.0093	14.8	0.0074	<0.0000019	0.0031	0.0011	<0.01	3.18
RSEM-R6E-EOP	9/22/2022 14:45	BCR614	M	C273969	1.43	0.0833	<0.0005	0.00028	0.125	<0.0001	<0.001	<0.05	<0.00001	61.7	<0.001	<0.0002	0.00052	0.092	<0.0002	0.0094	14.6	0.0074	<0.0000019	0.0031	0.0011	<0.01	3.18
RSEM-R6E-EOP	9/23/2022 11:15	BCR891	M	C273985	1.87	0.094	<0.0005	0.00031	0.128	<0.0001	<0.001	<0.05	0.000011	63.2	<0.001	<0.0002	0.00051	0.117	<0.0002	0.0091	14.7	0.013	<0.0000019	0.0032	0.0011	<0.01	3.21
RSEM-R6E-EOP	9/24/2022 10:00	BCV560	M	C274577	1.45	0.0685	<0.0005	0.0003	0.128	<0.0001	<0.001	<0.05	<0.00001	62.2	<0.001	<0.0002	0.00059	0.072	<0.0002	0.0088	14.2	0.0065	<0.0000019	0.0032	<0.001	<0.01	3.27
RSEM-R6E-EOP	9/25/2022 14:15	BCV619	M	C274593	1.72	0.0666	<0.0005	0.00029	0.125	<0.0001	<0.001	<0.05	<0.00001	60.1	<0.001	<0.0002	<0.0005	0.079	<0.0002	0.0089	14.1	0.0062	<0.0000019	0.0032	<0.001	<0.01	3.36
RSEM-R6E-EOP	9/26/2022 9:15	BCV504	M	C274562	1.46	0.0819	<0.0005	0.00031	0.128	<0.0001	<0.001	<0.05	<0.00001	58.8	<0.001	<0.0002	0.0005	0.089	<0.0002	0.0085	13.6	0.0085	<0.0000019	0.0032	<0.001	<0.01	3.21
RSEM-R6E-EOP	9/27/2022 10:20	BDB609	M	C275584	1.74	0.0671	<0.0005	0.00025	0.12	<0.0001	<0.001	<0.05	<0.00001	55.9	<0.001	<0.0002	<0.0005	0.056	<0.0002	0.0084	13.9	0.0087	<0.0000019	0.0029	<0.001	<0.01	3.07
RSEM-R6E-EOP	9/28/2022 10:20	BDE178	M	C276033	0.58	0.0869	<0.0005	0.00029	0.131	<0.0001	<0.001	<0.05	<0.00001	56.5	<0.001	<0.0002	0.00054	0.1	<0.0002	0.0089	13.5	0.0097	<0.0000019	0.0029	<0.001	<0.01	3.05
RSEM-R6E-EOP	9/28/2022 10:30	BDE179	D	C276033	1.55	0.08	<0.0005	0.0003	0.135	<0.0001	<0.001	<0.05	0.00001	58.1	<0.001	<0.0002	<0.0005	0.088	<0.0002	0.0091	13.8	0.0095	<0.0000019	0.003	<0.001	<0.01	3.13
RSEM-R6E-EOP	9/29/2022 10:30	BDH540	M	C276348	1.72	0.0881	<0.0005	0.00038	0.164	<0.0001	<0.001	<0.05	0.000019	63.7	<0.001	<0.0002	0.00067	0.123	<0.0002	0.0074	13.4	0.0101	<0.0000019	0.0031	0.0012	0.017	2.71
RSEM-R6E-EOP	9/30/2022 10:45	BDH543	M	C276348	1.55	0.0587	<0.0005	0.00034	0.175	<0.0001	<0.001	<0.05	0.000017	63.1	<0.001	<0.0002	0.00056	0.083	<0.0002	0.0067	13.1	0.009	<0.0000019	0.0031	0.0011	0.011	2.55
RSEM-R6E-EOP	10/1/2022 9:30	BDL248	M	C276877	1.58	0.0746	<0.0005	0.00036	0.173	<0.0001	<0.001	<0.05	0.000018	65.1	<0.001	<0.0002	0.00055	0.073	<0.0002	0.0069	13.4	0.0098	<0.0000019	0.0033	0.001	0.013	2.55
RSEM-R6E-EOP	10/1/2022 9:40	BDL251	D	C276877	1.64	0.0752	<0.0005	0.00035	0.175	<0.0001	<0.001	<0.05	0.000018	63.1	<0.001	<0.0002	0.00056	0.082	<0.0002	0.0068	13.2	0.0099	<0.0000019	0.0032	0.001	0.013	2.52
RSEM-R6E-EOP	10/2/2022 10:15	BDL180	M	C276859	1.82	0.0708	<0.0005	0.00035	0.186	<0.0001	<0.001	<0.05	0.000018	63.4	<0.001	<0.0002	0.00067	0.088	<0.0002	0.0069	13.7	0.0091	<0.0000019	0.0033	0.0011	0.014	2.61
RSEM-R6E-EOP	10/3/2022 10:20	BDP149	M	C277443	1.95	0.0784	<0.0005	0.00037	0.17	<0.0001	<0.001	<0.05	0.000014	63.0	<0.001	<0.0002	0.00056	0.076	<0.0002	0.007	13.5	0.0171	<0.0000019	0.0032	0.001	0.011	2.67
RSEM-R6E-EOP	10/4/2022 10:25	BDR435	M	C277814	1.90	0.373	<0.0005	0.00063	0.154	<0.0001	<0.001	<0.05	0.000027	63.0	<0.001	0.00032	0.00102	0.497	0.00032	0.0074	13.9	0.0146	0.0000034	0.0034	0.0016	0.029	2.72
RSEM-R6E-EOP	10/5/2022 10:45	BDV020	M	C278393	2.36	0.103	0.00083	0.0009	0.0912	<0.0001	<0.001	0.099	0.000013	47.9	0.002	<0.0002	0.00111	0.182	<0.0002	0.0189	22.4	0.008	<0.0000019	0.011	0.002	0.019	5.59
RSEM-R6E-EOP	10/6/2022 10:40	BDZ970	M	C278888	1.65	0.119	<0.0005	0.00039	0.166	<0.0001	<0.001	<0.05	0.000022	71.9	<0.001	0.00023	0.00074	0.206	<0.0002	0.0058	14.6	0.0108	<0.0000019	0.0029	0.0013	0.015	2.29
RSEM-R6E-EOP	10/7/2022 12:00	BEA025	M	C278893	1.41	0.0784	<0.0005	0.00029	0.17	<0.0001	<0.001	<0.05	<0.00001	73.0	<0.001	<0.0002	0.00057	0.073	<0.0002	0.0058	15.6	0.007	<0.0000019	0.0029	<0.001	<0.01	2.29
RSEM-R6E-EOP	10/8/2022 10:15	BED963	M	C279402	1.58	0.0767	<0.0005	0.00028	0.173	<0.0001	<0.001	<0.05	0.000014	68.6	<0.001	<0.0002	<0.0005	0.045	<0.0002	0.0057	14.4	0.0069	<0.0000019	0.003	<0.001	<0.01	2.56
RSEM-R6E-EOP	10/9/2022 9:35	BED925	M	C279394	1.35	0.0826	<0.0005	0.00025	0.165	<0.0001	<0.001	<0.05	0.000013	65.3	<0.001	<0.0002	<0.0005	0.039	<0.0002	0.0055	13.8	0.0057	<0.0000019	0.0028	<0.001	<0.01	2.43
RSEM-R6E-EOP	10/10/2022 9:55	BED792	M	C279368	1.41	0.0894	<0.0005	0.00028	0.167	<0.0001	<0.001	<0.05	<0.00001	65.9	<0.001	<0.0002	<0.0005	0.035	<0.0002	0.0059	14.2	0.0071	<0.0000019	0.0029	<0.001	<0.01	2.47
RSEM-R6E-EOP	10/11/2022 12:15	BEK435	M	C280406	3.01	0.0754	<0.0005	0.00027	0.159	<0.0001	<0.001	<0.05	0.000016	63.9	<0.001	<0.0002	0.00057	0.071	<0.0002	0.0063	14.1	0.0063	<0.0000019	0.0028	0.0013	0.011	2.49
RSEM-R6E-EOP	10/12/2022 14:30	BEK645	M	C280448	1.23	0.0816	<0.0005	0.00027	0.158	<0.0001	<0.001	<0.05	0.000014	62.8	<0.001	<0.0002	0.00051	0.048	<0.0002	0.0062	13.9	0.0066	<0.0000019	0.0028	0.0014	<0.01	2.50
RSEM-R6E-EOP	10/13/2022 13:00	BEN617	M	C280837	1.18	0.0872	<0.0005	0.0002	0.156	<0.0001	<0.001	<0.05	0.000013	65.3	<0.001	<0.0002	0.00053	0.071	<0.0002	0.0055	14.2	0.0072	<0.0000019	0.0029	0.0011	<0.01	2.36
RSEM-R6E-EOP	10/13/2022 13:30	BEN619	D	C280837	2.65	0.0836	<0.0005	0.00019	0.15	<0.0001	<0.001	<0.05	0.000014	62.5	<0.001	<0.0002	0.00072	0.076	<0.0002	0.0054	13.5	0.0069	<0.0000019	0.0027	0.003	<0.01	2.20
RSEM-R6E-EOP	10/14/2022 11:30	BEN599	M	C280833	1.68	0.0774	<0.0005	0.00019	0.152	<0.0001	<0.001	<0.05	0.000012	62.5	<0.001	<0.0002	<0.0005	0.048	<0.0002	0.0053	13.7	0.0063	<0.0000019	0.0028	<0.001	<0.01	2.33
RSEM-R6E-EOP	10/15/2022 13:30	BER007	M	C281389	1.82	0.0586	<0.0005	0.00025	0.152	<0.0001	<0.001	<0.05	0.00001	59.6	<0.001	<0.0002	<0.0005	0.049	<0.0002	0.0066	13.4	0.0047	<0.0000019	0.0029	<0.001	<0.01	2.39
RSEM-R6E-EOP	10/16/2022 15:30	BER094	M	C281399	0.96	0.0733	<0.0005	0.00028	0.149	<0.0001	<0.001	<0.05	<0.00001	61.9	<0.001	<0.0002	0.00053	0.056	<0.0002	0.0059	13.7	0.0072	0.0000027	0.0029	<0.001	0.012	2.35
RSEM-R6E-EOP	10/17/2022 11:15	BER150	M	C281421	<0.50	0.0725	<0.0005	0.00025	0.151	<0.0001	<0.001	<0.05	0.000013	61.7	<0.001	<0.0002	0.00055	0.054	<0.0002	0.0053	13.7	0.0059	<0.0000019	0.0029	0.0013	0.013	2.20
RSEM-R6E-EOP	10/18/2022 9:30	BEX619	M	C282315	1.75	0.0593	<0.0005	0.00026	0.157	<0.0001	<0.001	<0.05	0.000014	62.0	<0.001	<0.0002	<0.0005	0.052	<0.0002	0.0058	13.5	0.0057	<0.0000019	0.0028	<0.001	<0.01	2.30
RSEM-R6E-EOP	10/19/2022 12:30	BFA345	M	C282741	1.49	0.0843	<0.0005	0.00029	0.156	<0.0001	<0.001	<0.05	0.000011	63.7	<0.001	<0.0002	0.00052	0.047	<0.0002	0.0055	14.3	0.0071	<0.0000019	0.0027	<0.001	0.014	2.49
RSEM-R6E-EOP	10/19/2022 12:40	BFA346	D	C282741	1.86	0.0871	<0.0005	0.00029	0.159	<0.0001	<0.001	<0.05	0.000011	64.2	<0.001	<0.0002	<0.0005	0.05	<0.0002	0.0056	14.4	0.0073	0.0000023	0.0028	<0.001	0.012	2.54
RSEM-R6E-EOP	10/20/2022 10:00	BFD236	M	C283174	1.89	0.0922	<0.0005	0.0003	0.154	<0.0001	<0.001	<0.05	<0.00001	63.6	<0.001	<0.0002	0.00052	0.076	<0.0002	0.0064	13.9	0.0056	<0.0000019	0.0029	<0.001	0.013	2.68
RSEM-R6E-EOP	10/21/2022 10:10	BFD223	M	C283172	1.81	0.11	<0.0005	0.00035	0.154	<0.0001	<0.001	<0.05	0.000012	64.9	<0.001	<0.0002	0.0006	0.118	<0.0002	0.0064	14.2	0.0079	<0.0000019	0.0029	0.0011	0.014	2.76
RSEM-R6E-EOP	10/22/2022 11:20	BFI041	M	C283756	1.38	0.1	<0.0005	0.00033	0.159	<0.0001	<0.001	<0.05	0.000013	67.3	<0.001	<0.0002	0.0005	0.069	<0.0002	0.0058	14.7	0.0066	<0.0000019	0.0028	<0.001	<0.01	2.64
RSEM-R6E-EOP	10/22/2022 11:30	BFI042	D	C283756	1.40	0.0946	<0.0005	0.00031	0.152	<0.0001	<0.001	<0.05	0.000014	64.0	<0.001	<0.0002	0.00055	0.063	<0.0002	0.0058	14.3	0.0064	<0.0000019	0.0027	<0.001	<0.01	2.58
RSEM-R6E-EOP	10/23/2022 10:15	BFI228	M	C283774	2.09	0.111	<0.0005	0.0003	0.155	<0.0001	<0.001	<0.05	0.000014	65.9	<0.001	<0.0002	0.00053	0.094	<0.0002	0.0058	13.5	0.0052	<0.0000019	0.0028	<0.001	0.014	2.39
RSEM-R6E-EOP	10/24/2022 9:45	BFL669	M	C284145	1.03	0.0977	<0.0005	0.00027	0.151	<0.0001	<0.001	<0.05	0.000018	64.7	<0.001	<0.0002	0.00052	0.085	<0.0002	0.0054	13.4	0.0058	0.0000022	0.0027	<0.001	0.014	2.43
RSEM-R6E-EOP	10/25/2022 10:35	BFP705	M	C284665	1.71	0.131	<0.0005	0.00031	0.147	<0.0001	<0.001	<0.05	0.000025	70.9	<0.001	<0.0002	0.00064	0.167	<0.0002	0.0061	14.2	0.0116	<0.0000019	0.0028	0.0012	0.017	2.65
RSEM-R6E-EOP	10/25/2022 10:45	BFP706	D	C284665	1.81	0.122	<0.0005	0.00033	0.15	<0.0001	<0.001	<0.05	0.000024	73.3	<0.001	<0.0002	0.00061	0.158	<0.0002	0.0063	14.3	0.0118	<0.0000019	0.0028	0.0012	0.018	2.69
RSEM-R6E-EOP	10/26/2022 12:30	BFS034	M	C285038	1.72	0.126	<0.0005	0.00032	0.152	<0.0001	<0.001	<0.05	0.000027	71.0	<0.001	<0.0002	0.00063	0.165	<0.0002	0.0059	13.7	0.0114	<0.0000019	0.0028	0.0013	0.016	2.69
RSEM-R6E-EOP	10/27/2022 10:05	BFU904	M	C285466	1.74	0.129	<0.0005	0.0003	0.146	<0.0001	<0.001	<0.05	0.000027	66.9	<0.001	<0.0002	0.00064	0.158	<0.0002	0.0055	13.5	0.0106	<0.0000019	0.0027	0.0012	0.017	2.54
RSEM-R6E-EOP	10/27/2022 10:15	BFU905	D	C285466	1.91	0.13	<0.0005	0.0003	0.144	<0.0001	<0.001	<0.05	0.000025	65.2	<0.001	<0.0002	0.00058	0.16	<0.0002	0.0053	13.0	0.0103	<0.0000019	0.0027	0.0011	0.016	2.46
RSEM-R6E-EOP	10/28/2022 11:30	BFU721	M	C285458	1.49	0.147	<0.0005	0.00037	0.141	<0.0001	<0.001	<0.05	0.000027	64.6	<0.001	<0.0002	0.00059	0.182	<0.0002	0.0056	13.9	0.0091	0.0000028	0.0027	0.0011	0.018	2.49
RSEM-R6E-EOP	10/29/2022 9:45	BFZ653	M	C286199	1.76	0.599	<0.0005	0.00075	0.149	<0.0001	<0.001	<0.05	0.000043	66.6	0.0012	0.00042	0.00114	0.686	0.00051	0.0059	14.9	0.019	0.00001	0.0029	0.0017	0.029	2.75

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
RSEM-R6E-EOP	10/30/2022 11:20	BFZ645	M	C286196	1.81	0.211	<0.0005	0.00043	0.14	<0.0001	<0.001	<0.05	0.000029	62.7	<0.001	0.00022	0.00071	0.293	0.00023	0.0052	13.2	0.0111	0.0000054	0.0027	0.0011	0.025	2.36
RSEM-R6E-EOP	10/31/2022 11:00	BGA235	M	C286288	1.86	0.178	<0.0005	0.00036	0.14	<0.0001	<0.001	<0.05	0.000033	63.3	<0.001	<0.0002	0.00067	0.221	<0.0002	0.005	13.4	0.0107	0.0000027	0.0029	0.0011	0.015	2.34
RSEM-R6E-EOP	11/1/2022 15:20	BGE763	M	C286877	1.78	0.106	<0.0005	0.00031	0.144	<0.0001	<0.001	<0.05	0.000033	67.9	<0.001	<0.0002	0.00069	0.166	<0.0002	0.005	13.6	0.0102	0.0000021	0.0028	<0.001	0.015	2.21
RSEM-R6E-EOP	11/2/2022 12:30	BGJ735	M	C287754	1.74	0.108	<0.0005	0.00029	0.151	<0.0001	<0.001	<0.05	0.000033	67.0	<0.001	<0.0002	0.00054	0.141	<0.0002	0.005	13.8	0.0121	0.0000024	0.0029	<0.001	0.014	2.15
RSEM-R6E-EOP	11/3/2022 14:00	BGJ743	M	C287759	1.96	0.259	<0.0005	0.00036	0.157	<0.0001	<0.001	<0.05	0.000035	69.6	<0.001	<0.0002	0.00071	0.268	<0.0002	0.0047	13.7	0.0096	0.0000031	0.0029	<0.001	0.017	2.16
RSEM-R6E-EOP	11/4/2022 11:00	BGJ738	M	C287756	1.86	0.161	<0.0005	0.00028	0.155	<0.0001	<0.001	<0.05	0.000028	68.3	<0.001	<0.0002	<0.0005	0.127	<0.0002	0.0044	13.5	0.0069	0.0000026	0.0027	<0.001	0.01	2.06
RSEM-R6E-EOP	11/5/2022 13:30	BGO362	M	C288361	2.98	0.12	<0.0005	0.00026	0.146	<0.0001	<0.001	<0.05	0.000028	64.4	<0.001	<0.0002	<0.0005	0.104	<0.0002	0.0046	13.3	0.0122	<0.0000019	0.0026	<0.001	0.01	1.98
RSEM-R6E-EOP	11/6/2022 14:15	BGO251	M	C288323	1.27	0.272	<0.0005	0.00043	0.155	<0.0001	<0.001	<0.05	0.000035	69.6	<0.001	0.00029	0.00089	0.369	0.00024	0.005	13.9	0.0184	<0.0000019	0.0027	0.0012	0.024	2.11
RSEM-R6E-EOP	11/6/2022 14:30	BGO253	D	C288323	3.03	0.202	<0.0005	0.00035	0.154	<0.0001	<0.001	<0.05	0.00003	68.2	<0.001	<0.0002	0.00061	0.257	<0.0002	0.0046	13.6	0.0147	<0.0000019	0.0027	0.001	0.016	2.09
RSEM-R6E-EOP	11/7/2022 10:00	BGO319	M	C288345	1.53	0.107	<0.0005	0.00028	0.149	<0.0001	<0.001	<0.05	0.00003	67.4	<0.001	<0.0002	0.00055	0.125	<0.0002	0.0046	13.6	0.013	<0.0000019	0.0027	<0.001	0.016	2.03
RSEM-R6E-EOP	11/8/2022 10:30	BGT300	M	C289111	2.16	0.101	<0.0005	0.00026	0.145	<0.0001	<0.001	<0.05	0.000024	73.8	<0.001	<0.0002	<0.0005	0.182	<0.0002	0.0056	13.2	0.013	<0.0000019	0.0025	<0.001	0.015	2.36
RSEM-R6E-EOP	11/9/2022 10:40	BGW281	M	C289508	1.67	0.124	<0.0005	0.00026	0.146	<0.0001	<0.001	<0.05	0.000029	74.0	<0.001	<0.0002	0.00054	0.183	<0.0002	0.0056	13.3	0.0122	<0.0000019	0.0026	<0.001	0.011	2.38
RSEM-R6E-EOP	11/9/2022 10:50	BGW282	D	C289508	1.75	0.105	<0.0005	0.00029	0.141	<0.0001	<0.001	<0.05	0.000039	73.2	<0.001	<0.0002	0.00136	0.137	0.00026	0.0059	12.9	0.0122	<0.0000019	0.0025	<0.001	0.014	2.21
RSEM-R6E-EOP	11/10/2022 10:50	BGV715	M	C289423	1.51	0.198	<0.0005	0.00025	0.143	<0.0001	<0.001	<0.05	0.000021	72.9	<0.001	<0.0002	0.00098	0.128	<0.0002	0.0057	13.0	0.0128	<0.0000019	0.0026	<0.001	<0.01	2.30
RSEM-R6E-EOP	11/11/2022 10:50	BHA031	M	C290104	0.78	0.144	<0.0005	0.00025	0.147	<0.0001	<0.001	<0.05	0.000038	69.6	<0.001	<0.0002	0.00053	0.19	<0.0002	0.0039	12.2	0.0131	<0.0000019	0.0025	0.001	0.014	1.96
RSEM-R6E-EOP	11/11/2022 11:00	BHA032	D	C290104	1.30	0.123	<0.0005	0.00022	0.153	<0.0001	<0.001	<0.05	0.000023	71.2	<0.001	<0.0002	<0.0005	0.13	<0.0002	0.0041	13.1	0.0137	<0.0000019	0.0026	<0.001	0.014	2.06
RSEM-R6E-EOP	11/12/2022 10:30	BHA061	M	C290112	1.51	0.0955	<0.0005	0.00022	0.151	<0.0001	<0.001	<0.05	0.000022	71.8	<0.001	<0.0002	<0.0005	0.111	<0.0002	0.0042	13.0	0.0141	<0.0000019	0.0025	<0.001	0.012	2.03
RSEM-R6E-EOP	11/13/2022 11:10	BHA077	M	C290117	1.70	0.0566	<0.0005	0.0002	0.141	<0.0001	<0.001	<0.05	0.000018	69.8	<0.001	<0.0002	<0.0005	0.079	<0.0002	0.0043	12.4	0.0134	<0.0000019	0.0024	<0.001	<0.01	1.91
RSEM-R6E-EOP	11/14/2022 10:50	BHC286	M	C290544	2.36	0.0514	<0.0005	0.00025	0.135	<0.0001	<0.001	<0.05	0.000019	88.8	<0.001	<0.0002	<0.0005	0.078	<0.0002	0.0051	15.3	0.017	<0.0000019	0.0025	<0.001	0.012	1.97
RSEM-R6E-EOP	11/15/2022 10:50	BHD949	M	C290817	1.73	0.0522	<0.0005	0.00024	0.126	<0.0001	<0.001	<0.05	0.000018	81.3	<0.001	<0.0002	<0.0005	0.084	<0.0002	0.0049	14.3	0.0185	<0.0000019	0.0024	<0.001	<0.01	1.87
RSEM-R6E-EOP	11/15/2022 11:00	BHD950	D	C290817	2.06	0.0406	<0.0005	0.00023	0.128	<0.0001	<0.001	<0.05	0.000019	84.9	<0.001	<0.0002	<0.0005	0.068	<0.0002	0.005	14.5	0.0188	<0.0000019	0.0024	<0.001	0.01	1.90
RSEM-R6E-EOP	11/16/2022 12:10	BHF925	M	C291159	1.85	0.0298	<0.0005	0.00025	0.137	<0.0001	<0.001	<0.05	0.000017	73.9	<0.001	<0.0002	<0.0005	0.076	<0.0002	0.0054	11.9	0.0184	<0.0000019	0.0025	<0.001	<0.01	1.96
RSEM-R6E-EOP	11/17/2022 12:00	BHH895	M	C291494	2.05	0.0514	<0.0005	0.00024	0.131	<0.0001	<0.001	<0.05	0.000022	72.6	<0.001	<0.0002	0.00067	0.08	<0.0002	0.0051	13.4	0.0171	<0.0000019	0.0022	<0.001	0.01	1.87
RSEM-R6E-EOP	11/18/2022 11:00	BHI799	M	C291574	1.64	0.0727	<0.0005	0.00025	0.137	<0.0001	<0.001	<0.05	0.000018	77.5	<0.001	<0.0002	<0.0005	0.1	<0.0002	0.005	13.9	0.0157	<0.0000019	0.0022	<0.001	0.011	1.92
RSEM-R6E-EOP	11/19/2022 12:00	BHL409	M	C291899	1.68	0.0368	<0.0005	0.00022	0.147	<0.0001	<0.001	<0.05	0.000019	72.0	<0.001	<0.0002	<0.0005	0.08	<0.0002	0.0046	12.5	0.015	<0.0000019	0.0025	0.0014	<0.01	1.89
RSEM-R6E-EOP	11/19/2022 12:10	BHL410	D	C291899	1.77	0.0336	<0.0005	0.00022	0.139	<0.0001	<0.001	<0.05	0.000017	72.8	<0.001	<0.0002	<0.0005	0.075	<0.0002	0.0045	12.0	0.014	<0.0000019	0.0024	<0.001	<0.01	1.77
RSEM-R6E-EOP	11/20/2022 11:30	BHL416	M	C291901	1.97	0.039	<0.0005	0.00024	0.146	<0.0001	<0.001	<0.05	0.000019	73.0	<0.001	<0.0002	<0.0005	0.076	<0.0002	0.0045	12.5	0.0146	<0.0000019	0.0025	<0.001	<0.01	1.84
RSEM-R6E-EOP	11/21/2022 11:15	BHL420	M	C291903	2.24	0.0476	<0.0005	0.00023	0.146	<0.0001	<0.001	<0.05	0.00002	73.3	<0.001	<0.0002	0.00063	0.084	<0.0002	0.0046	12.6	0.015	<0.0000019	0.0026	<0.001	<0.01	1.86
RSEM-R6E-EOP	11/22/2022 12:15	BHR288	M	C292931	2.05	0.0394	<0.0005	0.00025	0.142	<0.0001	<0.001	<0.05	0.000016	79.9	<0.001	<0.0002	<0.0005	0.069	<0.0002	0.0061	13.9	0.0138	<0.0000019	0.0025	<0.001	0.015	1.95
RSEM-R6E-EOP	11/23/2022 15:15	BHR239	M	C292918	1.89	0.0347	<0.0005	0.00025	0.143	<0.0001	<0.001	<0.05	0.000015	77.5	<0.001	<0.0002	<0.0005	0.058	<0.0002	0.006	14.0	0.0128	<0.0000019	0.0026	<0.001	0.013	1.97
RSEM-R6E-EOP	11/24/2022 13:30	BHS968	M	C293245	1.84	0.0342	<0.0005	0.00025	0.138	<0.0001	<0.001	<0.05	0.000014	78.4	<0.001	<0.0002	<0.0005	0.062	<0.0002	0.0061	13.4	0.0124	<0.0000019	0.0025	<0.001	0.011	1.91
RSEM-R6E-EOP	11/24/2022 13:45	BHS970	D	C293245	1.91	0.0384	<0.0005	0.00025	0.143	<0.0001	<0.001	<0.05	0.000015	76.6	<0.001	<0.0002	<0.0005	0.068	<0.0002	0.0057	13.5	0.0129	<0.0000019	0.0026	<0.001	0.013	1.93
RSEM-R6E-EOP	11/25/2022 10:30	BHS972	M	C293246	1.79	0.0329	<0.0005	0.00023	0.138	<0.0001	<0.001	<0.05	0.000012	75.6	<0.001	<0.0002	<0.0005	0.059	<0.0002	0.006	13.2	0.0114	<0.0000019	0.0025	<0.001	0.01	1.87
RSEM-R6E-EOP	11/26/2022 12:00	BHX191	M	C293769	1.86	0.0293	<0.0005	0.00022	0.15	<0.0001	<0.001	<0.05	<0.00001	80.3	<0.001	<0.0002	<0.0005	0.05	<0.0002	0.006	13.1	0.0123	<0.0000019	0.0028	0.0011	<0.01	2.16
RSEM-R6E-EOP	11/27/2022 13:30	BHX163	M	C293759	1.86	0.0361	<0.0005	0.00023	0.152	<0.0001	<0.001	<0.05	0.000012	85.2	<0.001	<0.0002	0.00053	0.069	<0.0002	0.0063	13.3	0.0176	<0.0000019	0.0028	0.0011	0.013	2.27
RSEM-R6E-EOP	11/28/2022 10:00	BHX165	M	C293760	1.85	0.0426	<0.0005	0.00026	0.157	<0.0001	<0.001	<0.05	0.000011	81.6	<0.001	<0.0002	0.00055	0.07	<0.0002	0.0063	13.8	0.0139	<0.0000019	0.0028	0.0011	0.014	2.34
RSEM-R6-EP-US-SD	2/9/2022 13:55	AOK262	M	C208577	4.90	29.8	0.00131	0.024	1.73	0.00213	<0.001	0.067	0.00267	194	0.0911	0.0321	0.088	130	0.0418	0.049	27.8	2.35	0.000169	0.0057	0.102	3.7	8.15
RSEM-R6-EP-US-SD	4/22/2022 12:15	ARX723	M	C226550	0.79	3.61	0.0006	0.00513	0.272	0.00026	<0.001	0.102	0.000521	113	0.0079	0.0093	0.0136	10.9	0.00496	0.0356	28.7	0.347	0.000026	0.0053	0.0374	0.403	4.52
RSEM-R6-EP-US-SD	4/27/2022 16:30	ASH199	M	C228648	2.34	172	<0.0025	0.1	12.4	0.0124	<0.005	0.275	0.0174	1140	0.407	0.258	0.645	580	0.296	0.289	220	13.4	0.00174	0.0122	0.779	22.1	32.2
RSEM-R6-EP-US-SD	5/10/2022 11:55	ASX006	M	C231638	1.19	6.21	0.00056	0.0105	0.116	0.00148	<0.001	0.11	0.00323	123	0.0095	0.0787	0.069	16.4	0.00105	0.0879	41.5	0.97	0.000007	0.0046	0.255	1.1	4.01
RSEM-R6E-SP	1/1/2022 13:00	FJ2200029-001	M	FJ2200029	3.97	0.0347	0.00043	0.00061	0.148	<0.000100	<0.000050	0.125	0.0000350	152	0.00053	0.00078	0.00095	0.073	<0.000050	0.0443	45.8	0.0743	<0.0000050	0.00695	0.0149	<0.050	6.83
RSEM-R6E-SP	1/7/2022 12:30	FJ2200035-001	M	FJ2200035	3.18	0.0591	0.00044	0.00075	0.164	<0.000100	<0.000050	0.122	0.0000673	140	<0.00050	0.00331	0.00132	0.143	0.000075	0.0428	47.1	0.347	<0.0000050	0.00663	0.0185	<0.050	6.66
RSEM-R6E-SP	1/7/2022 12:40	FJ2200035-002	D	FJ2200035	3.20	0.0253	0.00044	0.00060	0.153	<0.000100	<0.000050	0.130	0.0000534	140	<0.00050	0.00148	0.00086	0.072	<0.000050	0.0417	46.6	0.236	<0.0000050	0.00702	0.0158	<0.050	6.43
RSEM-R6E-SP	1/11/2022 16:00	FJ2200088-002	M	FJ2200088	5.03	0.0228	0.00051	0.00106	0.178	<0.000100	<0.000050	0.125	0.0000590	142	<0.00050	0.00618	0.00057	0.153	<0.000050	0.0405	47.1	1.02	<0.0000050	0.00664	0.0236	<0.050	7.49
RSEM-R6E-SP	1/16/2022 12:00	FJ2200109-001	M	FJ2200109	4.46	0.0508	0.00057	0.00056	0.160	<0.000100	<0.000050	0.128	0.0000121	140	<0.00050	0.00311	0.00273	0.115	<0.000050	0.0426	44.9	0.255	<0.0000050	0.00787	0.0177	<0.050	6.18
RSEM-R6E-SP	1/20/2022 12:00	FJ2200187-002	M	FJ2200187	4.02	0.0312	0.00056	0.00088	0.170	<0.000100	<0.000050	0.127	0.0000286	140	<0.00050	0.00685	0.00100	0.160	<0.000050	0.0421	44.3	0.982	<0.0000050	0.00696	0.0239	<0.050	7.06
RSEM-R6E-SP	1/22/2022 16:20	FJ2200193-004	M	FJ2200193	4.69	1.03	0.00044	0.00141	0.109	<0.000100	<0.000050	0.083	0.0000643	86.3	0.00173	0.00367	0.00240	1.10	0.000555	0.0264	31.0	0.320	<0.0000050	0.00475	0.0133	<0.050	5.11
RSEM-R6E-SP	1/24/2022 13:05	FJ2200237-002	M	FJ2200237	6.90	0.609	0.00030	0.00110	0.0824	<0.000100	<0.000050	0.028	0.0000555	41.6	0.00179	0.00162	0.00735	1.23	0.000524	0.0088	9.32	0.0933	<0.0000050	0.00284	0.00754	0.086	3.12
RSEM-R6E-SP	1/25/2022 15:50	ANP163	M	C204905	3.02	0.706	<0.0005	0.00081	0.0713	<0.0001	<0.001	<0.05	0.000032	41.8	0.0019	0.00176	0.0108	0.77	0.00037	0.0085	8.94	0.0931	<0.0000019	0.003	0.0085	0.054	3.27
RSEM-R6E-SP	2/3/2022 11:00	AOC176	M	C207302	3.7	0.0362	<0.0005	0.00055	0.0922	<0.0001	<0.001	0.061	<0.00001	82.5	<0.001	0.00164	0.00289	0.081	<0.0002	0.0205	18.4	0.119	<0.0000019	0.0049	0.0099	0.033	4.30
RSEM-R6E-SP	2/7/2022 5:30	AOE527	M	C207636	3.13	0.0282	<0.0005	0.00059	0.094	<0.0001	<0.001	0.07	<0.00001	82.7	<0.001	0.00156	0.00325	0.051	<0.0002	0.0219	21.7	0.132	0.0000028	0.0051	0.0108	0.038	4.93
RSEM-R6E-SP	2/9/2022 13:35	AOK258	M	C208577	3.64	0.376	<0.0005	0.00077	0.102	<0.0001	<0.001	0.06	0.000054	69.3	0.0015	0.00237	0.0024	1.22	0.00043	0.0182	13.2	0.174	<0.0000019	0.0058	0.0111	0.063	4.30
RSEM-R6E-SP	2/10/2022 18:00	AOM661	M	C208923	3.22	0.36	<0.0005	0.00062	0.0712	<0.0001	<0.001	<0.05	0.000037	41.3	0.0016	0.00083	0.00203	1.13	0.00044	0.0113	6.78	0.0597	0.0000041	0.005	0.005	0.074	3.35
RSEM-R6E-SP	2/17/2022 15:45	AOW645	M	C210704	3.5	0.0828	0.00052	0.00054	0.0943	<0.0001	<0.001	<0.05	0.000026	52.6	0.0013	0.00066	0.00133	0.136	<0.0002	0.0179	9.37	0.0652	<0.0000019	0.0068	0.0056	0.03	4.82
RSEM-R6E-SP	2/19/2022 11:55	AOX370	M	C210838	3.6	0.129	<0.0005	0.00045	0.0796	<0.0001	<0.001	<0.05	0.00003	52.5	<0.001	0.00066	0.00119	0.168	<0.0002	0.0155	10.3	0.0587	<0.0000019	0.0062	0.0055	0.029	4.57
RSEM-R6E-SP	2/26/2022 11:00	API826	M	C212869	3.2	0.0617	<0.0005	0.00036	0.0899	<0.0001	<0.001	<0.05	0.000015	84.9	<0.001	0.00074	0.0007	0.097	<0.0002	0.0222	11.3	0.0919	<0.0000019	0.0061	0.0056	0.023	5.34
RSEM-R6E-SP	3/3/2022 15:15	APQ572	M	C214168	2.7	0.0551	<0.0005	0.00033	0.0973	<0.0001	<0.001	<0.05	<0.00001	94.1	<0.001	0.00091	0.00056	0.075	<0.0002	0.0249	12.6	0.126	<0.0000019	0.0059	0.0063	0.026	5.64
RSEM-R6E-SP	3/5/2022 14:45	APS819	M	C214509	3.0	0.0369	<0.0005	0.00037	0.0857	<0.0001	<0.001	<0.05	<0.00001	80.9	<0.001	0.00106	0.00066	0.088	<0.0002	0.0218	13.3	0.13	<0.0000019	0.0061	0.0074	0.013	4.41
RSEM-R6E-SP	3/7/2022 12:05	APU817	M	C214856	2.3	0.0315	<0.0005	0.00035	0.0869	<0.0001	<0.001	<0.05	<0.00001	81.6	<0.001	0.00099	0.00096	0.075	<0.0002	0.0233	13.7	0.128	<0.0000019	0.0063	0.0074	0.01	4.40
RSEM-R6E-SP	3/11/2022 11:45	APZ041	M	C215890	2.07	0.0313	<0.0005	0.00059	0.108	<0.0001	<0.001	<0.05	0.000015	81.0	<0.001	0.00139	0.00057	0.135	<0.0002	0.0226	15.3	0.209	<0.0000019	0.0078	0.0079	0.016	6.06
RSEM-R6E-SP	3/14/2022 11:40	AQB611	M	C216399	2.03	0.0404	<0.0005	0.00055	0.108	<0.0001	<0.001	<0.05	0.000012	71.8	<0.001	0.00184	0.00069	0.186	<0.0002	0.024	15.2	0.287	<0.0000019	0.0075	0.0083	0.02	6.20
RSEM-R6E-SP	3/19/2022 13:50	AQJ970	M	C218236	3.08	0.982	0.00052	0.00126	0.113	<0.0001	<0.001	<0.05	0.000089	59.1	0.0047	0.00239	0.00335	2.37	0.00107	0.0194	12.8	0.15	0.0000095	0.0056	0.0119	0.094	4.59
RSEM-R6E-SP	3/28/2022 11:10	AQU417	M	C220399	2.03	0.34	<0.0005	0.00071	0.0871	<0.0001	<0.001	<0.05	0.00003	42.1	0.001	0.00127	0.00188	0.97	0.00041	0.0157	7.99	0.0843	0.0000042	0.0044	0.0075	0.049	2.68
RSEM-R6E-SP	11/29/2022 10:50	BIA657	M	C294441	1.65	0.0388	<0.0005	0.00026	0.16	<0.0001	<0.001	<0.05	0.000012	88.2	<0.001	<0.0002	0.00054	0.071	<0.0002	0.0067	14.2	0.0183	<0.0000019	0.003	0.0011	0.01	2.46
RSEM-R6E-SP	12/3/2022 11:50	BII771	M	C295634	1.93	0.0294	<0.0005	0.00042	0.178	<0.0001	<0.001	<0.05	0.00001	85.2	<0.001	<0.0002	0.00059	0.093	<0.0002	0.0072	14.8	0.0444	<0.0000019	0.0032	0.0015	<0.01	2.79
RSEM-R6E-SP	12/7/2022 12:30	BIR867	M	C297052	2.01	0.0249	<0.0005	0.00046	0.181	<0.0001	<0.001	<0.05	<0.00001	87.0	<0.001	<0.0002	0.00072	0.095	<0.0002	0.0074	15.9	0.0279	<0.0000019	0.0031	0.0016	<0.01	2.96
RSEM-R6E-SP	12/9/2022 11:45	BIT657	M	C297341	2.10	0.0271	<0.0005	0.00045	0.17	<0.0001	<0.001	<0.05	<0.00001	85.3	<0.001	<0.0002	0.00065	0.086	<0.0002	0.0074	15.1	0.0237	<0.0000019	0.003	0.0015	<0.01	2.84
RSEM-R6E-SP	12/15/2022 12:45	BJJ046	M	C299557	2.12	0.0353	<0.0005	0.00053	0.192	<0.0001	<0.001	<0.05	0.000011	90.6	<0.001	<0.0002	0.00072	0.114	<0.0002	0.0086	15.6	0.0416	0.0000022	0.0034	0.0018	0.012	3.45

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
RSEM-R6E-SP	12/18/2022 12:45	BJL803	M	C299943	2.34	0.0202	<0.0005	0.00053	0.2	<0.0001	<0.001	<0.05	<0.00001	94.3	<0.001	<0.0002	0.00066	0.074	<0.0002	0.0086	16.2	0.034	<0.0000019	0.0034	0.0018	<0.01	3.56
RSEM-R6E-SP	12/20/2022 10:30	BJP133	M	C2A0603	2.72	0.0201	<0.0005	0.00054	0.176	<0.0001	<0.001	<0.05	<0.00001	91.6	<0.001	<0.0002	0.00069	0.0699	<0.0002	0.0087	16.1	0.0386	<0.0000019	0.003	0.0019	<0.01	3.49
RSEM-R6E-SP	12/23/2022 12:15	BJQ105	M	C2A0819	2.35	0.0224	<0.0005	0.00065	0.227	<0.0001	<0.001	0.052	0.000013	103	<0.001	0.00024	0.0007	0.097	<0.0002	0.0094	18.5	0.0655	0.0000024	0.0036	0.0021	0.011	3.66
RSEM-R6E-SP	12/27/2022 12:30	BJS996	M	C2A1469	3.10	0.0221	<0.0005	0.00069	0.2	<0.0001	<0.001	<0.05	0.00001	107	<0.001	<0.0002	0.00075	0.094	<0.0002	0.0108	21.2	0.0616	<0.0000019	0.0031	0.0019	0.01	3.86
RSEM-R6E-SP	12/31/2022 12:45	BJU300	M	C300112	2.99	0.0273	<0.0005	0.00091	0.233	<0.0001	<0.001	<0.05	0.000013	105	<0.001	0.0003	0.00088	0.089	<0.0002	0.0089	21.7	0.115	<0.0000019	0.0037	0.0022	0.013	4.35
RSEM-R6E-SP-US	4/10/2022 13:00	ARK080	M	C223661	1.63	0.524	<0.0005	0.00066	0.0564	0.00012	<0.001	0.098	0.000735	129	0.0011	0.0174	0.00515	2	0.00042	0.0443	26.3	0.333	0.0000067	0.0056	0.0642	0.077	3.81
RSEM-R6W-EOP	1/4/2022 12:00	FJ2200037-001	M	FJ2200037	4.79	0.107	0.00168	0.00124	0.0401	<0.000100	<0.000050	0.116	0.0000406	29.4	0.00310	0.00032	0.00131	0.116	0.000094	0.0662	29.3	0.0441	<0.0000050	0.00783	0.00350	<0.050	4.67
RSEM-R6W-EOP	1/20/2022 10:45	FJ2200187-001	M	FJ2200187	3.45	0.172	0.00138	0.00126	0.0405	<0.000100	<0.000050	0.114	0.0000095	20.6	0.00102	0.00029	0.00054	0.107	0.000108	0.0643	27.5	0.0309	<0.0000050	0.00713	0.00243	<0.050	4.27
RSEM-R6W-EOP	1/21/2022 10:20	FJ2200183-001	M	FJ2200183	4.41	0.240	0.00142	0.00132	0.0483	<0.000100	<0.000050	0.120	0.0000096	20.3	0.00111	0.00030	0.00058	0.110	0.000118	0.0662	30.6	0.0328	<0.0000050	0.00732	0.00285	<0.050	4.41
RSEM-R6W-EOP	1/22/2022 14:50	FJ2200193-001	M	FJ2200193	3.24	0.126	0.00156	0.00142	0.0545	<0.000100	<0.000050	0.138	0.0000098	21.0	0.00116	0.00032	0.00076	0.083	0.000113	0.0738	32.4	0.0333	<0.0000050	0.00754	0.00300	<0.050	4.70
RSEM-R6W-EOP	1/23/2022 10:55	FJ2200194-001	M	FJ2200194	2.42	0.179	0.00147	0.00130	0.0540	<0.000100	<0.000050	0.117	0.0000064	20.3	0.00113	0.00029	0.00076	0.097	0.000103	0.0649	29.2	0.0295	<0.0000050	0.00709	0.00271	<0.050	4.36
RSEM-R6W-EOP	1/24/2022 12:00	FJ2200237-001	M	FJ2200237	3.17	0.0908	0.00103	0.00114	0.0586	<0.000100	<0.000050	0.096	0.0000209	29.3	0.00106	0.00060	0.00166	0.139	0.000158	0.0511	24.4	0.0540	<0.0000050	0.00499	0.00351	<0.050	4.09
RSEM-R6W-EOP	1/25/2022 16:00	ANP164	M	C204905	1.83	0.0623	0.00087	0.00086	0.0536	<0.0001	<0.001	0.08	0.000013	31.8	0.0013	0.00063	0.00081	0.076	<0.0002	0.0402	21.2	0.0629	0.0000024	0.0056	0.0036	0.015	3.70
RSEM-R6W-EOP	1/26/2022 13:55	ANQ893	M	C205279	1.78	0.0411	0.00099	0.0009	0.0536	<0.0001	<0.001	0.082	0.000015	34.9	0.001	0.00065	0.00092	0.058	<0.0002	0.0467	21.7	0.0644	<0.0000019	0.0056	0.0038	0.012	3.88
RSEM-R6W-EOP	1/26/2022 14:05	ANQ894	D	C205279	1.71	0.0397	0.001	0.00088	0.0542	<0.0001	<0.001	0.085	0.000018	34.9	0.001	0.00065	0.00092	0.053	<0.0002	0.0486	21.8	0.0647	0.0000028	0.0055	0.0038	0.014	3.89
RSEM-R6W-EOP	1/27/2022 15:50	ANS643	M	C205612	1.92	0.0578	0.00107	0.0009	0.0469	<0.0001	<0.001	0.084	0.00002	30.6	0.0013	0.00059	0.00097	0.121	<0.0002	0.0505	22.2	0.0535	<0.0000019	0.0056	0.0037	0.014	3.95
RSEM-R6W-EOP	1/27/2022 16:00	ANS644	D	C205612	1.92	0.0577	0.00111	0.00091	0.0481	<0.0001	<0.001	0.087	0.000016	31.5	0.0012	0.0006	0.00098	0.086	<0.0002	0.0512	22.7	0.0545	0.0000027	0.0058	0.0037	0.015	4.02
RSEM-R6W-EOP	1/29/2022 10:55	ANV925	M	C206078	4.07	0.051	0.0011	0.00096	0.0511	<0.0001	<0.001	0.102	0.000018	31.2	0.0015	0.00057	0.00095	0.053	<0.0002	0.0578	22.9	0.0527	<0.0000019	0.0059	0.0036	0.011	3.89
RSEM-R6W-EOP	1/30/2022 11:20	ANV924	M	C206077	2.93	0.103	0.0012	0.00095	0.0416	<0.0001	<0.001	0.099	0.000025	28.7	0.0013	0.00058	0.0012	0.101	<0.0002	0.061	23.5	0.0424	0.0000031	0.006	0.0039	0.015	3.98
RSEM-R6W-EOP	1/31/2022 10:35	ANV920	M	C206074	3.14	0.106	0.00122	0.00098	0.0429	<0.0001	<0.001	0.096	0.000023	30.6	0.0014	0.00059	0.00212	0.097	<0.0002	0.0606	23.6	0.0432	<0.0000019	0.0061	0.0042	0.013	4.03
RSEM-R6W-EOP	2/7/2022 5:00	AOE528	M	C207636	2.31	0.143	0.00119	0.00084	0.0307	<0.0001	<0.001	0.115	0.000011	32.8	0.002	0.00035	0.0014	0.103	<0.0002	0.0751	28.0	0.0314	<0.0000019	0.0062	0.0043	0.033	4.54
RSEM-R6W-EOP	2/8/2022 11:45	AOI290	M	C208265	2.40	0.0918	0.0012	0.00081	0.0291	<0.0001	<0.001	0.11	<0.00001	33.5	0.0027	0.00058	0.0016	0.111	<0.0002	0.0709	23.2	0.0276	<0.0000019	0.0064	0.005	0.015	4.45
RSEM-R6W-EOP	2/9/2022 11:10	AOK259	M	C208577	2.65	0.139	0.00078	0.00063	0.0808	<0.0001	<0.001	0.086	0.00002	68.9	0.0015	0.00146	0.00124	0.197	<0.0002	0.0426	21.4	0.158	<0.0000019	0.0055	0.0075	0.019	4.70
RSEM-R6W-EOP	2/10/2022 10:30	AOM663	D	C208923	3.10	0.405	0.00061	0.00084	0.092	<0.0001	<0.001	0.052	0.000059	55.8	0.0016	0.00136	0.00186	1.27	0.00085	0.0228	14.0	0.122	0.000004	0.006	0.007	0.062	3.97
RSEM-R6W-EOP	2/10/2022 22:20	AOM662	M	C208923	3.20	0.432	0.00071	0.00089	0.101	<0.0001	<0.001	0.056	0.000048	58.3	0.0018	0.00152	0.00198	1.4	0.00101	0.0253	15.0	0.131	0.0000034	0.0118	0.0079	0.047	4.17
RSEM-R6W-EOP	2/11/2022 11:25	AOM648	M	C208915	3.20	0.223	0.0007	0.00053	0.0743	<0.0001	<0.001	<0.05	0.000044	57.3	0.0017	0.001	0.00155	0.405	0.00025	0.0247	14.8	0.0848	<0.0000019	0.0048	0.0066	0.028	3.95
RSEM-R6W-EOP	2/12/2022 13:30	AOP214	M	C209346	2.50	0.0636	0.00072	0.00038	0.0518	<0.0001	<0.001	<0.05	0.000036	55.6	0.0014	0.00067	0.00157	0.068	<0.0002	0.0275	15.4	0.046	<0.0000019	0.0045	0.0057	0.013	3.72
RSEM-R6W-EOP	2/12/2022 13:40	AOP215	D	C209346	2.39	0.0776	0.00077	0.00035	0.0541	<0.0001	<0.001	0.054	0.000022	54.7	0.0014	0.00075	0.00153	0.072	<0.0002	0.0291	16.1	0.0483	<0.0000019	0.0047	0.006	0.02	3.77
RSEM-R6W-EOP	2/13/2022 10:45	AOP246	M	C209355	2.22	0.0623	0.00084	0.00034	0.0481	<0.0001	<0.001	<0.05	0.00003	52.0	0.0016	0.00065	0.00161	0.066	<0.0002	0.0273	15.5	0.0318	<0.0000019	0.0048	0.0055	0.017	3.76
RSEM-R6W-EOP	2/14/2022 12:50	AOQ979	M	C209670	2.78	0.0675	0.00079	0.00038	0.0408	<0.0001	<0.001	<0.05	<0.00001	46.4	0.0014	0.00058	0.00157	0.095	<0.0002	0.0256	13.9	0.0261	<0.0000019	0.0049	0.0066	0.026	3.40
RSEM-R6W-EOP	2/15/2022 15:35	AOS724	M	C210043	2.81	0.0541	0.0011	0.0006	0.0604	<0.0001	<0.001	<0.05	0.000025	47.9	0.0021	0.0007	0.00204	0.063	<0.0002	0.0198	15.7	0.037	0.0000029	0.0069	0.0078	0.027	4.48
RSEM-R6W-EOP	2/16/2022 10:40	AOU840	M	C210450	2.8	0.0658	0.00099	0.00069	0.0586	<0.0001	<0.001	0.051	0.000032	48.4	0.0018	0.00077	0.00195	0.06	<0.0002	0.0288	15.8	0.0384	0.0000025	0.0066	0.0086	0.022	4.37
RSEM-R6W-EOP	2/17/2022 14:15	AOW646	M	C210704	3.7	0.0736	0.00099	0.00081	0.0617	<0.0001	<0.001	0.054	0.000013	50.2	0.002	0.00074	0.00201	0.08	<0.0002	0.0309	16.5	0.0402	<0.0000019	0.0066	0.0079	0.026	4.63
RSEM-R6W-EOP	2/17/2022 14:25	AOW647	D	C210704	3.6	0.0742	0.00101	0.00079	0.0621	<0.0001	<0.001	0.051	0.000023	51.8	0.0022	0.00072	0.00203	0.087	<0.0002	0.0309	16.6	0.0395	<0.0000019	0.007	0.0078	0.024	4.65
RSEM-R6W-EOP	2/18/2022 13:20	AOW653	M	C210707	3.8	0.0811	0.00121	0.00082	0.0649	<0.0001	<0.001	0.052	0.000014	52.2	0.002	0.00082	0.00217	0.076	<0.0002	0.0308	17.3	0.0406	<0.0000019	0.0073	0.0083	0.023	4.77
RSEM-R6W-EOP	2/19/2022 10:30	AOX371	M	C210838	3.6	0.0747	0.00076	0.00071	0.0441	<0.0001	<0.001	<0.05	0.000018	45.5	0.0014	0.00084	0.00202	0.06	<0.0002	0.0247	17.1	0.0355	<0.0000019	0.0056	0.0084	0.011	4.10
RSEM-R6W-EOP	2/20/2022 15:20	AOY870	M	C211049	3.5	0.0762	0.00073	0.00078	0.0437	<0.0001	<0.001	<0.05	0.000017	45.9	0.0014	0.00099	0.00209	0.062	<0.0002	0.0278	17.7	0.0356	<0.0000019	0.0054	0.0095	0.014	4.10
RSEM-R6W-EOP	2/20/2022 15:30	AOY871	D	C211049	3.5	0.0728	0.00073	0.00077	0.0437	<0.0001	<0.001	<0.05	0.000023	46.3	0.0014	0.00099	0.00213	0.061	<0.0002	0.0272	17.8	0.0359	<0.0000019	0.0055	0.0096	0.014	4.14
RSEM-R6W-EOP	2/21/2022 11:00	AOY875	M	C211051	2.70	0.0724	0.00074	0.00081	0.0437	<0.0001	<0.001	<0.05	0.000022	47.4	0.0014	0.00099	0.00219	0.051	<0.0002	0.0281	18.1	0.0356	<0.0000019	0.0055	0.0097	0.013	4.17
RSEM-R6W-EOP	2/22/2022 10:30	APE539	M	C211930	3.0	0.079	0.00074	0.00082	0.0416	<0.0001	<0.001	<0.05	0.000017	42.5	0.0015	0.00092	0.00209	0.051	<0.0002	0.0281	17.6	0.0298	<0.0000019	0.0053	0.0095	0.015	4.00
RSEM-R6W-EOP	2/23/2022 14:00	APE585	M	C211939	4.1	0.0878	0.00074	0.00094	0.0383	<0.0001	<0.001	<0.05	0.000017	39.9	0.0015	0.00093	0.00219	0.054	<0.0002	0.0291	18.1	0.0272	<0.0000019	0.0054	0.0093	0.013	4.06
RSEM-R6W-EOP	2/24/2022 13:10	APF947	M	C212235	3.6	0.0706	0.00073	0.00088	0.0332	<0.0001	<0.001	<0.05	0.000015	36.2	0.0014	0.00084	0.00205	0.062	<0.0002	0.0289	17.3	0.0247	<0.0000019	0.0052	0.0079	0.015	3.86
RSEM-R6W-EOP	2/25/2022 10:00	APF955	M	C212240	3.7	0.0514	0.00069	0.00081	0.0273	<0.0001	<0.001	<0.05	0.000014	32.4	0.0013	0.00069	0.0019	0.043	<0.0002	0.0299	16.9	0.0192	<0.0000019	0.0049	0.0061	0.012	3.76
RSEM-R6W-EOP	2/26/2022 13:00	API827	M	C212869	3.4	0.0424	0.00067	0.00064	0.0286	<0.0001	<0.001	0.058	0.000014	41.3	<0.001	0.00049	0.00164	0.034	<0.0002	0.0309	15.2	0.0158	<0.0000019	0.0043	0.0044	0.013	3.68
RSEM-R6W-EOP	2/27/2022 11:00	API844	M	C212877	3.2	0.0344	0.00062	0.00057	0.028	<0.0001	<0.001	0.07	0.000012	44.6	<0.001	0.0004	0.00151	0.032	<0.0002	0.0329	14.3	0.014	<0.0000019	0.0039	0.0035	0.012	3.55
RSEM-R6W-EOP	2/28/2022 10:00	API841	M	C212874	3.0	0.0369	0.00062	0.00053	0.0275	<0.0001	<0.001	0.057	0.000012	42.6	<0.001	0.0004	0.00159	0.037	<0.0002	0.0314	14.5	0.0144	<0.0000019	0.0039	0.0032	0.013	3.62
RSEM-R6W-EOP	3/1/2022 11:45	APN031	M	C213536	2.48	0.0376	0.00058	0.00044	0.0258	<0.0001	<0.001	0.058	<0.00001	45.2	0.0011	0.00036	0.00163	0.027	<0.0002	0.0341	15.3	0.0126	<0.0000019	0.0036	0.0028	0.015	3.80
RSEM-R6W-EOP	3/1/2022 11:55	APN032	D	C213536	2.55	0.0364	0.00061	0.00045	0.0268	<0.0001	<0.001	0.059	<0.00001	47.3	0.0012	0.00038	0.00165	0.029	<0.0002	0.0353	15.7	0.013	<0.0000019	0.0037	0.0029	0.016	3.90
RSEM-R6W-EOP	3/4/2022 11:15	APQ571	M	C214167	2.2	0.0317	0.00059	0.00044	0.026	<0.0001	<0.001	0.059	<0.00001	46.0	0.0011	0.00036	0.0016	0.021	<0.0002	0.0348	15.5	0.0137	<0.0000019	0.0036	0.0029	0.012	3.83
RSEM-R6W-EOP	3/5/2022 13:20	APS820	M	C214509	2.7	0.0301	0.0006	0.00052	0.0227	<0.0001	<0.001	0.062	<0.00001	38.9	0.0016	0.00045	0.002	0.038	<0.0002	0.0332	18.1	0.0163	<0.0000019	0.0042	0.0037	<0.01	3.20
RSEM-R6W-EOP	3/5/2022 13:30	APS821	D	C214509	2.9	0.0306	0.00061	0.00053	0.023	<0.0001	<0.001	0.062	<0.00001	39.5	0.0017	0.00045	0.00203	0.038	<0.0002	0.034	18.5	0.0165	<0.0000019	0.0043	0.0038	<0.01	3.25
RSEM-R6W-EOP	3/6/2022 10:30	APS817	M	C214508	2.9	0.0374	0.00066	0.00056	0.0221	<0.0001	<0.001	0.064	<0.00001	35.4	0.002	0.00039	0.00226	0.049	<0.0002	0.0357	18.3	0.0146	<0.0000019	0.0044	0.0033	<0.01	3.15
RSEM-R6W-EOP	3/7/2022 10:55	APU818	M	C214856	2.5	0.0438	0.0007	0.00059	0.0231	<0.0001	<0.001	0.072	<0.00001	35.6	0.0021	0.00039	0.0025	0.06	<0.0002	0.0378	18.7	0.0154	<0.0000019	0.0046	0.0033	<0.01	3.20
RSEM-R6W-EOP	3/8/2022 18:30	APV994	M	C215206	2.60	0.0543	0.00104	0.00089	0.0244	<0.0001	<0.001	0.073	<0.00001	25.5	0.003	0.00025	0.00161	0.052	<0.0002	0.0423	19.0	0.0102	<0.0000019	0.0062	0.0021	0.012	3.83
RSEM-R6W-EOP	3/9/2022 11:00	APZ007	M	C215885	3.2	0.0589	0.00112	0.00095	0.0237	<0.0001	<0.001	0.069	<0.00001	24.5	0.004	0.00026	0.00163	0.059	<0.0002	0.0417	19.7	0.0092	<0.0000019	0.0065	0.0023	<0.01	3.89
RSEM-R6W-EOP	3/10/2022 10:00	APZ000	M	C215884	2.6	0.058	0.00117	0.00101	0.0223	<0.0001	<0.001	0.069	<0.00001	22.7	0.0035	0.00025	0.00145	0.058	<0.0002	0.0431	19.4	0.0086	<0.0000019	0.0065	0.002	0.011	3.80
RSEM-R6W-EOP	3/11/2022 10:50	APZ042	M	C215890	2.09	0.0665	0.00131	0.00108	0.0207	<0.0001	<0.001	0.074	<0.00001	19.2	0.004	<0.0002	0.00125	0.066	<0.0002	0.0462	19.4	0.0059	<0.0000019	0.0069	0.0015	<0.01	3.62
RSEM-R6W-EOP	3/12/2022 14:30	AQB294	M	C216354	1.87	0.0511	0.00114	0.00088	0.0225	<0.0001	<0.001	0.067	<0.00001	21.0	0.0033	0.00026	0.00134	0.055	<0.0002	0.0452	18.6	0.0102	<0.0000019	0.0062	0.0022	0.01	3.78
RSEM-R6W-EOP	3/12/2022 14:40	AQB295	D	C216354	1.70	0.0589	0.00113	0.00086	0.0221	<0.0001	<0.001	0.066	<0.00001	20.4	0.0035	0.00026	0.00143	0.059	<0.0002	0.0445	18.4	0.01	<0.0000019	0.006	0.0022	<0.01	3.75
RSEM-R6W-EOP	3/13/2022 11:15	AQB251	M	C216350	2.1	0.0583	0.00127	0.00094	0.0198	<0.0001	<0.001	0.07	<0.00001	16.4	0.0038	<0.0002	0.00111	0.059	<0.0002	0.0493	18.5	0.0077	<0.0000019	0.0065	0.0016	<0.01	3.55
RSEM-R6W-EOP	3/14/2022 10:55	AQB612	M	C216399	1.70	0.0566	0.00122	0.00096	0.02	<0.0001	<0.001	0.07	<0.00001	17.2	0.0035	<0.0002	0.0011	0.061	<0.0002	0.0493	18.8	0.0092	<0.0000019	0.0064	0.0016	<0.01	3.62
RSEM-R6W-EOP	3/15/2022 7:00	AQE813	M	C217150	3.3	0.0469	0.00121	0.00093	0.0209	<0.0001	<0.001	0.069	<0.00001	18.5	0.0033	<0.0002	0.00114	0.046	<0.0002	0.0492	18.9	0.0099	<0.0000019	0.0064	0.0017	<0.01	3.67
RSEM-R6W-EOP	3/17/2022 11:00	AQH797	M	C217776	2.0	0.0739	0.00105	0.00084	0.0308	<0.0001	<0.001	0.062	0.000018	22.5	0.003	0.00031	0.00123	0.114	<0.0002	0.0455	18.6	0.0223	<0.0000019	0.0058	0.0025	0.017	3.61
RSEM-R6W-EOP	3/18/2022 6:00	AQH794	M	C217775	2.18	0.253	0.00089	0.00095	0.0652	<0.0001	<0.001	0.064	0.000054	38.9	0.0033	0.00083	0.00165	0.561	0.00032	0.0383	18.5	0.0761	0.0000036	0.0061	0.0048	0.047	4.06
RSEM-R6W-EOP	3/19/2022 14:05	AQJ971	M	C218236	2.68	0.341	0.00076	0.00099	0.0818	<0.0001	<0.001	0.062	0.000071	49.9	0.0028	0.00163	0.00183	0.76	0.00036	0.0326	17.4	0.115	0.0000031	0.0068	0.0085	0.049	4.36
RSEM-R6W-EOP	3/20/2022 14:35	AQJ912	M	C218219	2.71	0.0858	0.00068	0.00062	0.0789	<0.0001	<0.001	0.054	0.00006	49.4	0.002	0.00134	0.00374	0.134	<0.0002	0.0243	14.4	0.0976	<0.0000019	0.0067	0.0078	0.032	4.05
RSEM-R6W-EOP	3/21/2022 12:40	AQL265	M	C218465	2.25	1.18	0.00077	0.00102	0.0952	<0.0001	<0.001	0.055	0.000074	45.3	0.0069	0.00166	0.00245	1.42	0.00081	0.0243	13.3	0.103	0.0000058	0.0069	0.0093	0.069	3.95
RSEM-R6W-EOP	3/22/2022 14:15	AQN715	M	C218958	2.08	0.667	0.00078	0.00084	0.0906	<0.0001	<0.001	0.056	0.000059	47.1	0.0032	0.00132	0.0021	0.829	0.00047	0.0243	13.5	0.0924	0.0000028	0.007	0.0081	0.05	3.81

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
RSEM-R6W-EOP	3/23/2022 12:00	AQP257	M	C219363	1.97	0.51	0.0008	0.0009	0.0801	<0.0001	<0.001	0.062	0.000054	43.9	0.0033	0.00119	0.00183	0.649	0.00055	0.023	13.5	0.0842	0.0000027	0.0069	0.0081	0.039	3.67
RSEM-R6W-EOP	3/24/2022 10:30	AQP981	M	C219524	2.28	0.237	0.00084	0.00091	0.0705	<0.0001	<0.001	0.062	0.000045	43.2	0.003	0.00099	0.00165	0.409	0.00023	0.0254	14.4	0.0767	<0.0000019	0.007	0.008	0.034	3.65
RSEM-R6W-EOP	3/25/2022 11:30	AQP914	M	C219519	2.09	0.192	0.00086	0.00067	0.0657	<0.0001	<0.001	0.067	0.000041	44.1	0.0026	0.00111	0.00162	0.299	<0.0002	0.0286	15.6	0.0778	<0.0000019	0.0069	0.0082	0.029	3.68
RSEM-R6W-EOP	3/25/2022 11:40	AQP915	D	C219519	2.26	0.136	0.00085	0.00071	0.0648	<0.0001	<0.001	0.064	0.000035	43.8	0.0025	0.00108	0.00149	0.15	<0.0002	0.028	15.5	0.0754	<0.0000019	0.0068	0.0082	0.028	3.71
RSEM-R6W-EOP	3/26/2022 10:50	AQS235	M	C219944	1.62	0.146	0.00077	0.00057	0.0616	<0.0001	<0.001	0.073	0.000034	49.6	0.0016	0.00128	0.0012	0.136	<0.0002	0.0347	13.5	0.0844	<0.0000019	0.0063	0.0083	0.025	3.31
RSEM-R6W-EOP	3/26/2022 11:05	AQS236	D	C219944	2.03	0.134	0.00071	0.00049	0.0572	<0.0001	<0.001	0.071	0.000028	47.6	0.0015	0.00118	0.00112	0.115	<0.0002	0.0342	12.8	0.0781	<0.0000019	0.0058	0.0076	0.023	3.06
RSEM-R6W-EOP	3/27/2022 11:50	AQS345	M	C219976	2.28	0.111	0.00073	0.00045	0.0563	<0.0001	<0.001	0.073	0.000026	51.4	0.0013	0.0014	0.00099	0.06	<0.0002	0.0369	13.2	0.0881	<0.0000019	0.0063	0.0087	0.021	3.32
RSEM-R6W-EOP	3/28/2022 10:40	AQU418	M	C220399	2.66	0.119	0.00089	0.00046	0.0533	<0.0001	<0.001	0.074	0.000024	49.2	0.0018	0.00125	0.00125	0.054	<0.0002	0.0406	13.0	0.0718	0.000002	0.0076	0.0082	0.021	3.60
RSEM-R6W-EOP	3/29/2022 10:20	AQV263	M	C220606	2.28	0.0923	0.001	0.00055	0.0459	<0.0001	<0.001	0.08	0.000015	45.1	0.0022	0.00099	0.00137	0.08	<0.0002	0.0471	12.8	0.0477	<0.0000019	0.0081	0.0075	0.015	3.66
RSEM-R6W-EOP	3/30/2022 11:10	AQX832	M	C221206	2.27	0.0798	0.00093	0.0007	0.036	<0.0001	<0.001	0.068	0.000012	33.3	0.0021	0.00075	0.00152	0.079	<0.0002	0.0409	12.6	0.0311	<0.0000019	0.0069	0.0064	0.014	3.21
RSEM-R6W-EOP	3/31/2022 9:25	AQY795	M	C221428	1.79	0.16	0.0008	0.00071	0.0466	<0.0001	<0.001	0.069	0.000022	39.3	0.0019	0.00105	0.00146	0.123	<0.0002	0.0391	13.2	0.0588	0.0000026	0.0064	0.0076	0.019	3.33
RSEM-R6W-EOP	4/1/2022 11:20	AQY727	M	C221415	1.53	0.119	0.00063	0.00059	0.0489	<0.0001	<0.001	0.059	0.000021	42.7	0.0012	0.00106	0.00114	0.063	<0.0002	0.034	12.5	0.069	0.000002	0.0054	0.0077	0.014	3.00
RSEM-R6W-EOP	4/2/2022 16:55	ARB520	M	C222000	1.66	0.0937	0.00062	0.00047	0.0544	<0.0001	<0.001	<0.05	0.000019	36.9	0.0013	0.00101	0.00119	0.048	<0.0002	0.0278	12.4	0.0661	<0.0000019	0.0052	0.0075	0.015	2.81
RSEM-R6W-EOP	4/3/2022 12:00	ARB459	M	C221989	1.4	0.0848	0.0006	0.00045	0.0496	<0.0001	<0.001	0.054	0.000039	38.9	0.0011	0.00099	0.00114	0.068	<0.0002	0.0302	12.0	0.0592	<0.0000019	0.0049	0.0073	0.016	2.71
RSEM-R6W-EOP	4/4/2022 11:45	ARB188	M	C221904	1.57	0.0738	0.00057	0.00046	0.0459	<0.0001	<0.001	<0.05	0.000022	35.3	0.0011	0.00092	0.00116	0.074	<0.0002	0.0321	12.2	0.0506	<0.0000019	0.0046	0.0076	0.015	2.60
RSEM-R6W-EOP	4/5/2022 11:00	ARE598	M	C222522	1.7	0.0544	0.00051	0.00042	0.0464	<0.0001	<0.001	<0.05	0.000024	33.6	<0.001	0.00077	0.00128	0.083	<0.0002	0.0287	10.9	0.041	<0.0000019	0.0045	0.0066	0.014	2.54
RSEM-R6W-EOP	4/6/2022 12:00	ARI188	M	C223269	1.9	0.0648	0.00061	0.0005	0.0505	<0.0001	<0.001	0.052	0.000025	38.2	0.0011	0.00097	0.00154	0.095	<0.0002	0.0356	13.9	0.0452	<0.0000019	0.0055	0.0089	0.011	3.00
RSEM-R6W-EOP	4/7/2022 16:40	ARI195	M	C223271	1.8	0.063	0.00056	0.00047	0.0545	<0.0001	<0.001	<0.05	0.000024	34.1	0.0014	0.00084	0.00166	0.118	<0.0002	0.033	12.5	0.0398	<0.0000019	0.0049	0.0081	0.017	2.71
RSEM-R6W-EOP	4/8/2022 12:00	ARI199	M	C223273	1.16	0.0822	<0.0005	0.00038	0.0456	<0.0001	<0.001	<0.05	0.000042	21.9	<0.001	0.00059	0.00354	0.175	<0.0002	0.0186	7.35	0.0357	<0.0000019	0.0027	0.0063	0.019	1.64
RSEM-R6W-EOP	4/9/2022 12:30	ARK006	M	C223638	1.55	0.0999	<0.0005	0.00043	0.0488	<0.0001	<0.001	<0.05	0.00003	30.9	0.001	0.00082	0.00134	0.2	<0.0002	0.0259	11.2	0.0494	0.000003	0.0046	0.007	0.018	2.54
RSEM-R6W-EOP	4/10/2022 12:00	ARK077	M	C223661	1.53	0.0841	0.00051	0.00043	0.0552	<0.0001	<0.001	<0.05	0.000027	36.4	0.001	0.00087	0.00185	0.147	<0.0002	0.0261	12.4	0.0617	0.0000026	0.0054	0.0074	0.017	2.84
RSEM-R6W-EOP	4/11/2022 10:00	ARK112	M	C223675	1.80	0.0685	0.00053	0.00044	0.0556	<0.0001	<0.001	<0.05	0.000028	41.9	<0.001	0.00087	0.00111	0.122	<0.0002	0.0296	12.9	0.0679	<0.0000019	0.0053	0.0072	0.016	2.91
RSEM-R6W-EOP	4/12/2022 10:30	ARN334	M	C224402	1.23	0.0597	0.0006	0.00042	0.0612	<0.0001	<0.001	0.057	0.000025	43.0	<0.001	0.00083	0.00111	0.077	<0.0002	0.034	13.8	0.0731	<0.0000019	0.0048	0.0066	0.013	2.89
RSEM-R6W-EOP	4/13/2022 12:10	ARP726	M	C224775	1.25	0.0402	0.00055	0.00039	0.057	<0.0001	<0.001	0.053	0.00002	43.1	<0.001	0.00077	0.00088	0.05	<0.0002	0.0315	13.2	0.0702	<0.0000019	0.0046	0.0062	0.015	2.74
RSEM-R6W-EOP	4/14/2022 9:35	ARQ065	M	C224815	1.39	0.0381	0.00061	0.00042	0.0621	<0.0001	<0.001	0.056	0.000023	44.7	<0.001	0.00083	0.00092	0.043	<0.0002	0.0325	14.2	0.0744	<0.0000019	0.0051	0.0066	0.013	3.01
RSEM-R6W-EOP	4/15/2022 13:55	ARQ200	M	C224832	1.04	0.0488	0.00059	0.00042	0.0652	<0.0001	<0.001	<0.05	0.00003	40.1	<0.001	0.00077	0.00118	0.058	<0.0002	0.0257	13.9	0.0688	<0.0000019	0.0053	0.0065	0.01	3.09
RSEM-R6W-EOP	4/16/2022 13:45	ARR879	M	C225206	1.14	0.0337	0.00072	0.00055	0.0737	<0.0001	<0.001	0.059	0.000028	42.4	0.0011	0.00072	0.00124	0.05	<0.0002	0.0355	15.3	0.0657	<0.0000019	0.0057	0.0068	0.015	3.42
RSEM-R6W-EOP	4/18/2022 13:55	ARU248	M	C225693	1.84	0.0346	0.00068	0.00045	0.0674	<0.0001	<0.001	<0.05	0.000026	45.7	<0.001	0.00053	0.00139	0.047	<0.0002	0.0265	13.8	0.0516	<0.0000019	0.0051	0.0059	0.015	3.12
RSEM-R6W-EOP	4/19/2022 13:40	ARV035	M	C225905	1.09	0.0342	0.00064	0.00044	0.0677	<0.0001	<0.001	0.056	0.00003	47.7	<0.001	0.00063	0.00134	0.051	<0.0002	0.0268	13.9	0.0589	<0.0000019	0.0052	0.0059	<0.01	3.10
RSEM-R6W-EOP	4/20/2022 12:35	ARW668	M	C226267	1.26	0.0289	0.00065	0.0005	0.0693	<0.0001	<0.001	0.055	0.000018	41.7	0.001	0.00062	0.0025	0.04	<0.0002	0.0294	15.1	0.0586	<0.0000019	0.0054	0.0065	<0.01	3.27
RSEM-R6W-EOP	4/21/2022 13:25	ARX707	M	C226546	1.25	0.0294	0.00071	0.00055	0.0711	<0.0001	<0.001	0.059	0.000023	46.6	0.0012	0.00088	0.00135	0.034	<0.0002	0.0336	17.4	0.081	<0.0000019	0.0063	0.0077	0.011	3.69
RSEM-R6W-EOP	4/22/2022 11:45	ARX721	M	C226550	1.80	0.0457	0.00086	0.00074	0.0682	<0.0001	<0.001	0.069	0.000024	45.8	0.0014	0.00086	0.00136	0.058	<0.0002	0.0378	18.9	0.0815	<0.0000019	0.0073	0.0079	<0.01	4.03
RSEM-R6W-EOP	4/23/2022 15:30	ARZ186	M	C226855	2.07	0.0716	0.00085	0.00058	0.0549	<0.0001	<0.001	0.068	0.000021	36.2	0.0013	0.00063	0.00144	0.088	<0.0002	0.0332	17.4	0.0587	<0.0000019	0.0072	0.0057	0.015	3.70
RSEM-R6W-EOP	4/24/2022 11:30	ASA417	M	C227083	2.21	0.0978	0.00102	0.00081	0.0502	<0.0001	<0.001	0.07	0.000015	31.9	0.0017	0.00048	0.00149	0.124	<0.0002	0.031	17.9	0.041	<0.0000019	0.0086	0.005	0.025	4.02
RSEM-R6W-EOP	4/25/2022 11:20	ASA413	M	C227083	1.89	0.0966	0.0009	0.00083	0.0462	<0.0001	<0.001	0.063	0.000017	27.1	0.0017	0.00037	0.00138	0.142	<0.0002	0.0251	15.4	0.0319	<0.0000019	0.0078	0.0038	0.019	3.54
RSEM-R6W-EOP	4/26/2022 11:00	ASD457	M	C227799	1.77	0.074	0.00091	0.00085	0.0435	<0.0001	<0.001	0.072	0.000018	26.4	0.0017	0.00037	0.00135	0.12	<0.0002	0.0294	15.8	0.0283	<0.0000019	0.008	0.0036	0.023	3.62
RSEM-R6W-EOP	4/27/2022 12:00	ASH197	M	C228648	1.73	0.0827	0.00104	0.0007	0.0439	<0.0001	<0.001	0.066	0.00002	26.9	0.0016	0.00037	0.00179	0.119	<0.0002	0.027	16.1	0.0315	<0.0000019	0.0081	0.0038	0.019	3.64
RSEM-R6W-EOP	4/28/2022 12:30	ASH217	M	C228650	1.19	0.116	0.00105	0.00081	0.0479	<0.0001	<0.001	0.069	0.000018	27.7	0.0017	0.00042	0.002	0.194	<0.0002	0.027	17.0	0.0379	<0.0000019	0.008	0.004	0.024	3.86
RSEM-R6W-EOP	4/29/2022 10:00	ASH017	M	C228622	1.61	0.191	0.00108	0.00078	0.0536	<0.0001	<0.001	0.066	0.000031	27.4	0.002	0.00045	0.00175	0.353	0.00025	0.0263	15.7	0.0396	0.0000024	0.0081	0.0036	0.033	3.62
RSEM-R6W-EOP	4/30/2022 12:00	ASL380	M	C229488	1.65	0.18	0.00103	0.0008	0.0534	<0.0001	<0.001	0.063	0.000034	27.9	0.0018	0.00038	0.00113	0.308	<0.0002	0.0235	14.8	0.0369	<0.0000019	0.008	0.003	0.029	3.50
RSEM-R6W-EOP	5/1/2022 11:00	ASL427	M	C229493	1.80	0.162	0.0011	0.00079	0.0548	<0.0001	<0.001	0.065	0.000036	29.7	0.0018	0.00038	0.00103	0.255	<0.0002	0.0239	15.5	0.0359	<0.0000019	0.0083	0.0031	0.026	3.62
RSEM-R6W-EOP	5/2/2022 11:00	ASL340	M	C229475	1.75	0.0807	0.00121	0.00072	0.056	<0.0001	<0.001	0.074	0.000035	31.3	0.0018	0.00044	0.00088	0.115	<0.0002	0.0278	16.7	0.0322	<0.0000019	0.009	0.0039	0.02	3.72
RSEM-R6W-EOP	5/3/2022 14:25	ASO448	M	C230063	1.72	0.0825	0.00124	0.00069	0.0565	<0.0001	<0.001	0.083	0.000028	37.3	0.0018	0.00081	0.00124	0.127	<0.0002	0.0335	21.1	0.0358	<0.0000019	0.0088	0.0067	0.022	4.21
RSEM-R6W-EOP	5/4/2022 12:20	ASP676	M	C230320	2.10	0.0733	0.00126	0.00054	0.0554	<0.0001	<0.001	0.089	0.000032	39.8	0.0016	0.0009	0.00122	0.113	<0.0002	0.0375	21.4	0.0333	<0.0000019	0.0087	0.0072	0.017	4.20
RSEM-R6W-EOP	5/5/2022 11:25	ASR005	M	C230531	1.87	0.0529	0.00117	0.00056	0.0495	<0.0001	<0.001	0.073	0.000031	35.9	0.0013	0.00066	0.00093	0.066	<0.0002	0.0376	19.3	0.0241	<0.0000019	0.008	0.0062	0.016	3.81
RSEM-R6W-EOP	5/6/2022 10:30	ASR072	M	C230545	2.10	0.0644	0.0013	0.00056	0.0543	<0.0001	<0.001	0.08	0.000031	42.5	0.0014	0.00069	0.00133	0.074	<0.0002	0.0429	22.5	0.0262	<0.0000019	0.0087	0.0075	0.018	4.27
RSEM-R6W-EOP	5/7/2022 11:25	ASS943	M	C230886	1.85	0.0707	0.0013	0.0006	0.0579	<0.0001	<0.001	0.082	0.000046	43.5	0.0016	0.0007	0.00141	0.08	<0.0002	0.0441	23.2	0.026	<0.0000019	0.009	0.0081	0.022	4.52
RSEM-R6W-EOP	5/8/2022 14:15	ASS885	M	C230861	1.69	0.102	0.00131	0.0005	0.0563	<0.0001	<0.001	0.079	0.000023	41.9	0.0014	0.00063	0.00125	0.137	<0.0002	0.0437	22.3	0.0249	<0.0000019	0.0085	0.0068	0.024	4.32
RSEM-R6W-EOP	5/8/2022 14:25	ASS884	D	C230861	1.77	0.124	0.00127	0.00062	0.0587	<0.0001	<0.001	0.082	0.000023	42.8	0.0016	0.00068	0.00133	0.142	<0.0002	0.046	23.3	0.0262	<0.0000019	0.0091	0.007	0.025	4.51
RSEM-R6W-EOP	5/9/2022 13:50	ASV292	M	C231306	2.07	0.0722	0.00116	0.00056	0.0519	<0.0001	<0.001	0.097	0.000026	45.5	<0.001	0.00056	0.00164	0.109	<0.0002	0.0494	20.0	0.0223	<0.0000019	0.0094	0.0062	0.016	3.69
RSEM-R6W-EOP	5/10/2022 11:00	ASX004	M	C231638	1.60	0.0876	0.00129	0.00073	0.0586	<0.0001	<0.001	0.094	0.00003	45.1	0.0013	0.00072	0.00142	0.141	<0.0002	0.0503	22.4	0.0279	<0.0000019	0.0098	0.0076	0.024	3.71
RSEM-R6W-EOP	5/11/2022 12:25	ASZ424	M	C232133	2.21	0.0804	0.00154	0.00072	0.0588	<0.0001	<0.001	0.098	0.000031	50.3	0.0017	0.00078	0.00116	0.16	<0.0002	0.049	22.0	0.0295	<0.0000019	0.0102	0.0074	0.025	4.71
RSEM-R6W-EOP	5/12/2022 14:05	ATA814	M	C232369	1.80	0.0633	0.00167	0.00103	0.0586	<0.0001	<0.001	0.105	0.000036	45.2	0.0013	0.00076	0.00108	0.106	<0.0002	0.0591	22.3	0.0252	<0.0000019	0.0113	0.0077	0.019	4.45
RSEM-R6W-EOP	5/13/2022 11:10	ATB012	M	C232410	1.90	0.0551	0.00166	0.00086	0.056	<0.0001	<0.001	0.104	0.000027	45.4	0.0018	0.0008	0.00112	0.098	<0.0002	0.0599	22.5	0.0247	<0.0000019	0.0112	0.0077	0.02	4.63
RSEM-R6W-EOP	5/13/2022 11:20	ATB013	D	C232410	1.78	0.0562	0.00151	0.00105	0.0542	<0.0001	<0.001	0.101	0.000033	44.9	0.0017	0.00074	0.00113	0.096	<0.0002	0.055	21.8	0.0237	<0.0000019	0.011	0.0076	0.023	4.32
RSEM-R6W-EOP	5/14/2022 14:35	ATD059	M	C232817	1.17	0.0506	0.00157	0.00064	0.0536	<0.0001	<0.001	0.109	0.000013	45.9	0.0018	0.0008	0.00178	0.08	<0.0002	0.0558	21.5	0.0245	<0.0000019	0.0115	0.0083	0.022	4.66
RSEM-R6W-EOP	5/15/2022 11:40	ATD051	M	C232812	2.05	0.0451	0.0016	0.00069	0.0504	<0.0001	<0.001	0.109	0.000016	44.5	0.0022	0.00083	0.0011	0.063	<0.0002	0.0553	21.3	0.0246	<0.0000019	0.0111	0.0085	0.018	4.61
RSEM-R6W-EOP	5/16/2022 10:10	ATC672	M	C232726	1.83	0.043	0.00145	0.00107	0.045	<0.0001	<0.001	0.106	0.000018	40.7	0.0024	0.00063	0.00099	0.066	<0.0002	0.0516	20.0	0.0195	<0.0000019	0.0103	0.0078	0.017	4.27
RSEM-R6W-EOP	5/17/2022 12:00	ATH851	M	C233625	2.16	0.0571	0.00195	0.00092	0.0562	<0.0001	<0.001	0.111	0.000021	47.9	0.0013	0.00069	0.00111	0.088	<0.0002	0.0973	25.3	0.0204	<0.0000019	0.0139	0.0076	0.017	4.96
RSEM-R6W-EOP	5/18/2022 12:00	ATJ925	M	C234012	2.02	0.0439	0.00151	0.00068	0.0462	<0.0001	<0.001	0.125	0.000018	45.6	<0.001	0.0005	0.00103	0.082	<0.0002	0.0864	20.9	0.0167	<0.0000019	0.0126	0.0061	<0.01	3.87
RSEM-R6W-EOP	5/19/2022 13:00	ATL911	M	C234314	1.86	0.0446	0.00184	0.00082	0.0502	<0.0001	<0.001	0.101	0.000014	44.3	0.0012	0.00044	0.00093	0.047	<0.0002	0.0932	22.0	0.0144	0.0000021	0.0126	0.0058	<0.01	4.63
RSEM-R6W-EOP	5/20/2022 10:30	ATL359	M	C234241	1.51	0.0415	0.00175	0.00077	0.0493	<0.0001	<0.001	0.131	0.000011	47.7	0.0011	0.00045	0.00087	0.055	<0.0002	0.0992	23.5	0.0146	<0.0000019	0.0145	0.0059	<0.01	4.16
RSEM-R6W-EOP	5/21/2022 10:30	ATN138	M	C234510	2.05	0.049	0.00148	0.00087	0.046	<0.0001	<0.001	0.128	0.000019	41.8	0.0023	0.00041	0.0008	0.05	<0.0002	0.0772	22.2	0.0127	<0.0000019	0.0139	0.0053	<0.01	4.53
RSEM-R6W-EOP	5/22/2022 15:00	ATO535	M	C234788	2.09	0.052	0.00191	0.001	0.0477	<0.0001	<0.001	0.101	0.000012	40.6	0.0012	0.00038	0.00082	0.045	<0.0002	0.0966	21.9	0.0116	<0.0000019	0.0131	0.0055	0.012	4.70
RSEM-R6W-EOP	5/23/2022 11:00	ATO584	M	C234797	2.06	0.0653	0.0019	0.00089	0.0461	<0.0001	<0.001	0.099	0.000011	38.9	0.0016	0.0004	0.0009	0.086	<0.0002	0.0954	20.9	0.011	0.0000025	0.0127	0.0051	0.013	4.48
RSEM-R6W-EOP	5/24/2022 10:40	ATR510	M	C235358	2.50	0.0429	0.00204	0.00098	0.0484	<0.0001	<0.001	0.148	<0.00001	42.4	0.0014	0.00042	0.00087	0.043	<0.0002	0.0549	22.4	0.0111	<0.0000019	0.0136	0.0056	0.012	5.04
RSEM-R6W-EOP	5/25/2022 15:25	ATT369	M	C235730	2.70	0.0468	0.00222	0.00096	0.0455	<0.0001	<0.001	0.161	<0.00001	43.6	0.0019	0.00037	0.00117	0.045	<0.0002	0.0826	23.6	0.01	<0.0000019	0.014	0.0057	0.012	5.22
RSEM-R6W-EOP	5/26/2022 15:30	ATV285	M	C236083	1.94	0.0426	0.00164	0.00089	0.0386	<0.0001	<0.001	0.135	<0.00001	41.0	0.0013	0.00029	0.00075	0.033	<0.0002	0.088	21.5	0.0074	0.0000021	0.0127	0.0042	0.012	4.23

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
RSEM-R6W-EOP	5/27/2022 13:35	ATV301	M	C236089	1.81	0.0661	0.00163	0.0009	0.0395	<0.0001	<0.001	0.143	<0.00001	42.6	0.0013	0.00029	0.00076	0.107	<0.0002	0.093	21.0	0.0082	<0.0000019	0.0127	0.004	0.015	4.33
RSEM-R6W-EOP	5/28/2022 16:30	ATX747	M	C236620	1.43	0.0876	0.00168	0.00128	0.0473	<0.0001	<0.001	0.155	0.000011	42.1	0.002	0.00039	0.00123	0.14	<0.0002	0.085	19.5	0.0131	<0.0000019	0.0126	0.0044	0.03	4.86
RSEM-R6W-EOP	5/29/2022 17:40	ATW969	M	C236421	1.78	0.288	0.00162	0.00118	0.0672	<0.0001	<0.001	0.15	0.000022	49.2	0.0021	0.00058	0.0012	0.367	0.00021	0.0839	19.5	0.026	0.0000021	0.0128	0.0047	0.03	4.93
RSEM-R6W-EOP	5/30/2022 16:25	ATZ466	M	C236894	1.90	0.164	0.00167	0.00148	0.0721	<0.0001	<0.001	0.163	0.000049	50.9	0.0023	0.00168	0.00137	0.221	<0.0002	0.0846	19.1	0.0446	<0.0000019	0.0116	0.0091	0.05	5.39
RSEM-R6W-EOP	5/31/2022 11:30	AUC336	M	C237377	1.46	0.106	0.00168	0.001	0.0693	<0.0001	<0.001	0.156	0.00005	55.3	0.0014	0.00173	0.00114	0.217	<0.0002	0.0984	17.6	0.0411	<0.0000019	0.0125	0.0088	0.019	4.55
RSEM-R6W-EOP	6/1/2022 11:30	AUE681	M	C237797	1.68	0.0807	0.00172	0.00099	0.0678	<0.0001	<0.001	0.161	0.000045	55.4	0.0016	0.00146	0.00099	0.161	<0.0002	0.106	17.6	0.0336	<0.0000019	0.0127	0.0084	0.013	4.63
RSEM-R6W-EOP	6/2/2022 10:40	AUH701	M	C238258	1.84	0.0644	0.0017	0.00098	0.0634	<0.0001	<0.001	0.162	0.000038	56.7	0.0015	0.00124	0.0009	0.131	<0.0002	0.107	15.9	0.0267	<0.0000019	0.0125	0.0078	0.013	4.24
RSEM-R6W-EOP	6/3/2022 13:10	AUH662	M	C238247	1.53	0.0578	0.00199	0.0011	0.0719	<0.0001	<0.001	0.166	0.000036	59.6	0.0018	0.00125	0.00103	0.077	<0.0002	0.115	19.1	0.0248	<0.0000019	0.0147	0.0088	0.012	4.87
RSEM-R6W-EOP	6/4/2022 10:25	AUL721	M	C238905	2.13	0.0367	0.00174	0.00091	0.0597	<0.0001	<0.001	0.164	0.000028	58.2	0.0014	0.00093	0.00087	0.042	<0.0002	0.111	16.6	0.0166	<0.0000019	0.0125	0.0074	<0.01	4.33
RSEM-R6W-EOP	6/5/2022 11:55	AUM441	M	C238986	2.09	0.0483	0.00203	0.00102	0.0665	<0.0001	<0.001	0.171	0.000028	58.9	0.0017	0.0009	0.00106	0.059	<0.0002	0.116	19.7	0.0165	<0.0000019	0.0145	0.008	0.011	4.97
RSEM-R6W-EOP	6/6/2022 10:50	AUO790	M	C239365	2.29	0.0369	0.00196	0.00082	0.0589	<0.0001	<0.001	0.201	0.00002	55.1	0.0014	0.00064	0.0009	0.048	<0.0002	0.114	19.9	0.0121	<0.0000019	0.0119	0.0065	0.011	5.11
RSEM-R6W-EOP	6/7/2022 12:00	AUT413	M	C240162	3.06	0.0326	0.00211	0.00098	0.0634	<0.0001	<0.001	0.183	0.000014	56.6	0.0021	0.00069	0.00141	0.023	<0.0002	0.117	22.4	0.0122	<0.0000019	0.0153	0.0078	0.01	6.20
RSEM-R6W-EOP	6/8/2022 13:00	AUT295	M	C240147	3.32	0.0338	0.00222	0.00103	0.0623	<0.0001	<0.001	0.21	0.000027	56.4	0.0021	0.00059	0.00115	0.028	<0.0002	0.121	22.8	0.0116	<0.0000019	0.0158	0.0074	0.015	6.27
RSEM-R6W-EOP	6/9/2022 13:30	AUV206	M	C240504	2.05	0.0315	0.00218	0.00102	0.0592	<0.0001	<0.001	0.19	0.000017	54.4	0.0021	0.0005	0.00121	0.022	<0.0002	0.114	22.3	0.011	<0.0000019	0.0155	0.0065	0.011	6.19
RSEM-R6W-EOP	6/10/2022 11:00	AUV211	M	C240508	2.04	0.0299	0.00222	0.00101	0.0604	<0.0001	<0.001	0.184	0.000012	56.0	0.0021	0.00044	0.00134	0.023	<0.0002	0.119	23.1	0.0102	<0.0000019	0.016	0.0066	0.016	6.41
RSEM-R6W-EOP	6/11/2022 10:00	AUY735	M	C241062	2.18	0.037	0.00205	0.00095	0.0564	<0.0001	<0.001	0.253	<0.00001	52.7	0.002	0.00042	0.00105	0.047	<0.0002	0.127	23.2	0.0096	<0.0000019	0.0147	0.0055	0.014	6.42
RSEM-R6W-EOP	6/12/2022 10:30	AUY703	M	C241043	1.67	0.0297	0.0021	0.00096	0.0559	<0.0001	<0.001	0.248	<0.00001	50.3	0.002	0.00036	0.00103	0.03	<0.0002	0.126	22.7	0.0077	<0.0000019	0.0153	0.0051	0.012	6.45
RSEM-R6W-EOP	6/13/2022 12:00	AVD504	M	C241814	2.23	0.0313	0.00191	0.00087	0.0526	<0.0001	<0.001	0.263	<0.00001	48.8	0.002	0.0003	0.00103	0.026	<0.0002	0.122	20.6	0.0062	<0.0000019	0.0155	0.0046	<0.01	6.14
RSEM-R6W-EOP	6/14/2022 10:30	AVD543	M	C241829	2.22	0.0324	0.00191	0.00086	0.0514	<0.0001	<0.001	0.255	<0.00001	46.0	0.0022	0.00029	0.00111	0.037	<0.0002	0.115	20.0	0.0064	<0.0000019	0.0154	0.0044	<0.01	6.13
RSEM-R6W-EOP	6/15/2022 11:55	AVG248	M	C242252	2.11	0.0316	0.00203	0.00093	0.0515	<0.0001	<0.001	0.276	<0.00001	46.3	0.0022	0.00028	0.00117	0.031	<0.0002	0.118	21.0	0.0067	<0.0000019	0.0166	0.0044	<0.01	6.57
RSEM-R6W-EOP	6/16/2022 12:45	AVK123	M	C242788	2.19	0.0371	0.00204	0.00091	0.0502	<0.0001	<0.001	0.268	<0.00001	44.9	0.0023	0.00027	0.00153	0.032	<0.0002	0.117	20.3	0.0078	<0.0000019	0.0168	0.0041	0.014	6.39
RSEM-R6W-EOP	6/17/2022 11:35	AVK724	M	C242942	2.04	0.051	0.00188	0.00104	0.0536	<0.0001	<0.001	0.224	0.000029	46.2	0.0021	0.00029	0.00148	0.056	<0.0002	0.102	22.2	0.0116	<0.0000019	0.0176	0.0043	0.014	6.63
RSEM-R6W-EOP	6/18/2022 12:45	AVL989	M	C243162	2.06	0.0419	0.00201	0.001	0.0523	<0.0001	<0.001	0.256	<0.00001	52.6	0.0021	0.0003	0.00147	0.062	<0.0002	0.115	22.3	0.01	0.0000021	0.0178	0.0037	0.01	6.76
RSEM-R6W-EOP	6/19/2022 11:50	AVM019	M	C243177	1.82	0.0474	0.00189	0.00095	0.0511	<0.0001	<0.001	0.257	<0.00001	52.4	0.002	0.00029	0.00139	0.079	<0.0002	0.112	21.4	0.01	<0.0000019	0.0169	0.0036	0.011	6.48
RSEM-R6W-EOP	6/20/2022 10:50	AVO965	M	C243664	2.00	0.0605	0.00179	0.0009	0.0495	<0.0001	<0.001	0.277	<0.00001	48.7	0.0018	0.00026	0.00133	0.072	<0.0002	0.112	19.8	0.0087	<0.0000019	0.0165	0.0034	0.011	6.24
RSEM-R6W-EOP	6/21/2022 11:35	AVQ611	M	C244010	2.47	0.0491	0.00163	0.00096	0.0526	<0.0001	<0.001	0.251	<0.00001	50.7	0.0019	0.0003	0.0012	0.068	<0.0002	0.099	25.3	0.0105	0.0000021	0.0167	0.0038	<0.01	6.86
RSEM-R6W-EOP	6/22/2022 11:05	AVT153	M	C244412	2.43	0.0387	0.00153	0.0009	0.0522	<0.0001	<0.001	0.26	<0.00001	52.9	0.002	0.00028	0.00111	0.054	<0.0002	0.0968	26.5	0.0099	<0.0000019	0.0162	0.004	0.013	6.87
RSEM-R6W-EOP	6/23/2022 11:15	AVV597	M	C244839	2.88	0.0397	0.00146	0.00089	0.0528	<0.0001	<0.001	0.252	<0.00001	53.5	0.0019	0.00028	0.00132	0.064	<0.0002	0.0914	25.8	0.0091	<0.0000019	0.0156	0.0042	0.012	6.49
RSEM-R6W-EOP	6/24/2022 11:10	AVV588	M	C244835	2.11	0.0367	0.00137	0.00082	0.053	<0.0001	<0.001	0.244	<0.00001	56.5	0.0017	0.00027	0.00112	0.053	<0.0002	0.0861	26.3	0.0082	0.0000024	0.0147	0.0041	<0.01	6.33
RSEM-R6W-EOP	6/25/2022 10:40	AVZ707	M	C245512	2.37	0.0356	0.00135	0.00086	0.0534	<0.0001	<0.001	0.236	<0.00001	61.1	0.0016	0.00026	0.0011	0.042	<0.0002	0.08	28.0	0.0078	<0.0000019	0.0142	0.0041	0.012	6.35
RSEM-R6W-EOP	6/26/2022 10:15	AVZ580	M	C245500	2.42	0.0396	0.00142	0.00088	0.0585	<0.0001	<0.001	0.234	<0.00001	63.2	0.0017	0.00027	0.0011	0.042	<0.0002	0.0779	30.2	0.0084	<0.0000019	0.015	0.0044	<0.01	6.66
RSEM-R6W-EOP	6/27/2022 10:25	AVY533	M	C245274	2.08	0.0335	0.00126	0.00084	0.0529	<0.0001	<0.001	0.221	<0.00001	59.9	0.0015	0.00024	0.00109	0.041	<0.0002	0.0708	27.3	0.008	<0.0000019	0.0131	0.0039	<0.01	6.02
RSEM-R6W-EOP	6/28/2022 13:00	AWH753	M	C246896	2.64	0.0297	0.0015	0.00092	0.0599	<0.0001	<0.001	0.24	<0.00001	67.4	0.0013	0.00024	0.00111	0.036	<0.0002	0.0756	31.0	0.0087	<0.0000019	0.014	0.0038	0.011	6.38
RSEM-R6W-EOP	6/29/2022 15:00	AWH758	M	C246898	2.71	0.0244	0.00148	0.00094	0.0624	<0.0001	<0.001	0.246	0.000012	68.2	0.0014	0.00027	0.00123	0.035	<0.0002	0.0764	30.9	0.0119	<0.0000019	0.0143	0.0052	0.012	6.81
RSEM-R6W-EOP	6/30/2022 13:00	AWH756	M	C246897	2.57	0.0233	0.0014	0.00085	0.0551	<0.0001	<0.001	0.231	<0.00001	65.7	0.0014	0.00022	0.00109	0.032	<0.0002	0.0671	29.1	0.0087	0.0000026	0.014	0.0037	<0.01	6.36
RSEM-R6W-EOP	7/1/2022 13:00	AWJ894	M	C247203	2.84	0.0324	0.00138	0.00094	0.0506	<0.0001	<0.001	0.213	0.000015	54.5	0.0018	0.00024	0.00143	0.026	<0.0002	0.0617	32.3	0.0086	<0.0000019	0.0152	0.0039	0.011	6.34
RSEM-R6W-EOP	7/2/2022 12:30	AWJ849	M	C247196	3.04	0.0296	0.00146	0.001	0.054	<0.0001	<0.001	0.198	0.000012	59.1	0.0016	0.00021	0.00119	0.028	<0.0002	0.0607	30.9	0.009	<0.0000019	0.016	0.0036	<0.01	6.62
RSEM-R6W-EOP	7/3/2022 11:30	AWM046	M	C247492	3.38	0.0287	0.00134	0.00085	0.0506	<0.0001	<0.001	0.233	<0.00001	62.8	0.0014	0.00021	0.00372	0.035	<0.0002	0.0659	29.0	0.0077	<0.0000019	0.0137	0.0033	<0.01	6.30
RSEM-R6W-EOP	7/4/2022 10:30	AWM516	M	C247552	2.94	0.0336	0.00137	0.00088	0.0505	<0.0001	<0.001	0.236	<0.00001	64.1	0.0014	0.00021	0.00118	0.053	<0.0002	0.068	28.9	0.008	<0.0000019	0.0138	0.0033	<0.01	6.39
RSEM-R6W-EOP	7/5/2022 10:10	AWR507	M	C248315	3.13	0.0397	0.00131	0.00087	0.047	<0.0001	<0.001	0.211	<0.00001	59.0	0.0014	<0.0002	0.00109	0.035	<0.0002	0.0604	28.4	0.0075	<0.0000019	0.0134	0.0028	<0.01	6.04
RSEM-R6W-EOP	7/6/2022 14:25	AWV910	M	C249077	2.68	0.0368	0.00142	0.00105	0.0465	<0.0001	<0.001	0.22	<0.00001	56.0	0.0016	0.00024	0.00132	0.05	<0.0002	0.0622	32.1	0.0084	<0.0000019	0.0161	0.0029	0.018	7.11
RSEM-R6W-EOP	7/7/2022 11:55	AWW343	M	C249139	3.08	0.0308	0.00143	0.00109	0.0476	<0.0001	<0.001	0.211	0.000014	56.9	0.0021	0.00025	0.00157	0.043	<0.0002	0.0587	32.8	0.0092	0.0000027	0.0166	0.0033	0.022	7.38
RSEM-R6W-EOP	7/8/2022 11:45	AWW522	M	C249170	3.31	0.0354	0.00145	0.00112	0.0459	<0.0001	<0.001	0.222	0.000013	56.3	0.0019	0.00026	0.00131	0.054	<0.0002	0.0631	32.4	0.0112	0.0000034	0.0169	0.0033	0.02	7.35
RSEM-R6W-EOP	7/9/2022 10:50	AWZ517	M	C249625	3.22	0.0317	0.00142	0.00114	0.044	<0.0001	<0.001	0.227	0.000015	54.7	0.0018	0.00024	0.00132	0.05	<0.0002	0.0636	31.2	0.0105	<0.0000019	0.0168	0.0031	0.017	7.30
RSEM-R6W-EOP	7/10/2022 14:20	AWZ487	M	C249617	3.46	0.0298	0.00142	0.00114	0.0404	<0.0001	<0.001	0.214	0.000019	53.0	0.0017	0.00024	0.0013	0.045	<0.0002	0.0535	30.7	0.0104	<0.0000019	0.0168	0.003	0.021	7.29
RSEM-R6W-EOP	7/11/2022 12:45	AXC658	M	C250105	2.83	0.0582	0.00143	0.00124	0.0426	<0.0001	<0.001	0.234	<0.00001	52.5	0.0031	0.00029	0.00148	0.123	<0.0002	0.0628	31.2	0.0089	0.0000024	0.0175	0.0027	0.024	7.49
RSEM-R6W-EOP	7/12/2022 12:25	AXE618	M	C250400	2.22	0.0452	0.00138	0.00117	0.0448	<0.0001	<0.001	0.231	<0.00001	50.3	0.0017	0.00025	0.00133	0.081	<0.0002	0.0595	29.9	0.0078	<0.0000019	0.0165	0.0024	0.021	7.38
RSEM-R6W-EOP	7/13/2022 11:35	AXH415	M	C250934	3.07	0.051	0.00142	0.00118	0.0515	<0.0001	<0.001	0.219	<0.00001	49.1	0.0019	0.00025	0.00138	0.065	<0.0002	0.0586	30.0	0.0087	<0.0000019	0.0164	0.0026	0.015	7.36
RSEM-R6W-EOP	7/14/2022 12:30	AXJ119	M	C251290	3.53	0.0622	0.0015	0.0012	0.059	<0.0001	<0.001	0.233	<0.00001	50.3	0.0018	0.00025	0.00136	0.082	<0.0002	0.0592	30.2	0.0093	<0.0000019	0.0167	0.0024	0.017	7.89
RSEM-R6W-EOP	7/15/2022 13:20	AXJ365	M	C251330	2.94	0.0566	0.00145	0.00116	0.0625	<0.0001	<0.001	0.222	<0.00001	49.8	0.0018	0.00023	0.0013	0.069	<0.0002	0.0545	29.5	0.0092	0.0000021	0.0162	0.0023	0.017	7.62
RSEM-R6W-EOP	7/16/2022 11:40	AXN331	M	C251927	3.56	0.0569	0.00138	0.00116	0.0624	<0.0001	<0.001	0.203	0.000011	50.1	0.002	0.00025	0.00129	0.063	<0.0002	0.0491	30.2	0.0108	0.0000076	0.0162	0.0024	0.018	7.53
RSEM-R6W-EOP	7/17/2022 10:50	AXN589	M	C251966	3.48	0.0401	0.00143	0.00124	0.0695	<0.0001	<0.001	0.198	<0.00001	54.5	0.0021	0.00022	0.00128	0.055	<0.0002	0.0506	31.8	0.0103	0.0000026	0.0141	0.0024	0.014	8.26
RSEM-R6W-EOP	7/18/2022 14:30	AXQ724	M	C252515	2.38	0.0655	0.00123	0.00109	0.0629	<0.0001	<0.001	0.186	<0.00001	45.6	0.002	0.00021	0.00118	0.067	<0.0002	0.0437	28.0	0.01	<0.0000019	0.0152	0.0022	0.015	7.18
RSEM-R6W-EOP	7/19/2022 12:30	AXQ709	M	C252510	2.98	0.0468	0.00135	0.00117	0.0691	<0.0001	<0.001	0.191	<0.00001	53.8	0.0024	0.00021	0.00134	0.058	<0.0002	0.0456	31.7	0.0094	0.0000025	0.0167	0.0025	0.012	8.33
RSEM-R6W-EOP	7/20/2022 14:30	AXX166	M	C253451	2.99	0.0535	0.00131	0.0012	0.0657	<0.0001	<0.001	0.208	<0.00001	48.1	0.0024	<0.0002	0.00126	0.059	<0.0002	0.0474	29.4	0.0079	<0.0000019	0.0165	0.0022	0.012	8.15
RSEM-R6W-EOP	7/21/2022 13:30	AXX155	M	C253447	2.73	0.0494	0.00127	0.00116	0.0629	<0.0001	<0.001	0.214	<0.00001	47.0	0.0023	<0.0002	0.00114	0.049	<0.0002	0.0472	28.2	0.0067	<0.0000019	0.0164	0.0021	0.013	7.85
RSEM-R6W-EOP	7/22/2022 10:30	AXX134	M	C253442	2.84	0.0487	0.0013	0.00123	0.063	<0.0001	<0.001	0.207	0.000012	48.2	0.0023	<0.0002	0.00112	0.034	<0.0002	0.0489	28.5	0.0059	<0.0000019	0.0168	0.0021	0.017	8.12
RSEM-R6W-EOP	7/23/2022 10:00	AYB214	M	C254120	3.90	0.0532	0.00132	0.00124	0.0643	<0.0001	<0.001	0.215	<0.00001	45.1	0.0025	<0.0002	0.00116	0.03	<0.0002	0.0435	29.2	0.0043	0.0000024	0.0168	0.0021	0.019	7.96
RSEM-R6W-EOP	7/24/2022 13:30	AYC677	M	C254290	3.54	0.0666	0.0013	0.00124	0.0608	<0.0001	<0.001	0.212	<0.00001	41.6	0.0022	<0.0002	0.00114	0.055	<0.0002	0.0418	27.7	0.0067	<0.0000019	0.0161	0.002	0.014	7.74
RSEM-R6W-EOP	7/25/2022 9:30	AYC675	M	C254289	3.07	0.0435	0.00131	0.00132	0.0659	<0.0001	<0.001	0.293	<0.00001	42.9	0.0022	<0.0002	0.00117	0.05	<0.0002	0.0439	28.1	0.0064	<0.0000019	0.0168	0.002	0.021	7.83
RSEM-R6W-EOP	7/26/2022 11:25	AYG702	M	C254966	3.13	0.0526	0.00125	0.00141	0.065	<0.0001	<0.001	0.207	0.000148	46.6	0.0022	0.00027	0.00135	0.04	<0.0002	0.0415	28.0	0.0072	<0.0000019	0.016	0.0021	0.033	7.76
RSEM-R6W-EOP	7/28/2022 12:50	AYM153	M	C255903	3.14	0.0847	0.00128	0.00124	0.0696	<0.0001	<0.001	0.197	<0.00001	42.5	0.0021	<0.0002	0.00122	0.067	<0.0002	0.0406	27.4	0.0071	<0.0000019	0.0164	0.0019	0.014	7.68
RSEM-R6W-EOP	7/29/2022 12:30	AYM048	M	C255900	2.99	0.101	0.00126	0.00126	0.071	<0.0001	<0.001	0.199	<0.00001	43.0	0.0019	<0.0002	0.00129	0.079	<0.0002	0.0411	27.3	0.0097	<0.0000019	0.0163	0.002	0.014	7.62
RSEM-R6W-EOP	7/30/2022 12:15	AYP672	M	C256352	3.16	0.0664	0.00118	0.00118	0.0735	<0.0001	<0.001	0.186	<0.00001	42.2	0.0024	<0.0002	0.0015	0.068	<0.0002	0.0368	25.6	0.0084	<0.0000019	0.0153	0.0021	0.013	7.23
RSEM-R6W-EOP	7/31/2022 12:05	AYO874	M	C256301	3.2	0.0523	0.00115	0.00118	0.0765	<0.0001	<0.001	0.174	<0.00001	42.0	0.0016	<0.0002	0.00122	0.049	<0.0002	0.0344	24.1	0.0077	<0.0000019	0.015	0.0018	0.015	7.02
RSEM-R6W-EOP	8/1/2022 12:05	AYR822	M	C256691	3.2	0.0512	0.0009	0.00108	0.0639	<0.0001	<0.001	0.176	<0.00001	39.2	0.0013	<0.0002	0.00102	0.052	<0.0002	0.0307	24.1	0.0063	<0.0000019	0.0128	0.0015	0.013	6.39
RSEM-R6W-EOP	8/2/2022 11:55	AYU378	M	C257067	2.8	0.0523	0.00108	0.00109	0.0782	<0.0001	<0.001	0.176	0.000013	42.1	0.0014	<0.0002	0.00131	0.057	<0.0002	0.0312	22.7	0.0063	<0.0000019	0.0146	0.0017	<0.01	6.97
RSEM-R6W-EOP	8/3/2022 12:00	AYX381	M	C257672	3.02	0.0694	0.00106	0.00107	0.0786	<0.0001	<0.001	0.174	<0.00001	41.5	0.0014	<0.0002	0.00121	0.069	<0.0002	0.0294	22.7	0.0055	<0.0000019	0.014	0.0016	0.015	6.87

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
RSEM-R6W-EOP	8/4/2022 11:20	AYY904	M	C257848	3.48	0.0608	0.00109	0.00101	0.0674	<0.0001	<0.001	0.176	<0.00001	39.1	0.0014	<0.0002	0.00113	0.068	<0.0002	0.0285	19.7	0.0041	<0.0000019	0.0147	0.0014	0.015	6.85
RSEM-R6W-EOP	8/5/2022 10:20	AYY784	M	C257846	3.42	0.0598	0.00117	0.00106	0.0761	<0.0001	<0.001	0.171	<0.00001	41.2	0.0013	<0.0002	0.00113	0.056	<0.0002	0.0299	21.4	0.0044	<0.0000019	0.015	0.0015	0.014	7.07
RSEM-R6W-EOP	8/6/2022 11:30	AZA356	M	C258076	2.79	0.0654	0.00111	0.00097	0.064	<0.0001	<0.001	0.173	<0.00001	35.1	0.0014	<0.0002	0.00176	0.048	<0.0002	0.0295	19.6	0.0032	<0.0000019	0.014	0.0014	0.012	6.84
RSEM-R6W-EOP	8/7/2022 12:20	AZC301	M	C258444	3.37	0.0753	0.00111	0.00098	0.0641	<0.0001	<0.001	0.16	0.000011	34.5	0.0016	<0.0002	0.00116	0.081	<0.0002	0.0222	17.7	0.0041	<0.0000019	0.014	0.0015	0.016	6.43
RSEM-R6W-EOP	8/8/2022 16:30	AZK278	M	C259762	2.76	0.0837	0.00106	0.0009	0.072	<0.0001	<0.001	0.151	<0.00001	36.8	0.0016	<0.0002	0.00103	0.07	<0.0002	0.0255	19.1	0.0035	<0.0000019	0.0135	0.0017	0.013	6.28
RSEM-R6W-EOP	8/9/2022 13:30	AZK374	M	C259776	2.00	0.0522	0.00103	0.00088	0.0735	<0.0001	<0.001	0.15	<0.00001	36.5	0.0013	<0.0002	0.00095	0.027	<0.0002	0.025	19.1	0.0026	<0.0000019	0.0137	0.0017	0.012	5.94
RSEM-R6W-EOP	8/10/2022 15:30	AZL948	M	C259983	3.00	0.0465	0.00098	0.00087	0.0709	<0.0001	<0.001	0.146	<0.00001	35.6	0.0012	<0.0002	0.00092	0.023	<0.0002	0.0239	18.1	0.0023	<0.0000019	0.0133	0.0015	0.012	5.71
RSEM-R6W-EOP	8/11/2022 14:00	AZL944	M	C259981	3.45	0.0534	0.001	0.00089	0.0756	<0.0001	<0.001	0.144	<0.00001	36.5	0.0013	<0.0002	0.001	0.028	<0.0002	0.024	19.2	0.0023	<0.0000019	0.0137	0.0016	0.011	5.93
RSEM-R6W-EOP	8/12/2022 12:30	AZL946	M	C259982	3.10	0.0682	0.001	0.00089	0.0777	<0.0001	<0.001	0.143	<0.00001	38.1	0.0012	<0.0002	0.00097	0.044	<0.0002	0.0241	19.3	0.0025	<0.0000019	0.0136	0.0017	0.015	5.88
RSEM-R6W-EOP	8/13/2022 10:30	AZR091	M	C260796	2.80	0.0321	0.00098	0.00089	0.0784	<0.0001	<0.001	0.135	<0.00001	38.7	0.0012	<0.0002	0.00107	0.021	<0.0002	0.0235	18.5	0.0019	<0.0000019	0.0136	0.0016	0.013	6.08
RSEM-R6W-EOP	8/14/2022 15:00	AZR293	M	C260829	1.68	0.035	0.00092	0.00091	0.08	<0.0001	<0.001	0.129	0.00002	35.2	0.0013	<0.0002	0.00116	0.041	<0.0002	0.0236	18.3	0.0026	<0.0000019	0.013	0.0017	0.019	5.79
RSEM-R6W-EOP	8/15/2022 15:00	AZW325	M	C261663	2.69	0.0292	0.00094	0.00086	0.0777	<0.0001	<0.001	0.129	0.000011	35.9	0.001	<0.0002	0.0011	0.029	<0.0002	0.0223	17.8	0.0022	<0.0000019	0.0125	0.0015	0.016	5.89
RSEM-R6W-EOP	8/16/2022 13:30	AZW501	M	C261690	3.54	0.0495	0.00098	0.00095	0.0837	<0.0001	<0.001	0.145	<0.00001	37.8	<0.001	0.00101	0.00108	0.031	<0.0002	0.0251	18.9	0.0022	<0.0000019	0.0143	0.0015	0.012	5.70
RSEM-R6W-EOP	8/17/2022 14:00	BAA264	M	C262437	3.09	0.0531	0.00099	0.00102	0.0842	<0.0001	<0.001	0.145	<0.00001	37.7	<0.001	<0.0002	0.001	0.034	<0.0002	0.0255	18.7	0.0017	<0.0000019	0.014	0.0015	0.02	5.83
RSEM-R6W-EOP	8/18/2022 13:30	BAA275	M	C262439	3.21	0.0925	0.00092	0.00099	0.0832	<0.0001	<0.001	0.131	<0.00001	36.4	0.0011	<0.0002	0.00148	0.093	<0.0002	0.0231	18.6	0.0068	<0.0000019	0.0132	0.0016	0.015	5.49
RSEM-R6W-EOP	8/19/2022 10:30	BAA261	M	C262436	3.25	0.0605	0.00093	0.0009	0.0876	<0.0001	<0.001	0.139	<0.00001	37.4	<0.001	<0.0002	0.00103	0.052	<0.0002	0.0253	19.4	0.004	<0.0000019	0.0135	0.0016	0.011	5.88
RSEM-R6W-EOP	8/20/2022 12:00	BAD641	M	C262969	5.05	0.0498	0.00093	0.0009	0.0855	<0.0001	<0.001	0.133	<0.00001	37.8	<0.001	<0.0002	0.00109	0.04	<0.0002	0.0221	18.4	0.0039	<0.0000019	0.0131	0.0017	<0.01	5.68
RSEM-R6W-EOP	8/21/2022 11:30	BAD602	M	C262959	2.47	0.0401	0.00093	0.00088	0.0778	<0.0001	<0.001	0.074	<0.00001	33.7	<0.001	<0.0002	0.00106	0.028	<0.0002	0.0138	17.7	0.0033	<0.0000019	0.0129	0.0015	<0.01	5.76
RSEM-R6W-EOP	8/22/2022 14:00	BAG919	M	C263407	2.79	0.0413	0.00095	0.00097	0.0703	<0.0001	<0.001	<0.05	<0.00001	25.8	0.001	<0.0002	0.0013	0.021	<0.0002	0.0071	17.0	0.0029	<0.0000019	0.0134	0.0015	<0.01	5.80
RSEM-R6W-EOP	8/23/2022 14:30	BAM965	M	C264451	3.14	0.0412	0.00106	0.00096	0.0664	<0.0001	<0.001	0.143	<0.00001	28.5	0.001	<0.0002	0.00117	0.025	<0.0002	0.0249	17.4	0.003	<0.0000019	0.0145	0.0015	<0.01	5.98
RSEM-R6W-EOP	8/24/2022 14:00	BAM916	M	C264441	3.35	0.0415	0.00109	0.00098	0.0637	<0.0001	<0.001	0.145	<0.00001	26.8	0.0011	<0.0002	0.00111	0.025	<0.0002	0.0248	16.9	0.0028	<0.0000019	0.015	0.0015	<0.01	6.07
RSEM-R6W-EOP	8/25/2022 15:20	BAO145	M	C264632	4.92	0.0432	0.00108	0.00108	0.0617	<0.0001	<0.001	0.139	<0.00001	28.2	<0.001	<0.0002	0.00119	0.025	<0.0002	0.0233	17.7	0.0027	<0.0000019	0.0156	0.0015	<0.01	6.51
RSEM-R6W-EOP	8/26/2022 7:00	BAO138	M	C264629	4.47	0.0544	0.00118	0.00105	0.0632	<0.0001	<0.001	0.179	<0.00001	26.1	0.0011	<0.0002	0.00113	0.025	<0.0002	0.0276	17.9	0.0023	<0.0000019	0.0159	0.0014	<0.01	6.35
RSEM-R6W-EOP	8/27/2022 13:00	BAR926	M	C265307	3.14	0.0522	0.00122	0.00111	0.0634	<0.0001	<0.001	0.184	<0.00001	25.9	0.0011	<0.0002	0.00118	0.029	<0.0002	0.0286	17.7	0.0039	<0.0000019	0.0164	0.0016	<0.01	6.46
RSEM-R6W-EOP	8/28/2022 14:30	BAR947	M	C265316	2.99	0.0559	0.00115	0.00116	0.0585	<0.0001	<0.001	0.167	<0.00001	25.8	<0.001	<0.0002	0.00124	0.041	<0.0002	0.027	17.3	0.0026	<0.0000019	0.0159	0.0013	<0.01	6.69
RSEM-R6W-EOP	8/29/2022 14:00	BAU334	M	C265774	3.50	0.0604	0.00111	0.00108	0.06	<0.0001	<0.001	0.166	<0.00001	25.8	0.0012	<0.0002	0.00138	0.049	<0.0002	0.0254	16.1	0.0029	<0.0000019	0.0154	0.0014	<0.01	6.18
RSEM-R6W-EOP	8/30/2022 14:00	BBA810	M	C266812	2.81	0.0599	0.00106	0.00106	0.0602	<0.0001	<0.001	0.151	<0.00001	26.1	<0.001	<0.0002	0.00112	0.062	<0.0002	0.0223	15.9	0.0034	<0.0000019	0.0146	0.0014	<0.01	6.08
RSEM-R6W-EOP	8/31/2022 14:00	BBA807	M	C266810	1.81	0.0611	0.00101	0.00102	0.0599	<0.0001	<0.001	0.142	<0.00001	26.1	<0.001	<0.0002	0.00113	0.045	<0.0002	0.0216	15.9	0.0039	<0.0000019	0.014	0.0014	<0.01	5.83
RSEM-R6W-EOP	9/1/2022 13:30	BBC913	M	C267169	3.39	0.0367	0.00104	0.00104	0.0637	<0.0001	<0.001	0.156	<0.00001	27.1	<0.001	<0.0002	0.0013	0.038	<0.0002	0.024	17.2	0.0045	<0.0000019	0.0141	0.0015	<0.01	6.35
RSEM-R6W-EOP	9/2/2022 9:30	BBC921	M	C267172	3.71	0.0402	0.00105	0.00109	0.0628	<0.0001	<0.001	0.148	<0.00001	27.2	<0.001	<0.0002	0.00122	0.027	<0.0002	0.0246	16.8	0.0031	<0.0000019	0.0138	0.0013	<0.01	6.02
RSEM-R6W-EOP	9/3/2022 15:00	BBE155	M	C267383	5.81	0.0796	0.00102	0.00109	0.065	<0.0001	<0.001	0.162	<0.00001	27.4	0.001	<0.0002	0.00118	0.065	<0.0002	0.0264	17.7	0.003	<0.0000019	0.0147	0.0013	0.01	6.07
RSEM-R6W-EOP	9/4/2022 14:30	BBI405	M	C268301	2.66	0.0607	0.00098	0.00109	0.0602	<0.0001	<0.001	0.149	<0.00001	26.0	<0.001	<0.0002	0.0013	0.067	<0.0002	0.024	16.9	0.0031	<0.0000019	0.0141	0.0012	<0.01	6.03
RSEM-R6W-EOP	9/5/2022 13:30	BBI328	M	C268286	2.44	0.0554	0.00105	0.00114	0.0566	<0.0001	<0.001	0.152	<0.00001	24.0	<0.001	<0.0002	0.0012	0.056	<0.0002	0.0241	16.4	0.0028	<0.0000019	0.0146	0.0012	<0.01	6.34
RSEM-R6W-EOP	9/6/2022 15:25	BBI319	M	C268280	3.34	0.0506	0.00115	0.00121	0.0528	<0.0001	<0.001	0.164	<0.00001	21.8	0.0011	<0.0002	0.00121	0.051	<0.0002	0.0253	15.8	0.0027	<0.0000019	0.0154	0.0011	<0.01	6.43
RSEM-R6W-EOP	9/7/2022 12:10	BBM324	M	C268788	3.32	0.0721	0.00133	0.00139	0.0524	<0.0001	<0.001	0.195	<0.00001	20.3	0.0013	0.00023	0.00119	0.056	<0.0002	0.0276	16.3	0.0023	<0.0000019	0.0169	0.0011	<0.01	6.63
RSEM-R6W-EOP	9/8/2022 13:40	BBO446	M	C269143	3.41	0.0618	0.00137	0.00131	0.0472	<0.0001	<0.001	0.154	<0.00001	18.4	0.0013	<0.0002	0.00118	0.042	<0.0002	0.0239	14.6	0.0019	<0.0000019	0.0167	0.0011	<0.01	6.47
RSEM-R6W-EOP	9/9/2022 10:40	BBS002	M	C269764	3.52	0.0455	0.00147	0.00141	0.0478	<0.0001	<0.001	0.162	<0.00001	17.8	0.0013	<0.0002	0.0012	0.037	<0.0002	0.0248	14.1	0.002	<0.0000019	0.0168	0.0011	<0.01	6.57
RSEM-R6W-EOP	9/10/2022 12:40	BBR903	M	C269730	2.91	0.0661	0.00155	0.00141	0.0426	<0.0001	<0.001	0.186	<0.00001	16.2	0.0014	<0.0002	0.0013	0.042	<0.0002	0.0275	14.3	0.0024	<0.0000019	0.0171	0.0011	0.011	6.63
RSEM-R6W-EOP	9/11/2022 14:40	BBR960	M	C269754	3.18	0.0585	0.0016	0.00143	0.0401	<0.0001	<0.001	0.179	<0.00001	15.4	0.0015	<0.0002	0.00115	0.035	<0.0002	0.0268	13.8	0.002	<0.0000019	0.017	0.001	0.01	6.50
RSEM-R6W-EOP	9/12/2022 12:00	BBU606	M	C270263	2.93	0.0591	0.00165	0.00141	0.0389	<0.0001	<0.001	0.183	<0.00001	15.4	0.0016	<0.0002	0.00115	0.033	<0.0002	0.0293	15.3	0.002	<0.0000019	0.0173	0.0011	0.011	6.88
RSEM-R6W-EOP	9/13/2022 14:20	BBX515	M	C270776	2.16	0.0555	0.00161	0.00142	0.0379	<0.0001	<0.001	0.183	<0.00001	15.7	0.0015	<0.0002	0.00122	0.027	<0.0002	0.0296	16.1	0.0016	<0.0000019	0.0175	0.0011	0.014	6.81
RSEM-R6W-EOP	9/14/2022 10:25	BBZ916	M	C271275	2.58	0.0447	0.0016	0.0015	0.0401	<0.0001	<0.001	0.181	<0.00001	17.0	0.0017	<0.0002	0.0012	0.027	<0.0002	0.0312	16.4	0.0021	0.0000022	0.0178	0.0012	0.011	7.00
RSEM-R6W-EOP	9/15/2022 9:40	BCC125	M	C271667	2.18	0.0504	0.00163	0.00144	0.0393	<0.0001	<0.001	0.191	<0.00001	17.0	0.0016	<0.0002	0.00122	0.03	<0.0002	0.0296	16.5	0.0023	<0.0000019	0.0177	0.0012	<0.01	6.92
RSEM-R6W-EOP	9/16/2022 13:00	BCF680	M	C272242	2.63	0.0432	0.00162	0.00144	0.0403	<0.0001	<0.001	0.177	<0.00001	18.5	0.0016	<0.0002	0.00127	0.028	<0.0002	0.0297	18.2	0.0026	<0.0000019	0.0188	0.0012	<0.01	7.14
RSEM-R6W-EOP	9/17/2022 11:30	BCF751	M	C272259	3.36	0.0432	0.00159	0.00138	0.0386	<0.0001	<0.001	0.173	<0.00001	18.2	0.0016	<0.0002	0.00149	0.032	<0.0002	0.0296	17.8	0.0021	<0.0000019	0.0183	0.0012	<0.01	6.99
RSEM-R6W-EOP	9/18/2022 11:20	BCF723	M	C272251	1.65	0.0409	0.00158	0.00136	0.0433	<0.0001	<0.001	0.18	<0.00001	24.1	0.0016	<0.0002	0.00141	0.028	<0.0002	0.0314	19.4	0.0021	<0.0000019	0.0186	0.0012	<0.01	7.38
RSEM-R6W-EOP	9/19/2022 9:30	BCI769	M	C272683	2.54	0.0355	0.00137	0.00132	0.0422	<0.0001	<0.001	0.178	<0.00001	24.4	0.0014	<0.0002	0.00105	0.029	<0.0002	0.0308	17.5	0.0019	0.000002	0.0171	0.0011	<0.01	7.01
RSEM-R6W-EOP	9/20/2022 15:10	BCL544	M	C273070	2.27	0.0374	0.00136	0.00129	0.0421	<0.0001	<0.001	0.178	<0.00001	26.0	0.0014	<0.0002	0.00101	0.028	<0.0002	0.0309	18.1	0.0018	<0.0000019	0.0166	0.0012	<0.01	7.16
RSEM-R6W-EOP	9/21/2022 13:30	BCR698	M	C273972	2.17	0.0355	0.00145	0.00124	0.0466	<0.0001	<0.001	0.184	<0.00001	27.0	0.0015	<0.0002	0.00115	0.021	<0.0002	0.0348	21.0	0.0017	<0.0000019	0.0175	0.0015	<0.01	7.27
RSEM-R6W-EOP	9/22/2022 15:00	BCR615	M	C273969	2.48	0.0329	0.00135	0.00116	0.0462	<0.0001	<0.001	0.172	<0.00001	26.4	0.0016	<0.0002	0.00107	0.022	<0.0002	0.0358	21.2	0.0019	<0.0000019	0.0167	0.0016	<0.01	7.09
RSEM-R6W-EOP	9/23/2022 11:30	BCR892	M	C273985	3.04	0.032	0.00134	0.00114	0.0502	<0.0001	<0.001	0.17	<0.00001	29.7	0.0017	<0.0002	0.00111	0.024	<0.0002	0.0343	22.5	0.002	<0.0000019	0.0168	0.0018	<0.01	7.18
RSEM-R6W-EOP	9/24/2022 10:15	BCV561	M	C274577	3.76	0.027	0.00131	0.00121	0.0526	<0.0001	<0.001	0.165	<0.00001	33.2	0.0019	<0.0002	0.00103	0.02	<0.0002	0.0324	21.5	0.0018	<0.0000019	0.0166	0.0019	<0.01	7.40
RSEM-R6W-EOP	9/25/2022 14:30	BCV620	M	C274593	2.61	0.0287	0.00129	0.00113	0.0531	<0.0001	<0.001	0.164	<0.00001	33.7	0.002	<0.0002	0.00099	0.02	<0.0002	0.0325	23.2	0.0019	<0.0000019	0.016	0.002	<0.01	7.33
RSEM-R6W-EOP	9/25/2022 14:45	BCV621	D	C274593	2.95	0.03	0.00123	0.00114	0.0536	<0.0001	<0.001	0.167	<0.00001	34.7	0.0021	<0.0002	0.00104	0.021	<0.0002	0.0313	23.2	0.0019	<0.0000019	0.0164	0.0021	<0.01	7.39
RSEM-R6W-EOP	9/26/2022 9:30	BCV505	M	C274562	2.63	0.0203	0.00124	0.00115	0.054	<0.0001	<0.001	0.163	<0.00001	36.1	0.0021	<0.0002	0.001	0.013	<0.0002	0.0307	23.5	0.002	<0.0000019	0.0164	0.0022	<0.01	7.46
RSEM-R6W-EOP	9/27/2022 10:30	BDB610	M	C275584	5.56	0.0178	0.00116	0.00106	0.0517	<0.0001	<0.001	0.172	<0.00001	35.0	0.0022	<0.0002	0.00109	0.012	<0.0002	0.0307	24.4	0.0022	<0.0000019	0.0156	0.0022	<0.01	7.07
RSEM-R6W-EOP	9/28/2022 10:40	BDE181	M	C276033	2.84	0.0182	0.00127	0.00111	0.0592	<0.0001	<0.001	0.167	<0.00001	38.7	0.0021	<0.0002	0.00107	0.013	<0.0002	0.035	26.7	0.0028	<0.0000019	0.0166	0.0024	<0.01	7.50
RSEM-R6W-EOP	9/29/2022 10:40	BDH541	M	C276348	2.77	0.0199	0.00126	0.00108	0.0572	<0.0001	<0.001	0.165	0.000012	39.2	0.0022	<0.0002	0.00111	0.015	<0.0002	0.0326	28.4	0.0031	<0.0000019	0.0163	0.0025	0.013	7.45
RSEM-R6W-EOP	9/30/2022 10:55	BDH544	M	C276348	3.34	0.0205	0.00128	0.00112	0.0565	<0.0001	<0.001	0.172	<0.00001	39.6	0.0023	<0.0002	0.00117	0.015	<0.0002	0.0337	29.5	0.0034	<0.0000019	0.0166	0.0025	0.012	7.57
RSEM-R6W-EOP	10/1/2022 9:50	BDL249	M	C276877	1.96	0.0198	0.00128	0.00105	0.0545	<0.0001	<0.001	0.167	<0.00001	38.6	0.0023	<0.0002	0.00111	0.016	<0.0002	0.0326	30.0	0.0039	<0.0000019	0.0164	0.0024	0.012	7.63
RSEM-R6W-EOP	10/2/2022 10:25	BDL181	M	C276859	3.31	0.0208	0.00132	0.00108	0.055	<0.0001	<0.001	0.168	<0.00001	39.6	0.0026	<0.0002	0.00112	0.018	<0.0002	0.0317	30.8	0.0044	<0.0000019	0.017	0.0024	0.013	7.83
RSEM-R6W-EOP	10/3/2022 10:30	BDP150	M	C277443	3.54	0.0213	0.00123	0.00101	0.0496	<0.0001	<0.001	0.144	<0.00001	36.3	0.0025	<0.0002	0.00106	0.015	<0.0002	0.029	27.2	0.0041	<0.0000019	0.0157	0.0023	0.013	7.30
RSEM-R6W-EOP	10/4/2022 10:05	BDR436	M	C277814	3.16	0.0185	0.00121	0.00102	0.0493	<0.0001	<0.001	0.164	<0.00001	36.6	0.0024	<0.0002	0.001	0.018	<0.0002	0.0293	27.5	0.004	<0.0000019	0.0161	0.0023	0.014	7.36
RSEM-R6W-EOP	10/4/2022 10:15	BDR437	D	C277814	3.22	0.0198	0.00122	0.00103	0.05	<0.0001	<0.001	0.177	<0.00001	37.3	0.0026	<0.0002	0.00102	0.018	<0.0002	0.0306	28.2	0.0041	<0.0000019	0.0162	0.0023	0.014	7.53
RSEM-R6W-EOP	10/5/2022 10:55	BDV021	M	C278393	2.89	0.0213	0.00122	0.00102	0.0462	<0.0001	<0.001	0.143	<0.00001	35.7	0.0027	<0.0002	0.00109	0.018	<0.0002	0.0265	26.7	0.0034	<0.0000019	0.0156	0.0022	0.012	7.37
RSEM-R6W-EOP	10/6/2022 10:50	BDZ971	M	C278888	2.44	0.0247	0.00117	0.00105	0.0449	<0.0001	<0.001	0.144	0.000011	37.4	0.0029	<0.0002	0.00106	0.022	<0.0002	0.0247	25.1	0.0032	<0.0000019	0.0158	0.002	0.012	7.56
RSEM-R6W-EOP	10/6/2022 11:00	BDZ973	D	C278888	2.54	0.0297	0.00129	0.00113	0.0482	<0.0001	<0.001	0.157	<0.00001	39.6	0.0031	<0.0002	0.00115	0.026	<0.0002	0.0264	26.9	0.0034	<0.0000019	0.0168	0.002	0.015	7.94
RSEM-R6W-EOP	10/7/2022 12:10	BEA026	M	C278893	2.38	0.0275	0.00123	0.00109	0.0468	<0.0001	<0.001	0.145	<0.00001	40.7	0.0032	<0.0002	0.00104	0.017	<0.0002	0.0242	25.2	0.0028	<0.0000019	0.0161	0.0017	0.012	7.75
RSEM-R6W-EOP	10/8/2022 10:25	BED964	M	C279402	2.11	0.0253	0.00131	0.00112	0.05	<0.0001	<0.001	0.136	<0.00001	42.1	0.0036	<0.0002	0.00107	0.017	<0.0002	0.0238	25.3	0.0026	<0.0000019	0.0167	0.0018	0.015	7.82

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
RSEM-R6W-EOP	10/9/2022 9:45	BED926	M	C279394	3.07	0.0292	0.00122	0.00107	0.0513	<0.0001	<0.001	0.131	<0.00001	45.7	0.0033	<0.0002	0.00126	0.017	<0.0002	0.0224	24.4	0.0024	<0.0000019	0.0155	0.0017	0.015	7.59
RSEM-R6W-EOP	10/10/2022 10:05	BED793	M	C279368	2.49	0.0322	0.00121	0.00099	0.0529	<0.0001	<0.001	0.128	<0.00001	50.5	0.0031	<0.0002	0.00112	0.021	<0.0002	0.0226	24.2	0.0023	<0.0000019	0.015	0.0017	0.015	7.51
RSEM-R6W-EOP	10/11/2022 12:30	BEK436	M	C280406	2.39	0.0245	0.00106	0.00096	0.0529	<0.0001	<0.001	0.128	<0.00001	53.0	0.0026	<0.0002	0.00096	0.012	<0.0002	0.0233	23.6	0.0018	<0.0000019	0.0139	0.0015	0.013	7.27
RSEM-R6W-EOP	10/12/2022 14:45	BEK646	M	C280448	2.08	0.0288	0.00111	0.00098	0.0539	<0.0001	<0.001	0.133	<0.00001	53.1	0.0029	<0.0002	0.00102	0.019	<0.0002	0.0235	24.0	0.0022	<0.0000019	0.0147	0.0014	0.014	7.39
RSEM-R6W-EOP	10/13/2022 13:15	BEN618	M	C280837	2.19	0.027	0.00108	0.0009	0.0552	<0.0001	<0.001	0.118	<0.00001	60.0	0.0026	<0.0002	0.00096	0.018	<0.0002	0.0206	23.4	0.0021	<0.0000019	0.0145	0.0015	0.012	7.35
RSEM-R6W-EOP	10/14/2022 11:45	BEN600	M	C280833	2.11	0.0288	0.00116	0.0009	0.0593	<0.0001	<0.001	0.124	<0.00001	60.9	0.0025	<0.0002	0.00105	0.016	<0.0002	0.0219	24.3	0.0022	<0.0000019	0.0149	0.0015	0.012	7.49
RSEM-R6W-EOP	10/15/2022 13:45	BER008	M	C281389	1.89	0.0254	0.00112	0.00089	0.0581	<0.0001	<0.001	0.14	<0.00001	61.5	0.0026	<0.0002	0.00091	0.014	<0.0002	0.0249	24.1	0.0023	<0.0000019	0.0142	0.0015	<0.01	7.29
RSEM-R6W-EOP	10/16/2022 15:45	BER095	M	C281399	1.44	0.0259	0.00116	0.00103	0.0662	<0.0001	<0.001	0.163	0.000011	73.4	0.0027	<0.0002	0.00109	0.015	<0.0002	0.0266	27.3	0.0025	<0.0000019	0.0164	0.0016	0.016	8.45
RSEM-R6W-EOP	10/16/2022 16:00	BER097	D	C281399	2.42	0.0227	0.00109	0.00088	0.0579	<0.0001	<0.001	0.128	0.000013	64.5	0.0027	<0.0002	0.00103	0.015	<0.0002	0.0229	24.8	0.0025	<0.0000019	0.0141	0.0016	0.014	7.69
RSEM-R6W-EOP	10/17/2022 11:30	BER151	M	C281421	<0.50	0.02	0.00101	0.00088	0.0595	<0.0001	<0.001	0.144	<0.00001	66.2	0.0022	<0.0002	0.00106	0.015	<0.0002	0.0231	24.2	0.0026	<0.0000019	0.0141	0.0016	0.013	7.62
RSEM-R6W-EOP	10/18/2022 9:40	BEX620	M	C282315	2.55	0.0195	0.00114	0.00085	0.0623	<0.0001	<0.001	0.146	0.000011	66.8	0.0022	<0.0002	0.00092	0.017	<0.0002	0.0272	24.1	0.003	<0.0000019	0.0142	0.0015	<0.01	7.40
RSEM-R6W-EOP	10/19/2022 12:50	BFA348	M	C282741	1.95	0.0254	0.00113	0.0009	0.0649	<0.0001	<0.001	0.129	<0.00001	68.5	0.0019	<0.0002	0.00099	0.024	<0.0002	0.0225	26.3	0.0032	<0.0000019	0.0141	0.0016	0.011	7.56
RSEM-R6W-EOP	10/20/2022 10:10	BFD237	M	C283174	2.28	0.0277	0.00108	0.00081	0.0636	<0.0001	<0.001	0.124	0.000011	69.7	0.0019	<0.0002	0.00097	0.036	<0.0002	0.0257	24.9	0.003	<0.0000019	0.0136	0.0015	0.013	7.46
RSEM-R6W-EOP	10/21/2022 10:20	BFD224	M	C283172	2.58	0.0291	0.00094	0.00075	0.0614	<0.0001	<0.001	0.117	<0.00001	66.8	0.002	<0.0002	0.00095	0.025	<0.0002	0.0242	24.1	0.0025	<0.0000019	0.0125	0.0016	0.012	7.05
RSEM-R6W-EOP	10/22/2022 11:40	BFI044	M	C283756	2.85	0.037	0.0011	0.00092	0.0716	<0.0001	<0.001	0.131	<0.00001	74.2	0.0024	<0.0002	0.001	0.021	<0.0002	0.024	25.7	0.0029	<0.0000019	0.0141	0.0016	0.012	7.57
RSEM-R6W-EOP	10/23/2022 10:25	BFI229	M	C283774	2.31	0.0342	0.0011	0.00088	0.07	<0.0001	<0.001	0.117	<0.00001	74.5	0.0024	<0.0002	0.00095	0.031	<0.0002	0.0228	23.6	0.0028	<0.0000019	0.0132	0.0015	0.011	7.18
RSEM-R6W-EOP	10/24/2022 9:55	BFL670	M	C284145	1.68	0.0356	0.00101	0.00086	0.0711	<0.0001	<0.001	0.103	<0.00001	71.8	0.0024	<0.0002	0.00099	0.024	<0.0002	0.0192	22.0	0.0025	<0.0000019	0.0125	0.0015	0.014	6.82
RSEM-R6W-EOP	10/25/2022 10:55	BFP708	M	C284665	2.00	0.0436	0.001	0.00087	0.074	<0.0001	<0.001	0.106	<0.00001	77.9	0.0024	<0.0002	0.00098	0.025	<0.0002	0.0199	22.5	0.0029	<0.0000019	0.0123	0.0016	0.016	6.55
RSEM-R6W-EOP	10/26/2022 12:40	BFS035	M	C285038	2.03	0.0455	0.00092	0.0008	0.0733	<0.0001	<0.001	0.094	<0.00001	73.6	0.0022	<0.0002	0.00093	0.027	<0.0002	0.0172	20.5	0.0031	<0.0000019	0.0115	0.0015	0.014	6.12
RSEM-R6W-EOP	10/27/2022 10:25	BFU907	M	C285466	2.01	0.045	0.00094	0.0008	0.0758	<0.0001	<0.001	0.098	<0.00001	77.7	0.0022	<0.0002	0.001	0.022	<0.0002	0.0175	20.8	0.003	<0.0000019	0.0117	0.0015	0.014	6.29
RSEM-R6W-EOP	10/28/2022 11:40	BFU722	M	C285458	2.55	0.0549	0.00086	0.00077	0.0732	<0.0001	<0.001	0.085	<0.00001	73.8	0.0021	<0.0002	0.00091	0.03	<0.0002	0.0152	19.1	0.0031	<0.0000019	0.0104	0.0015	0.015	5.81
RSEM-R6W-EOP	10/29/2022 9:55	BFZ654	M	C286199	1.76	0.0612	0.00085	0.00078	0.0731	<0.0001	<0.001	0.086	<0.00001	72.9	0.0024	<0.0002	0.00096	0.027	<0.0002	0.015	20.3	0.0028	<0.0000019	0.0101	0.0016	0.015	5.79
RSEM-R6W-EOP	10/30/2022 11:30	BFZ646	M	C286196	2.22	0.0646	0.00088	0.00078	0.0757	<0.0001	<0.001	0.096	<0.00001	75.9	0.0025	<0.0002	0.00102	0.039	<0.0002	0.0147	19.7	0.003	<0.0000019	0.0104	0.0017	0.016	5.88
RSEM-R6W-EOP	10/31/2022 11:10	BGA236	M	C286288	1.90	0.073	0.00081	0.00071	0.0715	<0.0001	<0.001	0.077	<0.00001	70.4	0.0024	<0.0002	0.00095	0.043	<0.0002	0.0132	18.5	0.0026	<0.0000019	0.0092	0.0015	0.014	5.23
RSEM-R6W-EOP	11/1/2022 15:35	BGE764	M	C286877	2.24	0.0646	0.00085	0.00077	0.0759	<0.0001	<0.001	0.079	0.000011	77.2	0.0023	<0.0002	0.00089	0.044	<0.0002	0.0135	19.0	0.0028	<0.0000019	0.0097	0.0015	0.017	5.47
RSEM-R6W-EOP	11/1/2022 15:55	BGE765	D	C286877	2.15	0.0696	0.00082	0.00077	0.074	<0.0001	<0.001	0.079	<0.00001	77.1	0.0023	<0.0002	0.00089	0.053	<0.0002	0.0134	19.1	0.003	0.0000023	0.0095	0.0015	0.017	5.38
RSEM-R6W-EOP	11/2/2022 12:45	BGJ736	M	C287754	1.60	0.0606	0.00077	0.00075	0.0734	<0.0001	<0.001	0.075	<0.00001	72.4	0.0021	<0.0002	0.00086	0.034	<0.0002	0.0133	18.7	0.0029	<0.0000019	0.0088	0.0015	0.014	5.01
RSEM-R6W-EOP	11/3/2022 14:15	BGJ744	M	C287759	2.02	0.075	0.0008	0.00076	0.0767	<0.0001	<0.001	0.073	<0.00001	77.2	0.0021	<0.0002	0.00079	0.053	<0.0002	0.0126	18.7	0.0029	<0.0000019	0.0089	0.0015	0.014	5.09
RSEM-R6W-EOP	11/4/2022 11:15	BGJ739	M	C287756	2.05	0.08	0.00076	0.00074	0.0764	<0.0001	<0.001	0.068	<0.00001	76.1	0.0019	<0.0002	0.00078	0.047	<0.0002	0.0117	18.1	0.0033	<0.0000019	0.0083	0.0016	0.014	4.86
RSEM-R6W-EOP	11/5/2022 13:45	BGO363	M	C288361	3.19	0.0648	0.00065	0.00066	0.0714	<0.0001	<0.001	0.06	0.000011	68.6	0.0016	<0.0002	0.00086	0.046	<0.0002	0.0102	16.0	0.0049	<0.0000019	0.0064	0.0014	0.013	3.97
RSEM-R6W-EOP	11/6/2022 14:45	BGO252	M	C288323	2.70	0.0982	0.00065	0.00066	0.074	<0.0001	<0.001	0.055	0.000014	69.4	0.0015	<0.0002	0.00087	0.075	<0.0002	0.0092	15.5	0.0064	<0.0000019	0.0058	0.0014	0.012	3.81
RSEM-R6W-EOP	11/7/2022 10:15	BGO320	M	C288345	2.81	0.0638	0.0006	0.00063	0.0736	<0.0001	<0.001	0.055	0.000013	69.3	0.0013	<0.0002	0.00079	0.054	<0.0002	0.0092	15.8	0.0069	<0.0000019	0.0054	0.0015	0.014	3.54
RSEM-R6W-EOP	11/8/2022 10:40	BGT301	M	C289111	2.02	0.0815	0.00054	0.00053	0.0658	<0.0001	<0.001	0.054	<0.00001	68.6	0.0012	<0.0002	0.00075	0.1	<0.0002	0.0101	13.7	0.0065	<0.0000019	0.0042	0.0014	0.013	3.28
RSEM-R6W-EOP	11/9/2022 11:00	BGW284	M	C289508	2.05	0.119	0.00058	0.00057	0.0707	<0.0001	<0.001	0.054	<0.00001	69.2	0.0014	<0.0002	0.00162	0.101	<0.0002	0.0098	13.9	0.0067	<0.0000019	0.0042	0.0019	0.011	3.21
RSEM-R6W-EOP	11/10/2022 11:00	BGV716	M	C289423	2.46	0.101	0.00057	0.00054	0.0699	<0.0001	<0.001	0.052	<0.00001	70.2	0.0013	<0.0002	0.00074	0.093	<0.0002	0.0098	13.8	0.0065	<0.0000019	0.0041	0.0014	0.015	3.10
RSEM-R6W-EOP	11/11/2022 11:10	BHA034	M	C290104	1.97	0.156	0.00052	0.0005	0.0747	<0.0001	<0.001	<0.05	0.000012	68.3	0.0021	0.00021	0.00117	0.128	<0.0002	0.0072	13.7	0.0077	<0.0000019	0.0041	0.0018	0.013	3.05
RSEM-R6W-EOP	11/12/2022 10:40	BHA062	M	C290112	1.84	0.0914	<0.0005	0.00046	0.0704	<0.0001	<0.001	<0.05	0.000012	71.3	0.0013	<0.0002	0.00093	0.092	<0.0002	0.0082	13.5	0.0072	<0.0000019	0.0037	0.0015	0.012	2.78
RSEM-R6W-EOP	11/13/2022 11:20	BHA078	M	C290117	0.94	0.109	<0.0005	0.00038	0.0628	<0.0001	<0.001	<0.05	0.000012	65.0	0.0011	<0.0002	0.00073	0.091	<0.0002	0.0067	12.4	0.0063	<0.0000019	0.0033	0.0015	<0.01	2.51
RSEM-R6W-EOP	11/14/2022 11:00	BHC287	M	C290544	1.72	0.103	<0.0005	0.00045	0.0575	<0.0001	<0.001	<0.05	0.000048	80.0	0.001	<0.0002	0.00073	0.088	<0.0002	0.0079	14.4	0.0075	<0.0000019	0.003	0.0014	0.013	2.34
RSEM-R6W-EOP	11/15/2022 11:10	BHD952	M	C290817	1.75	0.162	<0.0005	0.00045	0.0608	<0.0001	<0.001	<0.05	0.000018	82.3	0.0012	<0.0002	0.00082	0.147	<0.0002	0.0081	14.8	0.0078	<0.0000019	0.0032	0.0015	0.014	2.43
RSEM-R6W-EOP	11/16/2022 12:20	BHF926	M	C291159	1.98	0.139	<0.0005	0.00043	0.0692	<0.0001	<0.001	<0.05	0.00006	67.6	0.0011	0.00079	0.00112	0.157	<0.0002	0.0096	12.7	0.0138	<0.0000019	0.0036	0.0036	0.013	2.60
RSEM-R6W-EOP	11/17/2022 12:10	BHH896	M	C291494	2.42	0.184	<0.0005	0.00042	0.0686	<0.0001	<0.001	<0.05	0.000012	69.0	0.0011	<0.0002	0.00073	0.106	<0.0002	0.0085	14.4	0.0064	<0.0000019	0.0033	0.0016	0.012	2.61
RSEM-R6W-EOP	11/18/2022 11:10	BHI800	M	C291574	1.69	0.226	<0.0005	0.00045	0.067	<0.0001	<0.001	0.05	0.000015	73.0	0.0014	<0.0002	0.00083	0.149	<0.0002	0.0088	14.0	0.0064	<0.0000019	0.0033	0.0017	0.014	2.56
RSEM-R6W-EOP	11/19/2022 12:20	BHL412	M	C291899	1.70	0.0724	<0.0005	0.00038	0.0671	<0.0001	<0.001	<0.05	0.000015	64.3	0.0013	<0.0002	0.00087	0.119	<0.0002	0.0074	11.5	0.0067	<0.0000019	0.0033	0.0018	0.011	2.26
RSEM-R6W-EOP	11/20/2022 11:40	BHL417	M	C291901	2.02	0.0875	<0.0005	0.00041	0.0654	<0.0001	<0.001	<0.05	0.000021	65.7	<0.001	<0.0002	0.00086	0.145	<0.0002	0.0071	12.1	0.0072	<0.0000019	0.0032	0.0017	0.01	2.22
RSEM-R6W-EOP	11/21/2022 11:25	BHL421	M	C291903	1.97	0.202	<0.0005	0.0004	0.0686	<0.0001	<0.001	<0.05	0.000016	64.2	0.0011	0.00022	0.00094	0.21	<0.0002	0.007	11.6	0.0079	<0.0000019	0.003	0.0017	0.012	2.15
RSEM-R6W-EOP	11/22/2022 12:39	BHR289	M	C292931	1.46	0.286	<0.0005	0.00045	0.0689	<0.0001	<0.001	<0.05	0.000014	69.7	0.001	0.00021	0.00092	0.249	<0.0002	0.0093	13.8	0.0084	<0.0000019	0.003	0.0016	0.019	2.41
RSEM-R6W-EOP	11/23/2022 15:30	BHR240	M	C292918	1.72	0.152	<0.0005	0.00046	0.0628	<0.0001	<0.001	<0.05	0.000015	68.0	0.0012	<0.0002	0.00085	0.145	<0.0002	0.0086	12.8	0.0072	<0.0000019	0.0031	0.0015	0.016	2.30
RSEM-R6W-EOP	11/24/2022 14:00	BHS969	M	C293245	1.72	0.163	<0.0005	0.00042	0.064	<0.0001	<0.001	<0.05	0.000013	65.6	0.0016	<0.0002	0.00188	0.148	<0.0002	0.0084	12.3	0.0074	<0.0000019	0.0035	0.0015	0.02	2.39
RSEM-R6W-EOP	11/25/2022 10:45	BHS973	M	C293246	1.75	0.184	<0.0005	0.0004	0.0625	<0.0001	<0.001	<0.05	0.00001	63.6	0.0015	<0.0002	0.00101	0.166	<0.0002	0.0079	11.7	0.0074	<0.0000019	0.0035	0.0014	0.014	2.32
RSEM-R6W-EOP	11/26/2022 12:15	BHX192	M	C293769	1.75	0.204	<0.0005	0.00045	0.0699	<0.0001	<0.001	<0.05	0.000038	68.1	0.0021	0.00025	0.00099	0.196	<0.0002	0.0082	11.5	0.01	<0.0000019	0.0036	0.0018	0.019	2.58
RSEM-R6W-EOP	11/27/2022 13:45	BHX164	M	C293759	1.59	0.236	<0.0005	0.00046	0.075	<0.0001	<0.001	<0.05	0.000011	72.1	0.0014	0.00027	0.00101	0.227	<0.0002	0.0085	11.9	0.0116	<0.0000019	0.0035	0.0036	0.018	2.55
RSEM-R6W-EOP	11/28/2022 10:15	BHX166	M	C293760	1.63	0.139	<0.0005	0.00049	0.0762	0.00011	<0.001	<0.05	0.000092	71.6	0.0012	0.0003	0.00091	0.128	<0.0002	0.0082	11.4	0.0099	<0.0000019	0.0032	0.0016	0.015	2.37
RSEM-R6W-EOP	11/28/2022 10:30	BHX167	D	C293760	1.63	0.144	<0.0005	0.00052	0.0768	0.00014	<0.001	<0.05	0.000133	68.8	0.0016	0.00033	0.00095	0.141	<0.0002	0.0082	11.5	0.0102	<0.0000019	0.0032	0.0017	0.016	2.41
RSEM-R6W-EOP	11/29/2022 10:05	BIA658	M	C294441	2.40	0.151	<0.0005	0.00039	0.0765	<0.0001	<0.001	<0.05	0.000018	69.8	0.0011	0.00021	0.00079	0.133	<0.0002	0.0082	11.7	0.0085	<0.0000019	0.0031	0.0015	0.018	2.30
RSEM-R6W-EOP	11/30/2022 10:50	BID442	M	C294835	1.65	0.155	<0.0005	0.00039	0.0716	<0.0001	<0.001	<0.05	0.000016	66.1	<0.001	<0.0002	0.00106	0.172	<0.0002	0.0067	12.7	0.0071	<0.0000019	0.0029	0.0016	0.011	1.93
RSEM-R6W-EOP	11/30/2022 11:00	BID443	D	C294835	1.93	0.188	<0.0005	0.00038	0.0735	<0.0001	<0.001	<0.05	0.000019	68.7	0.0011	0.00021	0.0008	0.203	<0.0002	0.0077	12.3	0.0076	0.0000025	0.0031	0.0017	0.016	2.13
RSEM-R6W-EOP	12/1/2022 11:20	BIF877	M	C295196	1.82	0.104	<0.0005	0.00034	0.071	<0.0001	<0.001	<0.05	0.000018	71.2	<0.001	<0.0002	0.00082	0.115	<0.0002	0.0078	12.8	0.0071	<0.0000019	0.003	0.0018	0.013	2.14
RSEM-R6W-EOP	12/2/2022 10:50	BIF818	M	C295193	1.99	0.147	<0.0005	0.00042	0.0683	<0.0001	<0.001	<0.05	0.000017	68.5	0.001	0.0002	0.00081	0.213	<0.0002	0.0069	13.1	0.0073	<0.0000019	0.0029	0.0016	0.013	1.97
RSEM-R6W-EOP	12/3/2022 10:45	BII772	M	C295634	1.32	0.111	<0.0005	0.00038	0.0717	<0.0001	<0.001	0.051	0.000024	68.6	<0.001	0.0002	0.00077	0.15	<0.0002	0.0078	11.9	0.0072	<0.0000019	0.003	0.0016	0.013	2.32
RSEM-R6W-EOP	12/3/2022 10:55	BII773	D	C295634	1.40	0.101	<0.0005	0.00038	0.0719	<0.0001	<0.001	<0.05	0.000017	68.6	<0.001	0.00021	0.00078	0.146	<0.0002	0.008	12.3	0.0075	<0.0000019	0.0031	0.0017	0.014	2.33
RSEM-R6W-EOP	12/4/2022 10:45	BII770	M	C295633	2.01	0.116	<0.0005	0.00037	0.0705	<0.0001	<0.001	<0.05	0.000017	66.8	<0.001	0.00021	0.0008	0.165	<0.0002	0.0077	11.9	0.0075	<0.0000019	0.0031	0.0017	0.014	2.29
RSEM-R6W-EOP	12/5/2022 12:30	BIL940	M	C296047	2.00	0.102	<0.0005	0.00036	0.0694	<0.0001	<0.001	<0.05	0.000012	66.3	<0.001	<0.0002	0.00072	0.139	<0.0002	0.0075	10.9	0.0071	<0.0000019	0.0029	0.0015	0.014	2.24
RSEM-R6W-EOP	12/6/2022 10:30	BIO857	M	C296487	1.71	0.0941	<0.0005	0.00034	0.0722	<0.0001	<0.001	<0.05	0.000016	69.1	<0.001	0.00023	0.00077	0.111	<0.0002	0.0078	12.8	0.0077	<0.0000019	0.0029	0.0018	0.016	2.34
RSEM-R6W-EOP	12/7/2022 11:35	BIR864	M	C297052	1.24	0.0584	<0.0005	0.00033	0.0685	<0.0001	<0.001	<0.05	0.000018	69.4	<0.001	0.00022	0.0007	0.071	<0.0002	0.0076	12.1	0.0071	<0.0000019	0.0028	0.0018	0.01	2.20
RSEM-R6W-EOP	12/7/2022 11:45	BIR865	D	C297052	1.44	0.067	<0.0005	0.00032	0.0712	<0.0001	<0.001	<0.05	0.000019	71.8	<0.001	0.00022	0.00072	0.083	<0.0002	0.008	12.5	0.0073	0.0000027	0.0029	0.0018	0.012	2.27
RSEM-R6W-EOP	12/8/2022 16:10	BIT646	M	C297337	1.34	0.141	<0.0005	0.00038	0.0678	<0.0001	<0.001	<0.05	0.000018	68.3	<0.001	0.00023	0.00092	0.175	<0.0002	0.0077	12.1	0.007	0.0000028	0.0029	0.0019	0.014	2.19
RSEM-R6W-EOP	12/9/2022 11:10	BIT658	M	C297341	1.52	0.0884	<0.0005	0.00036	0.0698	<0.0001	<0.001	<0.05	0.000017	70.9	0.0022	0.00024	0.0007	0.132	<0.0002	0.0079	12.2	0.0073	<0.0000019	0.0029	0.002	0.017	2.24

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P	T-K
					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
RSEM-R6W-EOP	12/10/2022 11:50	BIX265	M	C297760	1.34	0.127	<0.0005	0.00036	0.0717	<0.0001	<0.001	<0.05	0.000016	67.9	0.001	0.00023	0.00077	0.137	<0.0002	0.008	12.1	0.0076	<0.0000019	0.0029	0.002	0.017	2.23
RSEM-R6W-EOP	12/10/2022 12:00	BIX266	D	C297760	1.51	0.106	<0.0005	0.00035	0.0738	<0.0001	<0.001	<0.05	0.000017	68.7	<0.001	0.00023	0.00074	0.11	<0.0002	0.008	12.4	0.0077	<0.0000019	0.003	0.002	0.013	2.29
RSEM-R6W-EOP	12/11/2022 15:30	BIX268	M	C297761	1.49	0.118	<0.0005	0.0004	0.0766	<0.0001	<0.001	<0.05	0.000014	70.8	0.0011	0.00024	0.0008	0.124	<0.0002	0.0082	12.5	0.0075	<0.0000019	0.0031	0.0021	0.014	2.32
RSEM-R6W-EOP	12/12/2022 10:15	BIX294	M	C297767	1.66	0.0891	<0.0005	0.00038	0.0745	<0.0001	<0.001	<0.05	0.000019	71.7	0.001	0.00025	0.00076	0.102	<0.0002	0.0079	12.5	0.0081	<0.0000019	0.0031	0.0021	0.015	2.30
RSEM-R6W-EOP	12/13/2022 12:30	BJH803	M	C299400	1.31	0.164	<0.0005	0.00035	0.0802	<0.0001	<0.001	<0.05	0.000017	69.5	0.001	0.0003	0.001	0.222	<0.0002	0.0083	11.9	0.0111	<0.0000019	0.0031	0.0025	0.017	2.44
RSEM-R6W-EOP	12/14/2022 13:15	BJH809	M	C299405	1.44	0.198	<0.0005	0.00032	0.0755	<0.0001	<0.001	<0.05	0.000022	64.9	<0.001	0.00025	0.00075	0.194	<0.0002	0.0072	10.6	0.0081	<0.0000019	0.003	0.0019	0.013	2.25
RSEM-R6W-EOP	12/14/2022 13:30	BJH810	D	C299405	1.65	0.212	<0.0005	0.00034	0.077	<0.0001	<0.001	<0.05	0.000018	65.5	<0.001	0.00026	0.00079	0.198	<0.0002	0.0071	10.9	0.0084	<0.0000019	0.0031	0.002	0.016	2.28
RSEM-R6W-EOP	12/15/2022 13:00	BJJ047	M	C299557	1.41	0.138	<0.0005	0.00033	0.0758	<0.0001	<0.001	<0.05	0.000016	67.7	<0.001	0.00026	0.00082	0.168	<0.0002	0.0079	11.6	0.009	<0.0000019	0.0031	0.002	0.017	2.34
RSEM-R6W-EOP	12/16/2022 10:30	BJJ051	M	C299559	1.51	0.0995	<0.0005	0.00035	0.073	<0.0001	<0.001	<0.05	0.000018	69.3	0.0011	0.00023	0.00082	0.126	<0.0002	0.0079	11.9	0.0075	<0.0000019	0.003	0.0019	0.013	2.29
RSEM-R6W-EOP	12/17/2022 13:00	BJL794	M	C299939	1.36	0.0923	<0.0005	0.00033	0.0754	<0.0001	<0.001	<0.05	0.000016	66.2	<0.001	0.00024	0.00089	0.115	<0.0002	0.0076	11.5	0.0097	<0.0000019	0.0032	0.002	0.015	2.38
RSEM-R6W-EOP	12/18/2022 13:15	BJL804	M	C299943	1.52	0.087	<0.0005	0.00033	0.0764	<0.0001	<0.001	<0.05	0.000025	70.1	<0.001	0.00023	0.00086	0.097	<0.0002	0.0079	12.0	0.0097	<0.0000019	0.0032	0.0019	0.012	2.38
RSEM-R6W-EOP	12/19/2022 11:00	BJL813	M	C299950	1.38	0.0879	<0.0005	0.00036	0.0792	<0.0001	<0.001	<0.05	0.00002	71.9	0.001	0.00022	0.00083	0.109	<0.0002	0.0082	12.6	0.0094	<0.0000019	0.0033	0.002	0.012	2.52
RSEM-R6W-EOP	12/20/2022 10:00	BJP134	M	C2A0603	1.36	0.0775	<0.0005	0.0003	0.0678	<0.0001	<0.001	<0.05	0.000016	66.9	0.0011	<0.0002	0.00073	0.0931	<0.0002	0.008	11.6	0.0082	<0.0000019	0.0029	0.0018	0.015	2.33
RSEM-R6W-EOP	12/21/2022 10:30	BJP447	M	C2A0675	1.32	0.131	<0.0005	0.00035	0.0689	<0.0001	<0.001	<0.05	0.000022	70.5	<0.001	0.0002	0.00085	0.162	<0.0002	0.0079	12.6	0.0085	<0.0000019	0.0029	0.0017	0.015	2.29
RSEM-R6W-EOP	12/21/2022 10:40	BJP448	D	C2A0675	1.04	0.101	<0.0005	0.00033	0.0644	<0.0001	<0.001	<0.05	0.000026	67.6	<0.001	<0.0002	0.00084	0.131	<0.0002	0.0076	11.9	0.008	<0.0000019	0.0028	0.0018	0.014	2.19
RSEM-R6W-EOP	12/22/2022 12:35	BJQ104	M	C2A0818	1.02	0.105	<0.0005	0.00032	0.072	<0.0001	<0.001	0.053	0.000018	74.4	<0.001	<0.0002	0.00083	0.134	<0.0002	0.0083	13.6	0.0084	<0.0000019	0.0032	0.0017	0.014	2.34
RSEM-R6W-EOP	12/23/2022 11:25	BJQ106	M	C2A0819	1.64	0.0646	<0.0005	0.00028	0.0698	<0.0001	<0.001	<0.05	<0.00001	70.0	0.001	<0.0002	0.00075	0.088	<0.0002	0.0081	11.6	0.0065	<0.0000019	0.0033	0.0015	0.015	2.16
RSEM-R6W-EOP	12/24/2022 12:30	BJR122	M	C2A1052	1.49	0.0827	<0.0005	0.00039	0.0686	<0.0001	<0.001	<0.05	0.000018	67.8	<0.001	<0.0002	0.00071	0.08	<0.0002	0.0072	13.9	0.0066	<0.0000019	0.0039	0.0014	0.011	2.72
RSEM-R6W-EOP	12/24/2022 12:40	BJR121	D	C2A1052	1.34	0.108	<0.0005	0.00038	0.0702	<0.0001	<0.001	<0.05	0.000018	69.3	<0.001	<0.0002	0.00072	0.103	<0.0002	0.0071	14.0	0.0065	<0.0000019	0.0037	0.0015	0.011	2.59
RSEM-R6W-EOP	12/25/2022 10:55	BJR129	M	C2A1055	1.31	0.0856	<0.0005	0.00038	0.0701	<0.0001	<0.001	<0.05	0.000017	68.6	<0.001	<0.0002	0.00073	0.083	<0.0002	0.0066	13.6	0.0065	<0.0000019	0.0038	0.0015	0.011	2.56
RSEM-R6W-EOP	12/26/2022 8:05	BJR178	M	C2A1058	1.30	0.091	<0.0005	0.00039	0.0692	<0.0001	<0.001	<0.05	0.000016	68.4	<0.001	<0.0002	0.00071	0.091	<0.0002	0.0067	13.5	0.0067	<0.0000019	0.0038	0.0014	0.011	2.58
RSEM-R6W-EOP	12/27/2022 13:00	BJS997	M	C2A1469	1.26	0.0659	<0.0005	0.00036	0.0606	<0.0001	<0.001	<0.05	0.000014	68.6	<0.001	<0.0002	0.00062	0.079	<0.0002	0.0096	15.3	0.0068	<0.0000019	0.0036	0.0012	0.013	2.49
RSEM-R6W-EOP	12/28/2022 12:00	BJS998	M	C2A1470	1.97	0.0784	<0.0005	0.00038	0.063	<0.0001	<0.001	0.051	0.000024	66.5	<0.001	<0.0002	0.00067	0.086	<0.0002	0.0097	14.2	0.0087	<0.0000019	0.0038	0.0012	0.01	2.57
RSEM-R6W-EOP	12/29/2022 14:00	BJT907	M	C2A1753	1.63	0.0929	<0.0005	0.0004	0.0656	<0.0001	<0.001	0.053	0.000016	67.9	<0.001	<0.0002	0.00076	0.115	<0.0002	0.0108	14.8	0.0199	<0.0000019	0.0041	0.0014	0.016	2.68
RSEM-R6W-EOP	12/29/2022 14:15	BJT908	D	C2A1753	0.99	0.0757	<0.0005	0.0004	0.0625	<0.0001	<0.001	0.054	0.000011	68.8	<0.001	<0.0002	0.00068	0.085	<0.0002	0.0109	14.5	0.0193	<0.0000019	0.0039	0.0013	0.018	2.60
RSEM-R6W-EOP	12/30/2022 10:30	BJT902	M	C2A1751	1.89	0.0709	<0.0005	0.0004	0.0643	<0.0001	<0.001	0.056	<0.00001	71.2	<0.001	<0.0002	0.00066	0.087	<0.0002	0.0117	16.6	0.0175	<0.0000019	0.0043	0.0013	0.014	2.74
RSEM-R6W-EOP	12/31/2022 13:00	BJU301	M	C300112	1.68	0.0788	<0.0005	0.00046	0.0698	<0.0001	<0.001	<0.05	0.000012	64.8	<0.001	<0.0002	0.00075	0.071	<0.0002	0.0101	14.4	0.0138	0.000002	0.0048	0.0013	0.015	2.97
RSEM-R6-WP-IN	1/10/2022 9:50	FJ2200044-002	M	FJ2200044	3.83	0.204	0.00120	0.00150	0.0229	<0.000100	<0.000050	0.103	0.0000151	22.9	0.00254	0.00016	0.00124	0.102	0.000073	0.0656	31.0	0.0105	<0.0000050	0.00667	0.00196	<0.050	4.35
RSEM-R6-WP-IN	5/13/2022 11:50	ATB015	M	C232410	1.84	0.0583	0.00149	0.00116	0.0639	<0.0001	<0.001	0.108	0.000036	49.5	0.0014	0.00056	0.00118	0.102	<0.0002	0.0529	22.9	0.0216	<0.0000019	0.0106	0.006	0.021	4.69
RSEM-R6W-SP	1/7/2022 13:15	FJ2200035-003	M	FJ2200035	4.98	0.149	0.00151	0.00138	0.0417	<0.000100	<0.000050	0.113	0.0000468	29.8	0.00296	0.00067	0.00367	0.183	0.000155	0.0715	29.1	0.0607	<0.0000050	0.00775	0.00384	0.058	4.95
RSEM-R6W-SP	1/10/2022 10:30	FJ2200044-003	M	FJ2200044	4.46	0.214	0.00155	0.00169	0.0361	<0.000100	<0.000050	0.126	0.0000396	30.4	0.00310	0.00037	0.00285	0.144	0.000093	0.0714	29.4	0.0477	<0.0000050	0.00795	0.00317	<0.050	4.81
RSEM-R6W-SP	1/11/2022 17:00	FJ2200088-001	M	FJ2200088	3.18	0.194	0.00146	0.00115	0.0416	<0.000100	<0.000050	0.105	0.0000400	27.6	0.00177	0.00050	0.00550	0.162	0.000119	0.0675	26.8	0.0766	<0.0000050	0.00683	0.00334	<0.050	4.10
RSEM-R6W-SP	1/18/2022 11:20	FJ2200122-001	M	FJ2200122	4.81	0.260	0.00146	0.00135	0.0361	<0.000100	<0.000050	0.116	0.0000175	20.2	0.00096	0.00030	0.00064	0.146	0.000143	0.0657	27.9	0.0289	<0.0000050	0.00724	0.00248	<0.050	4.31
RSEM-R6W-SP	1/19/2022 12:00	FJ2200185-001	M	FJ2200185	3.69	0.120	0.00146	0.00139	0.0370	<0.000100	<0.000050	0.130	0.0000106	22.4	0.00097	0.00031	0.00056	0.114	0.000116	0.0690	31.1	0.0302	<0.0000050	0.00723	0.00271	<0.050	4.46
RSEM-R6W-SP	2/1/2022 16:00	AOB116	M	C207120	3.7	0.147	0.00113	0.00092	0.0329	<0.0001	<0.001	0.112	0.000021	33.7	0.0013	0.00068	0.00177	0.122	<0.0002	0.0774	25.7	0.0356	0.0000022	0.006	0.0056	0.04	4.33
RSEM-R6W-SP	2/2/2022 12:00	AOB073	M	C207109	3.0	0.15	0.00113	0.00095	0.0331	<0.0001	<0.001	0.111	0.000023	35.1	0.0013	0.00069	0.00225	0.118	<0.0002	0.0769	26.1	0.0366	<0.0000019	0.006	0.0054	0.018	4.29
RSEM-R6W-SP	2/3/2022 12:00	AOC177	M	C207302	3.6	0.151	0.00116	0.00099	0.039	<0.0001	<0.001	0.108	0.000018	35.8	0.0014	0.00096	0.00149	0.13	<0.0002	0.0732	26.4	0.054	<0.0000019	0.0063	0.006	0.044	4.68
RSEM-R6W-SP	2/4/2022 11:00	AOC181	M	C207304	3.5	0.156	0.00116	0.00105	0.0386	<0.0001	<0.001	0.118	0.000014	36.8	0.0013	0.00055	0.00155	0.131	<0.0002	0.0772	28.7	0.046	<0.0000019	0.0059	0.0053	0.026	4.61
RSEM-R6W-SP	2/5/2022 10:00	AOE502	M	C207630	3.4	0.15	0.00132	0.00104	0.04	<0.0001	<0.001	0.118	0.000023	35.8	0.0013	0.00058	0.00162	0.111	<0.0002	0.0765	29.9	0.049	0.000003	0.006	0.0055	0.021	4.76
RSEM-R6W-SP	2/6/2022 13:00	AOE484	M	C207624	3.3	0.146	0.00127	0.00094	0.0408	<0.0001	<0.001	0.127	0.000016	37.2	0.0014	0.0005	0.00156	0.105	<0.0002	0.0803	29.7	0.0451	0.0000023	0.0062	0.0052	0.021	4.64
RSEM-R6W-SP	3/2/2022 13:30	APO714	M	C213881	3.1	0.0396	0.00058	0.00046	0.0251	<0.0001	<0.001	0.057	<0.00001	44.8	0.0013	0.00037	0.00485	0.038	<0.0002	0.0343	15.3	0.0129	<0.0000019	0.0036	0.0028	0.017	3.83
RSEM-R6W-SP	3/3/2022 15:40	APQ573	M	C214168	3.2	0.0414	0.00059	0.00048	0.0262	<0.0001	<0.001	0.059	<0.00001	45.8	0.0012	0.00046	0.00308	0.039	<0.0002	0.0354	15.8	0.0167	0.000002	0.0037	0.0031	0.018	4.10
RSEM-R6W-SP	4/17/2022 17:25	ARR904	M	C225213	1.12	0.0472	0.00061	0.00045	0.071	<0.0001	<0.001	<0.05	0.000026	40.5	0.0018	0.00074	0.00151	0.093	<0.0002	0.0257	13.4	0.0661	<0.0000019	0.0048	0.0059	0.016	2.89
RSEM-R6W-SP	7/27/2022 12:00	AYK062	M	C255556	3.83	0.0358	0.00123	0.00122	0.0643	<0.0001	<0.001	0.189	0.000011	44.2	0.0021	<0.0002	0.00129	0.037	<0.0002	0.0411	28.7	0.0072	<0.0000019	0.0158	0.0021	0.016	8.13
SeptimusBeaverPond_1	4/2/2022 15:15	ARB522	M	C222000	8.22	0.0395	<0.0005	0.00091	0.0787	<0.0001	<0.001	<0.05	0.000068	27.2	<0.001	0.00054	<0.0005	0.394	<0.0002	<0.002	6.73	1.8	0.0000036	<0.001	<0.001	0.27	7.33
SeptimusBeaverPond_2	4/2/2022 15:25	ARB523	M	C222000	8.03	0.0454	<0.0005	0.00062	0.047	<0.0001	<0.001	<0.05	0.000015	19.3	<0.001	0.00032	0.00138	0.558	<0.0002	<0.002	4.54	0.547	0.0000033	<0.001	<0.001	0.335	6.94
SeptimusBeaverPond_3	4/2/2022 15:35	ARB524	M	C222000	13.0	0.0407	<0.0005	0.00078	0.0475	<0.0001	<0.001	<0.05	0.000024	18.9	<0.001	0.00036	0.0016	0.48	<0.0002	<0.002	6.45	0.57	0.0000072	<0.001	0.0011	0.536	7.51
SeptimusBeaverPond_4	4/2/2022 15:50	ARB525	M	C222000	10.4	0.0368	<0.0005	0.00065	0.0534	<0.0001	<0.001	<0.05	0.000021	29.1	<0.001	0.00029	<0.0005	0.393	<0.0002	<0.002	8.42	0.557	0.0000045	<0.001	<0.001	0.411	5.38
SeptimusBeaverPond_5	4/2/2022 16:00	ARB526	M	C222000	22.6	0.0785	<0.0005	0.00144	0.12	<0.0001	<0.001	<0.05	0.000016	66.9	<0.001	0.00049	<0.0005	0.545	<0.0002	0.0041	24.3	0.952	0.000004	<0.001	0.0019	0.622	8.13
SeptimusBeaverPond_6	4/2/2022 16:15	ARB527	M	C222000	6.42	0.0067	<0.0005	0.001	0.172	<0.0001	<0.001	<0.05	0.000012	40.9	<0.001	0.00068	<0.0005	1.4	<0.0002	<0.002	10.6	0.592	0.0000029	0.0014	0.0023	0.077	4.02
SeptimusBeaverPond_7	4/2/2022 16:20	ARB528	M	C222000	7.32	0.723	<0.0005	0.0015	0.0886	<0.0001	<0.001	<0.05	0.000053	30.1	0.003	0.00149	0.00241	2.69	0.00089	0.003	11.7	0.583	0.000008	0.0013	0.0052	0.252	3.64
SeptimusBeaverPond_8	4/2/2022 16:30	ARB529	M	C222000	4.51	0.103	<0.0005	0.00116	0.0921	<0.0001	<0.001	<0.05	0.000016	34.4	<0.001	0.00077	0.00067	0.673	<0.0002	0.0023	10.5	0.735	0.0000035	0.0011	0.0019	0.077	2.84
SeptimusBeaverPond_1	6/25/2022 14:35	AVZ710	M	C245512	12.7	0.0977	<0.0005	0.00116	0.116	<0.0001	<0.001	<0.05	0.000012	113	<0.001	0.00022	0.00073	0.341	<0.0002	0.0102	48.7	0.032	0.0000052	0.0019	0.0028	0.029	2.91
SeptimusBeaverPond_2	6/25/2022 14:50	AVZ711	M	C245512	15.4	0.0966	<0.0005	0.00145	0.126	<0.0001	<0.001	<0.05	<0.00001	85.1	<0.001	0.00045	<0.0005	0.656	<0.0002	0.0053	28.9	0.583	0.0000036	<0.001	0.0013	0.185	4.38
SeptimusBeaverPond_3	6/25/2022 14:55	AVZ712	M	C245512	15.6	0.0158	<0.0005	0.00102	0.132	<0.0001	<0.001	<0.05	<0.00001	77.6	<0.001	0.00023	<0.0005	0.282	<0.0002	0.0049	27.8	0.121	0.000003	<0.001	0.0012	0.051	3.99
SeptimusBeaverPond_4	6/25/2022 15:10	AVZ713	M	C245512	15.6	0.0189	<0.0005	0.00123	0.0976	<0.0001	<0.001	<0.05	<0.00001	78.6	<0.001	0.00031	<0.0005	0.318	<0.0002	0.0052	30.1	0.214	0.0000043	<0.001	0.001	0.121	4.71
SeptimusBeaverPond_5	6/25/2022 15:25	AVZ714	M	C245512	15.2	0.0186	<0.0005	0.00126	0.103	<0.0001	<0.001	<0.05	<0.00001	81.1	<0.001	0.00023	<0.0005	0.238	<0.0002	0.005	27.8	0.299	0.0000031	<0.001	<0.001	0.156	4.82
SeptimusBeaverPond_6	6/25/2022 15:40	AVZ715	M	C245512	15.2	0.0151	<0.0005	0.00133	0.115	<0.0001	<0.001	<0.05	<0.00001	91.5	<0.001	0.00023	<0.0005	0.295	<0.0002	0.0054	30.8	0.279	0.0000039	<0.001	<0.001	0.145	4.63
SeptimusBeaverPond_7	6/25/2022 15:50	AVZ716	M	C245512	17.1	0.0413	<0.0005	0.00147	0.134	<0.0001	<0.001	<0.05	<0.00001	89.9	<0.001	0.00039	<0.0005	0.429	<0.0002	0.0058	31.7	0.761	0.0000055	<0.001	0.0012	0.226	4.49
SeptimusBeaverPond_8	6/25/2022 15:55	AVZ717	M	C245512	15.4	0.0376	<0.0005	0.00139	0.114	<0.0001	<0.001	<0.05	<0.00001	90.4	<0.001	0.00026	<0.0005	0.295	<0.0002	0.0057	31.2	0.263	0.0000051	<0.001	0.001	0.147	4.33
SeptimusBeaverPond_1	9/17/2022 15:00	BCF762	M	C272259	20.6	0.0136	<0.0005	0.00181	0.143	<0.0001	<0.001	<0.05	<0.00001	80.2	<0.001	0.00025	<0.0005	0.246	<0.0002	0.0061	41.5	0.235	<0.000019	<0.001	0.0011	0.088	6.41
SeptimusBeaverPond_2	9/17/2022 15:15	BCF755	M	C272259	22.8	0.0744	<0.0005	0.00199	0.154	<0.0001	<0.001	<0.05	0.000011	77.1	<0.001	0.00049	<0.0005	0.33	<0.0002	0.0049	35.7	0.662	<0.000019	<0.001	0.0012	0.425	7.24
SeptimusBeaverPond_3	9/17/2022 15:25	BCF756	M	C272259	22.0	0.0196	<0.0005	0.00194	0.158	<0.0001	<0.001	<0.05	<0.00001	77.2	<0.001	0.00032	<0.0005	0.133	<0.0002	0.0051	36.9	0.778	<0.000019	<0.001	<0.001	0.204	7.24
SeptimusBeaverPond_4	9/17/2022 15:30	BCF757	M	C272259	21.7	0.0437	<0.0005	0.00215	0.144	<0.0001	<0.001	<0.05	<0.00001	81.2	<0.001	0.00035	<0.0005	0.264	<0.0002	0.0053	39.1	0.534	<0.000019	<0.001	0.0011	0.156	7.47
SeptimusBeaverPond_5	9/17/2022 15:45	BCF758	M	C272259	20.4	0.0393	<0.0005	0.00205	0.15	<0.0001	<0.001	<0.05	<0.00001	82.5	<0.001	0.00032	<0.0005	0.232	<0.0002	0.0053	38.4	0.674	<0.000019	<0.001	0.0011	0.17	7.25
SeptimusBeaverPond_6	9/17/2022 15:55	BCF759	M	C272259	24.6	0.0308	<0.0005	0.00133	0.0571	<0.0001	<0.001	<0.05	<0.00001	47.0	<0.001	<0.0002	<0.0005	0.167	<0.0002	0.0048	35.6	0.0161	<0.000019	<0.001	0.0015	0.038	2.01
SeptimusBeaverPond_7	9/17/2022 16:10	BCF760	M	C272259	29.2	0.0068	<0.0005	0.00089	0.128	<0.0001	<0.001	<0.05	<0.00001	55.5	<0.001	0.00029	<0.0005	0.456	<0.0002	0.0034	22.1	0.124	<0.000019	0.002	0.0012	0.039	6.28
SeptimusBeaverPond_8	9/17/2022 16:20	BCF761	M	C272259	21.3	0.0332	<0.0005	0.00205	0.155	<0.0001	<0.001	<0.05	<0.00001	81.5	<0.001	0.00046	<0.0005	0.395	<0.0002	0.0053	37.8	0.765	<0.000019	<0.001	0.0011	0.536	7.54
USCD-North-Well	2/9/2022 12:00	AOK260	M	C208577	4.17	0.014	<0.0005	0.0002	0.296	<0.0001	<0.001	<0.05	0.000017	134	<0.001	<0.0002	0.00096	0.122	<0.0002	0.0025	22.5	0.0024	<0.0000019	<0.001	<0.001	0.011	1.28
USCD-North-Well	3/30/2022 12:20	AQX835	M	C221206	2.97	0.18	<0.0005	0.0005	0.266	<0.0001	<0.001	<0.05	0.000024	111	0.0013	0.0003	0.00161	0.558	0.00046	0.005	20.7	0.0147	0.0000025	0.0015	0.0014	0.027	1.24
USCD-North-Well	5/18/2022 15:30	ATJ927	M	C234012	1.34	0.0627	<0.0005	0.00011	0.132	<0.0001	<0.001	<0.05	0.000017	75.1	<0.001	<0.0002	<0.0005	0.153	<0.0002	0.0064	17.1	0.0051	<0.0000019	0.0022	<0.001	0.014	1.34
USCD-South-Well	2/9/2022 12:10	AOK261	M	C208577	3.64	0.0631	<0.0005	0.00027	0.178	<0.0001	<0.001	<0.05	0.000015	130	<0.001	<0.0002	0.001	0.304	0.00032	0.0032	22.7	0.0065	0.0000024	0.0014	<0.001	0.015	1.51
USCD-South-Well	3/30/2022 12:45	AQX836	M	C221206	2.75	0.0845	<0.0005	0.00031	0.271	<0.0001	<0.001	<0.05	0.000023	103	0.001	<0.0002	0.0038	0.276	0.00043	0.0065	23.1	0.0071	<0.0000019	0.0012	<0.001	0.021	1.25

Notes: Under Sample Class "M" denotes a monitoring sample and "D" denotes a field duplicate sample. "<" = Result not detected and is below the indicated detection limit. Values are absent from the table if a test result was not reported.

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
85-Background	5/19/2022 12:10	ATL918	M	C234314																									
85-EOP	3/24/2022 15:30	AQP987	M	C219524																									
85-EOP	3/30/2022 16:15	AQX839	M	C221206																									
85-EOP	5/4/2022 18:10	ASP685	M	C230320																									
85-EOP	5/7/2022 17:10	ASS950	M	C230886																									
85-EOP	5/12/2022 16:45	ATA820	M	C232369																									
85-EOP	5/19/2022 11:50	ATL916	M	C234314																									
85-EOP	5/29/2022 11:45	ATW973	M	C236421																									
85-EP	3/27/2022 10:40	AQS346	M	C219976																									
85-EP	4/3/2022 17:05	ARB463	M	C221989																									
85-IDZ	3/24/2022 16:35	AQP988	M	C219524																									
85-IDZ	3/30/2022 16:50	AQX840	M	C221206																									
85-IDZ	5/4/2022 18:35	ASP687	M	C230320																									
85-IDZ	5/7/2022 18:00	ASS952	M	C230886																									
85-IDZ	5/12/2022 17:15	ATA822	M	C232369																									
85-IDZ	5/19/2022 12:00	ATL917	M	C234314																									
85-IDZ	5/29/2022 12:15	ATW975	M	C236421																									
85-US	3/24/2022 16:30	AQP989	M	C219524																									
85-US	5/4/2022 18:30	ASP686	M	C230320																									
85-US	5/7/2022 17:55	ASS951	M	C230886																									
85-US	5/12/2022 17:00	ATA821	M	C232369																									
85-US	5/29/2022 12:05	ATW974	M	C236421																									
85-WP	4/3/2022 17:00	ARB462	M	C221989																									
A25_EOP	2/10/2022 14:45	AOM668	M	C208923																									
A25_EOP	2/12/2022 12:50	AOP218	M	C209346																									
A25_EOP	3/20/2022 17:15	AQJ918	M	C218219																									
A25_EOP	3/26/2022 19:00	AQS242	M	C219944																									
A25-SP	4/2/2022 13:40	ARB530	M	C222000																									
A25-SP	4/29/2022 14:00	ASL383	M	C229488																									
A25-SP	5/3/2022 15:40	ASO451	M	C230063																									
AC-S-Sump	3/6/2022 14:00	APS818	M	C214508	0.00303	6.53	<0.00002	107	0.553	60.5	0.00003	<0.005	0.0095	0.00668	<0.005	0.0066	0.00018	<0.003	0.00114	0.00174	0.133	<0.0001	<0.001	0.101	<0.00001	94.1	<0.001	0.00184
Area_20_Sump	7/8/2022 12:15	AWW523	M	C249170	0.00029	9.15	0.000036	26.2	0.282	23.5	0.000065	<0.005	0.0395	0.00264	<0.005	0.0137	0.00076	0.0037	<0.0005	0.00029	0.331	<0.0001	<0.001	<0.05	<0.00001	102	<0.001	0.00022
Area_23_BT	2/11/2022 12:55	AOM649	M	C208915	0.00466	4.05	<0.00002	74.9	0.288	39.4	0.000024	<0.005	<0.005	0.00263	<0.005	<0.005	<0.0001	<0.003	0.00057	0.00031	0.093	<0.0001	<0.001	0.103	0.000031	74.8	<0.001	0.00274
Area_23_NCD	4/21/2022 16:00	ARX711	M	C226546																									
Area_23_NCD	5/7/2022 13:15	ASS948	M	C230886																									
Area_23_NCD-EOP	4/21/2022 17:05	ARX712	M	C226546																									
Area_23_NCD-EOP	5/7/2022 13:50	ASS949	M	C230886																									
Area_24_E_Sump	7/27/2022 15:35	AYK064	M	C255556																									
Area_24_E_Sump	8/3/2022 16:35	AYX385	M	C257672																									
Area_24_E_Sump	8/7/2022 14:25	AZC303	M	C258444																									
Area_24_E_Sump	8/11/2022 15:30	AZR300	M	C260829																									
Area_24_E_Sump	9/10/2022 12:50	BBR905	M	C269730																									
Area_24_E_Sump	9/13/2022 11:40	BBX516	M	C270776	0.00118	4.16	<0.00002	7.89	0.259	16.6	<0.00001	<0.005	<0.005	0.00228	<0.005	0.0085	<0.0001	0.0045	<0.0005	0.0003	0.102	<0.0001	<0.001	<0.05	<0.00001	74.7	<0.001	<0.0002
Area_24_E_Sump	9/22/2022 16:00	BCR620	M	C273969																									
Area_24_E_Sump	9/28/2022 13:45	BDE183	M	C276033																									
Area_24_E_Sump	10/4/2022 13:25	BDR439	M	C277814																									
Area_24_E_Sump	10/13/2022 15:00	BEN620	M	C280837																									
Area_24_E_Sump	10/21/2022 12:00	BFD225	M	C283172																									
Area_24_E_Sump	10/26/2022 14:25	BFS036	M	C285038																									
Area_24_E_Sump	11/3/2022 15:20	BGJ746	M	C287759																									
Area_24_E_Sump	11/8/2022 12:30	BGT302	M	C289111																									
Area_24_E_Sump	11/15/2022 12:25	BHD953	M	C290817																									
Area_24_E_Sump	11/23/2022 14:20	BHR242	M	C292918																									
Area_24_E_Sump	11/30/2022 12:30	BID445	M	C294835																									
Area_24_W_Sump	7/10/2022 14:55	AWZ489	M	C249617																									
Area_24_W_Sump	7/13/2022 15:55	AXH418	M	C250934																									
Area_24_W_Sump	7/24/2022 15:00	AYC681	M	C254290																									
Area_24_W_Sump	7/27/2022 15:45	AYK065	M	C255556																									
Area_25_Pond	3/17/2022 14:30	AQH806	M	C217776																									
Area_30_EOP	2/10/2022 15:30	AOM665	M	C208923	0.00116	2.41	0.000022	1.75	0.402	25.7	0.000032	<0.005	0.0178	0.00145	<0.005	0.0155	0.00018	0.0079	<0.0005	0.00014	0.044	<0.0001	<0.001	<0.05	0.000029	42.0	<0.001	<0.0002
Area_30_EOP	3/20/2022 16:05	AQJ915	M	C218219	0.00161	1.51	<0.00002	4.47	1.68	150	<0.00001	<0.005	<0.005	0.00394	<0.005	<0.005	0.00015	<0.003	<0.0005	0.00031	0.048	<0.0001	<0.001	<0.05	0.000018	130	<0.001	0.00034
Area_30_EOP	4/2/2022 15:00	ARB521	M	C222000	0.00098	1.02	0.000025	4.32	1.73	137	0.00003	<0.005	<0.005	0.00327	<0.005	0.0305	0.0016	<0.003	<0.0005	0.00021	0.024	<0.0001	<0.001	<0.05	0.000013	133	<0.001	0.00049
Area_30_EOP	4/23/2022 13:30	ARZ187	M	C226855	0.00547	1.02	<0.00002	8.25	2.58	214	<0.00001	<0.005	<0.005	0.00555	<0.005	0.109	<0.0001	<0.003	<0.0005	0.00029	0.033	<0.0001	<0.001	<0.05	0.000014	190	<0.001	0.00109
Area_30_EOP	5/1/2022 13:00	ASL428	M	C229493	0.00635	2.24	<0.00002	5.60	1.55	97.1	<0.00001	<0.005	0.0074	0.00349	<0.005	0.0134	0.00021	<0.003	<0.0005	0.00019	0.037	<0.0001	<0.001	<0.05	<0.00001	93.5	<0.001	0.00023
Area_30_EOP	5/4/2022 14:15	ASP680	M	C230320	0.00653	2.2	<0.00002	8.11	1.81	144	0.000017	<0.005	0.0061	0.00489	<0.005	0.0217	0.00023	<0.003	<0.0005	0.00039	0.045	<0.0001	<0.001	<0.05	<0.00001	122	<0.001	0.0002
Area_30_EOP	5/7/2022 12:30	ASS944	M	C230886	0.00678	2.19	<0.00002	5.66	2.15	120	0.000015	<0.005	0.0128	0.00418	<0.005	0.013	0.00025	<0.003	<0.0005	0.00011	0.042	<0.0001	<0.001	<0.05	<0.00001	118	<0.001	<0.0002
Area_30_EOP	5/10/2022 12:50	ASX005	M	C231638	0.00879	1.46	<0.00002	5.68	2.48	132	0.000013	<0.005	<0.005	0.00466	<0.005	0.0108	<0.0001	0.004	<0.0005	0.00019	0.042	<0.0001	<0.001	<0.05	<0.00001	130	<0.001	<0.0002
Area_30_EOP	5/30/2022 13:45	ATZ470	M	C236894	0.0119	2.14	<0.00002	5.85	3.82	185	0.000015	<0.005	<0.005	0.00565	<0.005	0.0393	<0.0001	0.0468	<0.0005	0.00024	0.059	<0.0001	<0.001	<0.05	0.00008	163	<0.001	0.00188
Area_30_EOP	6/20/2022 11:55	AVO967	M	C243664	0.00814	0.979	<0.00002	6.10	4.17	240	<0.00001	<0.005	<0.005	0.00521	<0.005	0.0143	<0.0001	0.0052	<0.0005	0.00028	0.049	<0.0001	<0.001	<0.05	<0.00001	202	<0.001	<0.0002

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
Area_30_EOP	8/5/2022 12:00	AYY785	M	C257846	0.00494	1.21	<0.00004	9.25	6.76	368	<0.00002	<0.01	<0.01	0.00678	<0.01	0.028	<0.0002	<0.006	<0.001	0.00047	0.048	<0.0002	<0.002	<0.1	<0.00002	363	<0.002	<0.0004
Area_30_EOP	9/17/2022 14:45	BCF754	M	C272259	0.0046	0.449	<0.00002	17.2	13	814	0.00002	<0.005	<0.005	0.0114	<0.005	0.127	<0.0001	<0.015	<0.0025	<0.0005	0.048	<0.0005	<0.005	<0.25	<0.00005	487	<0.005	<0.001
Area_30_SP	1/25/2022 14:05	ANP166	M	C204905	0.00028	1.8	<0.00002	0.829	0.234	13.1	0.000012	<0.005	0.0212	0.00097	<0.005	0.0571	0.0007	0.0055	<0.0005	<0.0001	0.017	<0.0001	<0.001	<0.05	0.000019	24.3	<0.001	<0.0002
Area_30_SP	4/18/2022 15:35	ARU249	M	C225693	0.0027	2.98	<0.00002	17.3	6.41	477	0.000051	<0.005	0.0165	0.0143	<0.005	0.28	0.00061	<0.003	<0.0005	0.00046	0.053	<0.0001	<0.001	<0.05	0.000025	379	<0.001	0.00079
Area_30_SP	4/27/2022 15:30	ASH198	M	C228648	0.00334	1.61	<0.00002	10.0	2.56	227	0.000014	<0.005	0.0057	0.00619	<0.005	0.0647	0.00024	<0.003	<0.0005	0.00037	0.036	<0.0001	<0.001	<0.05	0.00002	199	<0.001	0.00035
Area_30_SP	5/4/2022 14:25	ASP681	M	C230320	0.00661	2.25	<0.00002	7.72	1.83	143	0.000017	<0.005	0.0064	0.00487	<0.005	<0.005	0.00027	<0.003	<0.0005	0.00035	0.043	<0.0001	<0.001	<0.05	<0.00001	124	<0.001	0.0003
Area_30_SP	5/4/2022 14:35	ASP682	M	C230320	0.00738	2.23	<0.00002	7.75	1.9	150	0.000016	<0.005	0.0105	0.00514	<0.005	<0.005	0.00023	<0.003	<0.0005	0.00043	0.045	<0.0001	<0.001	<0.05	<0.00001	126	<0.001	0.0003
Area_30_SP	5/24/2022 14:30	ATR511	M	C235358	0.00566	0.384	<0.00002	8.20	2.98	196	0.000018	<0.005	<0.005	0.00556	<0.005	0.0159	<0.0001	<0.003	<0.0005	0.00026	0.047	<0.0001	<0.001	<0.05	<0.00001	189	<0.001	<0.0002
Area_30_SP	6/16/2022 13:40	AVK125	M	C242788	0.0122	1.09	<0.00002	6.25	5.9	296	0.000021	<0.005	<0.005	0.00658	<0.005	0.0227	0.00016	0.0031	<0.0005	0.00035	0.088	<0.0001	<0.001	0.052	<0.00001	365	<0.001	<0.0002
Area_30_SP	6/25/2022 14:15	AVZ709	M	C245512	0.0111	0.595	<0.00002	7.16	6.38	354	0.000013	<0.005	<0.005	0.00721	<0.005	0.0242	<0.0001	0.0046	<0.0005	0.00031	0.055	<0.0001	<0.001	<0.05	<0.00001	285	<0.001	<0.0002
Area_30_SP	7/3/2022 12:30	AWM047	M	C247492	0.00673	0.699	<0.00002	9.02	6.98	421	0.00002	<0.005	<0.005	0.0061	<0.005	0.0221	<0.0001	0.0032	<0.0005	0.00034	0.053	<0.0001	<0.001	0.055	<0.00001	338	<0.001	<0.0002
Area_30_SP	7/11/2022 13:20	AXC660	M	C250105	0.0067	0.729	<0.0001	12.4	9.33	552	<0.00005	<0.025	<0.025	0.00867	<0.025	0.064	<0.0005	<0.006	<0.001	0.00045	0.067	<0.0002	<0.002	<0.1	0.000027	429	<0.002	<0.0004
Area_30_SP	7/30/2022 15:00	AYP674	M	C256352	0.00629	0.96	<0.0001	17.9	13.9	807	<0.00005	<0.025	<0.025	0.00916	<0.025	0.133	<0.0005	<0.015	<0.0025	<0.0005	0.086	<0.0005	<0.005	<0.25	0.000053	698	<0.005	<0.001
Area_30_SP	9/9/2022 11:45	BBS004	M	C269764	0.00419	0.977	<0.0001	12.6	10.1	604	<0.00005	<0.025	<0.025	0.00859	<0.025	0.08	<0.0005	<0.015	<0.0025	<0.0005	0.055	<0.0005	<0.005	<0.25	<0.00005	480	<0.005	<0.001
Area_30_SP	10/1/2022 11:20	BDL253	M	C276877	0.00333	<0.5	<0.0001	11.6	9.24	572	<0.00005	<0.025	<0.025	0.00965	<0.025	0.095	<0.0005	<0.015	<0.0025	<0.0005	0.048	<0.0005	<0.005	<0.25	<0.00005	498	<0.005	<0.001
Area_30_SP	10/6/2022 13:35	BDZ975	M	C278888	0.00325	<0.5	<0.0001	13.9	9.59	570	<0.00005	<0.025	<0.025	0.0102	<0.025	0.066	<0.0005	<0.015	<0.0025	<0.0005	0.049	<0.0005	<0.005	<0.25	<0.00005	510	<0.005	<0.001
Area_30_SP	10/22/2022 13:20	BFI046	M	C283756	0.00228	<0.5	<0.0001	14.0	9.69	600	<0.00005	<0.025	<0.025	0.0115	<0.025	0.058	<0.0005	<0.015	<0.0025	<0.0005	0.059	<0.0005	<0.005	<0.25	<0.00005	497	<0.005	<0.001
Area_52_Sump	6/12/2022 9:30	AVD505	M	C241814	0.0103	1.23	<0.00002	146	0.616	332	0.000033	<0.005	<0.005	0.00647	<0.005	0.0948	0.00022	0.0379	<0.0005	0.00028	0.092	<0.0001	<0.001	0.192	0.00182	152	<0.001	0.0279
Area_A_N_Ditch	1/25/2022 14:40	ANP165	M	C204905	0.00017	2.82	<0.00002	2.32	0.0926	6.8	0.000012	<0.005	0.0113	0.0006	<0.005	<0.005	0.00026	0.0032	<0.0005	0.00023	0.141	<0.0001	<0.001	<0.05	<0.00001	46.1	<0.001	0.00031
Area_A_N_Ditch	3/21/2022 13:20	AQL270	M	C218465	0.00039	10.2	0.000027	3.76	0.135	10.1	0.000061	<0.005	0.103	0.00107	0.0108	0.0137	0.00262	<0.003	<0.0005	0.00029	0.182	<0.0001	<0.001	<0.05	0.000015	59.3	<0.001	0.0003
Area_A_N_Ditch	5/3/2022 13:00	ASO449	M	C230063	0.00027	2.94	<0.00002	3.60	0.122	14.1	<0.00001	<0.005	<0.005	0.00081	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00023	0.169	<0.0001	<0.001	<0.05	<0.00001	59.1	<0.001	<0.0002
Area_A_N_Ditch	5/30/2022 14:55	ATZ471	M	C236894	0.00043	2.98	<0.00002	5.25	0.118	21.4	<0.00001	<0.005	<0.005	0.00077	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00019	0.158	<0.0001	<0.001	<0.05	0.000019	58.8	<0.001	0.00021
Area_A_N_Ditch	8/1/2022 13:55	AYR823	M	C256691																								
Area_A_N_Ditch	12/7/2022 14:10	BIR868	M	C297052	0.00106	3.69	<0.00002	5.13	0.14	20.9	<0.00001	<0.005	<0.005	0.0012	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00012	0.197	<0.0001	<0.001	<0.05	0.000022	85.9	<0.001	<0.0002
Area_A_NE_Sump	3/9/2022 17:00	APZ006	M	C215885	0.00113	6.16	<0.00002	96.5	0.31	56.5	<0.00001	<0.005	<0.005	0.00257	<0.005	0.0072	<0.0001	<0.003	<0.0005	0.00017	0.113	<0.0001	<0.001	0.054	0.00001	102	<0.001	<0.0002
Area_A_NE_Sump	5/11/2022 11:00	ASZ427	M	C232133																								
Area_A_NE_Sump	5/22/2022 13:10	ATO539	M	C234788																								
Area_A_NE_Sump	5/26/2022 10:15	ATV286	M	C236083																								
Area_A_NE_Sump	5/30/2022 14:20	ATZ472	M	C236894																								
Area_A_NE_Sump	6/4/2022 11:40	AUL726	M	C238905																								
Area_A_NE_Sump	6/11/2022 11:30	AUY739	M	C241062																								
Area_A_NE_Sump	6/18/2022 13:15	AVL992	M	C243162																								
Area_A_NE_Sump	6/24/2022 16:45	AVZ718	M	C245512																								
Area_A_NE_Sump	7/3/2022 13:30	AWM051	M	C247492																								
Area_A_NE_Sump	7/6/2022 11:05	AWV912	M	C249077																								
Area_A_NE_Sump	7/12/2022 13:00	AXE622	M	C250400																								
Area_A_NE_Sump	7/24/2022 14:40	AYC680	M	C254290																								
Area_A_NE_Sump	8/7/2022 13:55	AZC302	M	C258444																								
Area_A_NE_Sump	8/14/2022 16:00	AZR297	M	C260829																								
Area_A_NE_Sump	8/15/2022 16:00	AZW326	M	C261663	0.00122	9.53	0.000029	9.21	0.332	17.0	0.00004	<0.005	0.033	0.00223	<0.005	0.0139	0.00269	0.0035	<0.0005	0.00028	0.167	<0.0001	<0.001	<0.05	0.000018	96.2	<0.001	0.00039
Area_A_NE_Sump	8/27/2022 13:30	BAR930	M	C265307																								
Area_A_NE_Sump	9/4/2022 16:00	BBI410	M	C268301																								
Area_A_NE_Sump	9/8/2022 10:30	BBO450	M	C269143																								
Area_A_NE_Sump	9/22/2022 16:20	BCR621	M	C273969																								
Dewatering_Pond	6/1/2022 14:30	AUE685	M	C237797	0.00433	3.9	0.000026	35.6	0.23	51.4	0.000028	<0.005	0.0096	0.00292	<0.005	0.0693	0.00039	0.0994	<0.0005	0.00032	0.048	<0.0001	<0.001	0.06	0.000162	71.8	<0.001	0.00376
Earthfill_Dam_DS_OUT	1/1/2022 13:45	FJ2200029-004	M	FJ2200029	0.00140	3.71	<0.000010	7.27	0.130	16.6	<0.000010	<0.00010	<0.00030	0.000854	<0.00050	<0.0030	<0.00020	0.0042	<0.00010	0.00020	0.108	<0.000100	<0.000050	0.011	0.0000050	52.0	<0.00050	<0.00010
Earthfill_Dam_DS_OUT	1/5/2022 12:10	FJ2200018-001	M	FJ2200018	0.00168	3.88	<0.000010	8.65	0.142	19.1	<0.000010	<0.00010	<0.00030	0.00111	<0.00050	<0.0030	<0.00020	0.0027	<0.00010	0.00015	0.09	<0.000100	<0.000050	<0.010	0.0000051	44.7	<0.00050	<0.00010
Earthfill_Dam_DS_OUT	1/13/2022 13:00	FJ2200098-001	M	FJ2200098	0.00108	3.19	<0.000010	5.35	0.129	12.4	<0.000010	<0.00010	<0.00030	0.000823	<0.00050	<0.0030	<0.00020	0.0034	<0.00010	0.00016	0.092	<0.000100	<0.000050	<0.010	<0.0000050	44.4	<0.00050	<0.00010
Earthfill_Dam_DS_OUT	1/19/2022 11:00	FJ2200185-002	M	FJ2200185	0.00204	4.28	<0.000010	10.5	0.151	20.1	<0.000010	<0.00010	<0.00030	0.00108	<0.00050	<0.0030	<0.00020	0.0031	<0.00010	0.00014	0.099	<0.000100	<0.000050	0.011	0.0000057	48.7	<0.00050	<0.00010
Earthfill_Dam_DS_OUT	1/26/2022 14:30	ANQ896	M	C205279	0.00147	3.26	<0.00002	6.14	0.128	6.9	<0.00001	<0.005	<0.005	0.00087	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00017	0.084	<0.0001	<0.001	<0.05	<0.00001	48.2	<0.001	<0.0002
Earthfill_Dam_DS_OUT	2/3/2022 15:00	AOC179	M	C207302	0.00221	4.03	<0.00002	10.6	0.134	13.3	<0.00001	<0.005	<0.005	0.00116	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.0001	0.085	<0.0001	<0.001	<0.05	<0.00001	53.8	<0.001	<0.0002
Earthfill_Dam_DS_OUT	2/8/2022 12:00	AOI292	M	C208265	0.00341	4.03	<0.00002	10.9	0.13	20.6	<0.00001	<0.005	<0.005	0.00116	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	0.097	<0.0001	<0.001	<0.05	<0.00001	66.9	<0.001	<0.0002
Earthfill_Dam_DS_OUT	2/16/2022 12:00	AOU843	M	C210450	0.00236	3.49	<0.00002	8.97	0.161	18.8	<0.00001	<0.005	<0.005	0.00112	<0.005	<0.005	<0.0001	0.0098	<0.0005	0.00025	0.113	<0.0001	<0.001	<0.05	0.000011	52.4	<0.001	<0.0002
Earthfill_Dam_DS_OUT	2/24/2022	APF946	M	C212235	0.00042	1.92	<0.00002	1.63	0.101	6.0	<0.00001	<0.005	<0.005	0.00046	<0.005	<0.005	<0.0001	0.0032	<0.0005	0.00011	0.109	<0.0001	<0.001	<0.05	<0.00001	68.7	<0.001	<0.0002
Earthfill_Dam_DS_OUT	3/2/2022 12:20	APO715	M	C213881	0.0032	3.3	<0.00002	15.9	0.139	31.4	<0.00001	<0.005	<0.005	0.00116	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00012	0.094	<0.0001	<0.001	<0.05	<0.00001	73.6	<0.001	<0.0002
Earthfill_Dam_DS_OUT	3/10/2022 10:30	APZ004	M	C215884	0.00047	2.38	<0.00002	1.77	0.115	5.0	<0.00001	<0.005	<0.005	0.00056	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00013	0.068	<0.0001	<0.001	<0.05	<0.00001	33.5	<0.001	<0.0002
Earthfill_Dam_DS_OUT	3/10/2022 10:40	APZ005	D	C215884	0.00315	4.04	<0.00002	17.0	0.16	25.8	<0.00001	<0.005	<0.005	0.00134	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00012	0.103	<0.0001	<0.001	<0.05	<0.00001	65.5	<0.001	<0.0002
Earthfill_Dam_DS_OUT	3/17/2022 15:00	AQH799	M	C217776	0.00267	3.04	<0.00002	14.2	0.145	27.0	<0.00001	<0.005	<0.005	0.00126	<0.005	<0.005	0.00014	<0.003	<0.0005	0.00015	0.098	<0.0001	<0.001	<0.05	<0.00001	56.9	<0.001	<0.0002
Earthfill_Dam_E_BT	3/23/2022 12:30	AQP256	M	C219363	0.00439	4.14	<0.00002	21.6	0.164	31.9	<0.00001	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00023	0.099	<0.0001	<0.001	<0.05	<0.00001	62.1	<0.001	<0.0002
Earthfill_Dam_E_BT	3/30/2022 13:05	AQX834	M	C221206	0.00383	3.91	<0.00002	19.4	0.138	29.9	<0.00001	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	0.0034	<0.0005	0.00014	0.093	<0.0001	<0.001	<0.05	<0.00001	69.4	<0.001	<0.0002
Earthfill_Dam_E_BT	4/7/2022 15:30	ARI194	M	C223271	0.00423	4.49	<0.00002	26.2	0.173	40.7	<0.00001	<0.005	<0.005	0.00155	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	0.089	<0.0001	<0.001	<0.05	<0.00001	74.6	<0.001	<0.0002
Earthfill_Dam_E_BT	4/13/2022 14:10	ARP728	M	C224775	0.00309	3.85	<0.00002	19.9	0.139	31.4	<0.00001	<0.005	<0.005	0.00118	<0.005	<0.005	<0.0001	0.0038	<0.0005	0.00012	0.085	<0.0001	<0.001	<0.05	<0.00001	68.2	<0.001	<0.0002
Earthfill_Dam_E_BT	4/20/2022 11:40	ARW670	M	C226267	0.00338	4.63	<0.00002	30.5	0.167	42.6	<0.00001	<0.005	<0.005	0.00169	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00011	0.093	<0.0001	<0.001	<0.05	0.000011	66.4	<0.001	<0.0002
Earthfill_Dam_E_BT	4/28/2022 13:00	ASH220	M	C228650	0.00358	3.77	<0.00002	22.3	0.157	32.9	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00016	0.089	<0.0001	<0.001	<0.05	<0.00001	64.2	<0.001	<0.0002
Earthfill_Dam_E_BT	5/4/2022 11:20	ASP678	M	C230320	0.00364	3.8	<0.00002	19.3	0.146	34.7	<0.00001	<0.005	<0.005	0.00127	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00024	0.097	<0.0001	<0.001	<0.05	<0.00001	71.6	<0.001	<0.0002
Earthfill_Dam_E_BT	5/11/2022 13:50	ASZ426	M	C232133	0.0037	3.72	<0.00002	22.6	0.167	38.6	<0.00001	<0.005	<0.005	0.00146	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00023	0.092	<0.0001	<0.001	<0.05	<0.00001	72.7	<0.001	<0.0002
GC-Debris-US	1/23/2022 18:15	FJ2200194-005	M	FJ2200194																								
GC-Debris-US	2/9/2022 18:00	AOK264	M	C208577																								
GC-Debris-US	2/15/2022 10:55	AOS725	M	C210043																								

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se mg/L	T-Si mg/L	T-Ag mg/L	T-Na mg/L	T-Sr mg/L	T-S mg/L	T-Tl mg/L	T-Sn mg/L	T-Ti mg/L	T-U mg/L	T-V mg/L	T-Zn mg/L	T-Zr mg/L	D-Al mg/L	D-Sb mg/L	D-As mg/L	D-Ba mg/L	D-Be mg/L	D-Bi mg/L	D-B mg/L	D-Cd mg/L	D-Ca mg/L	D-Cr mg/L	D-Co mg/L
GC-Debris-US	3/17/2022 13:40	AQH804	M	C217776																								
GC-Debris-US	3/19/2022 17:05	AQJ977	M	C218236																								
GC-Debris-US	3/22/2022 10:40	AQN718	M	C218958																								
GC-Debris-US	3/26/2022 17:55	AQS241	M	C219944																								
GC-Debris-US	3/31/2022 17:00	AQY800	M	C221428																								
GC-Debris-US	4/9/2022 11:40	ARK010	M	C223638																								
GC-Debris-US	4/15/2022 11:00	ARQ205	M	C224832																								
GC-Debris-US	4/30/2022 14:00	ASL382	M	C229488																								
GC-Debris-US	5/4/2022 16:50	ASP684	M	C230320																								
GC-Debris-US	5/10/2022 17:00	ASX008	M	C231638																								
GC-Debris-US	5/21/2022 14:30	ATN143	M	C234510																								
GC-Debris-US	5/27/2022 10:10	ATV304	M	C236089																								
GC-Debris-US	5/28/2022 11:00	ATX756	M	C236620																								
GC-Debris-US	6/1/2022 16:10	AUE686	M	C237797																								
GC-Debris-US	6/11/2022 12:20	AUY741	M	C241062																								
GC-Debris-US	6/17/2022 16:40	AVK726	M	C242942																								
GC-Debris-US	6/23/2022 14:45	AVV601	M	C244839																								
GC-Debris-US	7/3/2022 15:30	AWM052	M	C247492																								
GC-Debris-US	7/6/2022 16:35	AWV914	M	C249077																								
GC-Debris-US	7/24/2022 16:00	AYC683	M	C254290																								
GC-Debris-US	7/31/2022 15:40	AYO877	M	C256301																								
GC-Debris-US	8/4/2022 13:30	AYY908	M	C257848																								
GC-Debris-US	8/14/2022 17:10	AZR299	M	C260829																								
L3-DC-DS	2/10/2022 18:45	AOM670	M	C208923																								
L3-DC-DS	3/17/2022 20:10	AQH808	M	C217776																								
L3-DC-DS	3/19/2022 18:55	AQJ980	M	C218236																								
L3-DC-DS	3/22/2022 16:50	AQN721	M	C218958																								
L3-DC-DS	3/24/2022 15:30	AQP986	M	C219524																								
L3-DC-DS	3/29/2022 17:50	AQV268	M	C220606																								
L3-DC-DS	4/9/2022 10:20	ARK008	M	C223638																								
L3-DC-DS	4/23/2022 17:55	ARZ191	M	C226855																								
L3-DC-DS	4/27/2022 19:00	ASH201	M	C228648																								
L3-DC-DS	5/5/2022 15:10	ASR011	M	C230531																								
L3-DC-DS	5/8/2022 17:20	ASS889	M	C230861																								
L3-DC-DS	5/12/2022 10:10	ATA819	M	C232369																								
L3-DC-DS	5/21/2022 16:40	ATN141	M	C234510																								
L3-DC-DS	5/28/2022 19:05	ATX750	M	C236620																								
L3-DC-DS	6/11/2022 15:00	AUY743	M	C241062																								
L3-DC-US	2/10/2022 18:00	AOM669	M	C208923																								
L3-DC-US	3/17/2022 20:00	AQH807	M	C217776																								
L3-DC-US	3/19/2022 18:45	AQJ979	M	C218236																								
L3-DC-US	3/22/2022 16:40	AQN720	M	C218958																								
L3-DC-US	3/24/2022 15:20	AQP985	M	C219524																								
L3-DC-US	3/29/2022 17:40	AQV267	M	C220606																								
L3-DC-US	4/9/2022 10:40	ARK007	M	C223638																								
L3-DC-US	4/23/2022 17:45	ARZ190	M	C226855																								
L3-DC-US	4/27/2022 18:50	ASH200	M	C228648																								
L3-DC-US	5/5/2022 15:00	ASR010	M	C230531																								
L3-DC-US	5/8/2022 17:10	ASS888	M	C230861																								
L3-DC-US	5/12/2022 10:00	ATA818	M	C232369																								
L3-DC-US	5/21/2022 16:20	ATN140	M	C234510																								
L3-DC-US	5/28/2022 18:55	ATX749	M	C236620																								
L3-DC-US	6/11/2022 15:20	AUY742	M	C241062																								
L3-W-DC-EOP	2/9/2022 18:30	AOK265	M	C208577																								
L3-W-DC-EOP	2/12/2022 17:45	AOP219	M	C209346																								
L3-W-DC-EOP	3/17/2022 20:20	AQH809	M	C217776																								
L3-W-DC-EOP	3/19/2022 18:30	AQJ978	M	C218236																								
L3-W-DC-EOP	3/22/2022 16:35	AQN722	M	C218958																								
L3-W-DC-EOP	3/24/2022 15:10	AQP984	M	C219524																								
L3-W-DC-EOP	3/29/2022 17:25	AQV266	M	C220606																								
L3-W-DC-EOP	4/9/2022 10:30	ARK009	M	C223638																								
L3-W-DC-EOP	4/16/2022 17:40	ARR881	M	C225206																								
L3-W-DC-EOP	4/22/2022 15:55	ARZ192	M	C226855																								
L3-W-DC-EOP	4/23/2022 17:30	ARZ189	M	C226855																								
L3-W-DC-EOP	4/24/2022 14:50	ASA419	M	C227083																								
L3-W-DC-EOP	4/27/2022 19:10	ASH202	M	C228648																								
L3-W-DC-EOP	5/5/2022 14:50	ASR009	M	C230531																								
L3-W-DC-EOP	5/8/2022 17:00	ASS887	M	C230861																								
L3-W-DC-EOP	5/12/2022 9:50	ATA817	M	C232369																								

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
L3-W-DC-EOP	5/21/2022 16:00	ATN142	M	C234510																									
L3-W-DC-EOP	5/28/2022 18:45	ATX748	M	C236620																									
L3-W-DC-EOP	6/17/2022 17:45	AVK728	M	C242942																									
L3-W-DC-Sump	6/11/2022 15:30	AUY744	M	C241062																									
L3-W-DC-Sump	7/3/2022 16:40	AWM054	M	C247492																									
LBEX_B1	1/22/2022 10:30	FJ2200193-002	M	FJ2200193	0.00337	7.61	0.000048	7.37	0.294	59.8	0.000077	0.0001	0.0954	0.00207	0.0151	0.0502	0.00190	0.0058	0.00017	0.00029	0.037	<0.000100	<0.000050	0.016	0.0000615	64.2	<0.00050	<0.00010
LBGC-OUT	1/23/2022 15:50	FJ2200194-004	M	FJ2200194																									
LBGC-OUT	2/9/2022 17:50	AOK263	M	C208577																									
LBGC-OUT	3/17/2022 13:30	AQH805	M	C217776																									
LBGC-OUT	3/19/2022 15:15	AQJ976	M	C218236																									
LBGC-OUT	3/22/2022 10:50	AQN719	M	C218958																									
LBGC-OUT	3/26/2022 17:15	AQS240	M	C219944																									
LBGC-OUT	3/31/2022 18:00	AQY801	M	C221428																									
LBGC-OUT	4/9/2022 11:50	ARK011	M	C223638																									
LBGC-OUT	4/15/2022 11:50	ARQ206	M	C224832																									
LBGC-OUT	4/21/2022 11:45	ARX708	M	C226546																									
LBGC-OUT	4/30/2022 14:00	ASL381	M	C229488																									
LBGC-OUT	5/4/2022 16:40	ASP683	M	C230320																									
LBGC-OUT	5/10/2022 16:20	ASX007	M	C231638																									
LBGC-OUT	5/21/2022 14:50	ATN144	M	C234510																									
LBGC-OUT	5/27/2022 11:05	ATV305	M	C236089																									
LBGC-OUT	5/28/2022 10:45	ATX755	M	C236620																									
LBGC-OUT	6/1/2022 16:45	AUE687	M	C237797																									
LBGC-OUT	6/11/2022 12:00	AUY740	M	C241062																									
LBGC-OUT	6/17/2022 17:25	AVK727	M	C242942																									
LBGC-OUT	6/23/2022 14:05	AVV600	M	C244839																									
LBGC-OUT	7/3/2022 15:50	AWM053	M	C247492																									
LBGC-OUT	7/6/2022 16:00	AWV913	M	C249077																									
LBGC-OUT	7/24/2022 15:50	AYC682	M	C254290																									
LBGC-OUT	7/31/2022 15:30	AYO876	M	C256301																									
LBGC-OUT	8/4/2022 14:25	AYY909	M	C257848																									
LBGC-OUT	8/14/2022 17:00	AZR298	M	C260829																									
LBGC-OUT	10/25/2022 15:55	BFP710	M	C284665																									
MWTF-CELL-1-PIPE	1/12/2022 8:45	AMY185	M	C201826																									
MWTF-CELL-1-PIPE	1/19/2022 8:45	ANG681	M	C203398																									
MWTF-CELL-1-PIPE	1/26/2022 9:00	ANP082	M	C204889																									
MWTF-CELL-1-PIPE	2/2/2022 9:15	ANZ527	M	C206699																									
MWTF-CELL-1-PIPE	2/9/2022 8:50	AOI319	M	C208269																									
MWTF-CELL-1-PIPE	2/16/2022 8:50	AOS652	M	C210024																									
MWTF-CELL-1-PIPE	2/23/2022 9:00	APC513	M	C211586																									
MWTF-CELL-1-PIPE	3/2/2022 9:30	APM689	M	C213453																									
MWTF-CELL-1-PIPE	3/9/2022 8:45	APW000	M	C215209																									
MWTF-CELL-1-PIPE	3/16/2022 8:50	AQE363	M	C217028																									
MWTF-CELL-1-PIPE	3/23/2022 9:30	AQN282	M	C218879																									
MWTF-CELL-1-PIPE	3/30/2022 9:30	AQV055	M	C220559																									
MWTF-CELL-1-PIPE	4/6/2022 8:50	ARE618	M	C222526																									
MWTF-CELL-1-PIPE	4/13/2022 8:45	ARN240	M	C224394																									
MWTF-CELL-1-PIPE	4/20/2022 9:10	ARV016	M	C225896																									
MWTF-CELL-1-PIPE	4/27/2022 9:30	ASD263	M	C227745																									
MWTF-CELL-1-PIPE	5/3/2022 8:50	ASK914	M	C229394																									
MWTF-CELL-1-PIPE	5/11/2022 8:50	ASW835	M	C231613																									
MWTF-CELL-1-PIPE	5/18/2022 9:05	ATH374	M	C233574																									
MWTF-CELL-1-PIPE	5/25/2022 9:15	ATQ476	M	C235131																									
MWTF-CELL-1-PIPE	6/1/2022 8:50	AUC440	M	C237402																									
MWTF-CELL-1-PIPE	6/8/2022 8:50	AUR914	M	C239868																									
MWTF-CELL-1-PIPE	6/29/2022 8:50	AWE580	M	C246283																									
MWTF-CELL-1-PIPE	7/11/2022 11:35	AXC956	M	C250181	0.00484	7.91	<0.00002	212	0.417	184	0.000025	<0.005	0.0102	0.00415	<0.005	0.0139	0.00058	0.0263	0.00141	0.00099	0.037	<0.0001	<0.001	0.214	<0.00001	40.3	0.0047	<0.0002
MWTF-CELL-1-PIPE	7/28/2022 11:45	AYM157	M	C255903	0.00282	5.64	<0.00002	174	0.264	98.7	0.000017	<0.005	0.0063	0.00301	<0.005	0.0112	0.00038	0.0642	0.00138	0.00084	0.013	<0.0001	<0.001	0.198	<0.00001	9.84	0.0018	<0.0002
MWTF-CELL-3	1/5/2022 11:00	AMR869	M	C200496	0.00171	4.34	<0.000020	67.4	0.128	40.7	<0.000010	<0.0050	<0.0050	0.00259	<0.0050	<0.0050	<0.00010	0.0397	0.00084	0.00063	0.014	<0.00010	<0.0010	0.093	<0.000010	17.2	0.0016	<0.00020
MWTF-CELL-3	1/10/2022 9:30	FJ2200044-001	M	FJ2200044	0.00164	5.56	<0.000010	75.1	0.140	54.0	<0.000010	0.0004	0.00510	0.00263	0.00303	<0.0030	<0.00020	0.0372	0.00092	0.00100	0.014	<0.000100	<0.000050	0.077	<0.0000050	16.8	0.00148	<0.00010
MWTF-CELL-3	1/12/2022 8:55	AMY187	M	C201826	0.00182	5.43	<0.000020	86.6	0.146	49.0	<0.000010	<0.0050	<0.0050	0.00310	<0.0050	<0.0050	<0.00010	0.0141	0.00107	0.00089	0.015	<0.00010	<0.0010	0.100	<0.000010	19.1	0.0010	<0.00020
MWTF-CELL-3	1/19/2022 8:55	ANG683	M	C203398	0.00166	6.13	<0.000020	86.8	0.121	44.0	<0.000010	<0.0050	<0.0050	0.00280	<0.0050	<0.0050	<0.00010	0.0202	0.00122	0.00080	0.0350	<0.00010	<0.0010	0.113	<0.000010	18.9	<0.0010	0.00022
MWTF-CELL-3	1/26/2022 9:10	ANP081	M	C204889	0.00162	4.36	<0.000020	72.2	0.111	37.9	<0.000010	<0.0050	0.0052	0.00239	<0.0050	<0.0050	0.00018	0.0209	0.00112	0.00076	0.025	<0.00010	<0.0010	0.086	0.000013	17.6	0.0014	0.00031
MWTF-CELL-3	2/2/2022 9:10	ANZ526	M	C206699	0.00216	4.86	<0.000020	86.0	0.162	63.4	<0.000010	<0.0050	<0.0050	0.00200	<0.0050	0.0111	<0.00010	0.0513	0.00117	0.00058	0.019	<0.00010	<0.0010	0.103	0.000039	30.2	0.0025	0.00051
MWTF-CELL-3	2/9/2022 8:55	AOI318	M	C208269	0.00431	3.32	<0.000020	44.6	0.201	84.4	0.000031	<0.0050	<0.0050	0.00118	<0.0050	<0.0050	0.00016	0.0833	0.00101	0.00041	0.024	<0.00010	<0.0010	0.065	0.000013	55.0	0.0018	0.00099
MWTF-CELL-3	2/16/2022 8:55	AOS651	M	C210024	0.00347	2.59	<0.000020	33.2	0.262	65.5	<0.000010	<0.0050	<0.0050	0.00157	<0.0050	<0.0050	<0.00010	0.0356	0.00104	0.00070	0.049	<0.00010	<0.0010	<0.050	0.000025	46.5	0.0016	0.00072
MWTF-CELL-3	2/23/2022 9:05	APC512	M	C211586	0.00296	3.46	<0.000020	44.7	0.194	59.6	<0.000010	<0.0050	<0.0050	0.00162	<0.0050	<0.0050	<0.00010	0.0221	0.00073	0.00084	0.032	<0.00010	<0.0010	<0.050	0.000015	35.5	0.0013	0.00086
MWTF-CELL-3	3/2/2022 9:15	APM688	M	C213453	0.00300	2.66	<0.000020	43.5	0.160	71.3	<0.000010	<0.0050	<0.0050	0.00050	<0.0050	<0.0050	0.00012	0.0115	0.00055	0.00037	0.0220	<0.00010	<0.0010	0.051	<0.000010	45.9	0.0012	0.00031
MWTF-CELL-3	3/9/2022 8:55	APV999	M	C215209	0.00199	5.71	<0.000020	70.9	0.107	42.7	<0.000010	<0.0050	<0.0050	0.00189	<0.0050	0.0162	<0.00010	0.0155	0.00127	0.00086	0.019	<0.00010	<0.0010	0.089	<0.000010	19.3	0.0041	<0.00020

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
MWTF-CELL-3	3/16/2022 9:00	AQE362	M	C217028	0.00172	5.24	<0.000020	72.0	0.0994	38.8	<0.000010	<0.0050	<0.0050	0.00243	<0.0050	<0.0050	<0.00010	0.0074	0.00117	0.00099	0.017	<0.00010	<0.0010	0.073	<0.000010	14.3	0.0039	<0.00020
MWTF-CELL-3	3/23/2022 9:10	AQN281	M	C218879	0.00268	4.19	<0.000020	51.7	0.188	60.2	<0.000010	<0.0050	0.0053	0.00207	<0.0050	0.0068	0.00022	0.0249	0.00124	0.00085	0.041	<0.00010	<0.0010	0.073	0.000024	32.5	0.0037	0.00058
MWTF-CELL-3	3/30/2022 9:00	AQV054	M	C220559	0.00379	4.23	<0.000020	59.1	0.145	62.4	0.000010	<0.0050	<0.0050	0.00189	<0.0050	<0.0050	0.00015	0.0214	0.00104	0.00085	0.03	<0.00010	<0.0010	0.071	0.000015	29.3	0.0028	<0.00056
MWTF-CELL-3	4/6/2022 8:55	ARE617	M	C222526	0.00292	3.68	<0.000020	56.8	0.138	62.8	0.000013	<0.0050	<0.0050	0.00184	<0.0050	<0.0050	0.00088	0.0210	0.00071	0.00053	0.031	<0.00010	<0.0010	0.056	0.000017	26.9	0.0011	0.00074
MWTF-CELL-3	4/13/2022 8:55	ARN239	M	C224394	0.00401	3.68	<0.000020	73.5	0.142	73.7	0.000010	<0.0050	<0.0050	0.00232	<0.0050	<0.0050	<0.00010	0.0550	0.00095	0.00075	0.032	<0.00010	<0.0010	0.093	0.000011	27.3	0.0019	0.00042
MWTF-CELL-3	4/20/2022 9:05	ARV015	M	C225896	0.00402	4.19	<0.000020	78.7	0.167	79.6	<0.000010	<0.0050	<0.0050	0.00262	<0.0050	0.0060	<0.00010	0.0093	0.00133	0.00052	0.041	<0.00010	<0.0010	0.075	<0.000010	29.9	0.0014	0.00037
MWTF-CELL-3	4/27/2022 9:15	ASD262	M	C227745	0.00420	5.11	<0.000020	65.0	0.131	57.2	0.000010	<0.0050	<0.0050	0.00262	<0.0050	<0.0050	<0.00010	0.0120	0.00122	0.00092	0.032	<0.00010	<0.0010	0.072	<0.000010	20.8	0.0026	<0.00020
MWTF-CELL-3	5/3/2022 8:55	ASK913	M	C229394	0.0128	3.87	<0.000020	157	0.298	191	0.000025	<0.0050	<0.0050	0.00231	<0.0050	0.0160	<0.00010	0.0307	0.00145	0.00046	0.037	<0.00010	<0.0010	0.127	0.000031	57.2	<0.0010	0.00221
MWTF-CELL-3	5/11/2022 8:55	ASW834	M	C231613	0.0155	4.81	<0.000020	157	0.256	170	0.000018	<0.0050	<0.0050	0.00232	<0.0050	0.0062	0.00013	0.0168	0.00171	0.00105	0.035	<0.00010	<0.0010	0.139	<0.000010	37.0	0.0015	0.00124
MWTF-CELL-3	5/18/2022 9:05	ATH373	M	C233574	0.00817	4.24	<0.000020	144	0.245	137	0.000019	<0.0050	<0.0050	0.00182	<0.0050	<0.0050	0.00011	0.0093	0.00165	0.00076	0.036	<0.00010	<0.0010	0.138	<0.000010	33.9	0.0016	0.00050
MWTF-CELL-3	5/25/2022 9:10	ATQ475	M	C235131	0.00712	3.97	<0.000020	172	0.265	146	0.000017	<0.0050	<0.0050	0.00116	<0.0050	<0.0050	<0.00010	0.0039	0.00192	0.00055	0.033	<0.00010	<0.0010	0.101	<0.000010	35.8	0.0015	0.00032
MWTF-CELL-3	6/1/2022 8:55	AUC439	M	C237402	0.00954	4.23	<0.000020	213	0.442	187	0.000030	<0.0050	<0.0050	0.00142	<0.0050	0.0251	0.00013	0.0738	0.00200	0.00082	0.062	<0.00010	<0.0010	0.199	0.000075	60.4	0.0018	0.00368
MWTF-CELL-3	6/8/2022 8:55	AUR913	M	C239868	0.00905	4.63	<0.000020	229	0.302	187	0.000023	<0.0050	<0.0050	0.00139	<0.0050	<0.0050	<0.00010	0.0161	0.00269	0.00115	0.039	<0.00010	<0.0010	0.264	<0.000010	35.3	0.0035	0.00074
MWTF-CELL-3	6/18/2022 10:00	AVL920	M	C243145	0.00646	3.24	<0.00002	200	0.306	192	0.000024	<0.005	<0.005	0.00232	<0.005	<0.005	<0.0001	0.117	0.0014	0.00102	0.046	<0.0001	<0.001	0.213	0.000015	66.5	0.0024	0.00079
MWTF-CELL-3	6/19/2022 7:00	AVL891	M	C243135	0.00676	3.04	<0.00002	175	0.299	181	0.00002	<0.005	<0.005	0.00218	<0.005	<0.005	<0.0001	0.0967	0.00128	0.00082	0.044	<0.0001	<0.001	0.197	<0.00001	72.3	0.002	0.00069
MWTF-CELL-3	6/20/2022 11:05	AVO877	M	C243649	0.00751	2.94	<0.00002	159	0.334	193	0.000018	<0.005	<0.005	0.00227	<0.005	<0.005	<0.0001	0.0167	0.00132	0.00077	0.049	<0.0001	<0.001	0.231	<0.00001	68.3	0.0019	0.00068
MWTF-CELL-3	6/22/2022 9:30	AVQ401	M	C243950	0.00906	3.38	<0.000020	147	0.349	200	0.000019	<0.0050	<0.0050	0.00192	<0.0050	<0.0050	<0.00010	0.0144	0.00141	0.00084	0.064	<0.00010	<0.0010	0.208	<0.000010	72.0	0.0019	0.00050
MWTF-CELL-3	6/29/2022 8:55	AWE579	M	C246283	0.00563	3.37	<0.000020	115	0.220	120	0.000018	<0.0050	<0.0050	0.00102	<0.0050	0.0059	<0.00010	0.0068	0.00104	0.00076	0.0380	<0.00010	<0.0010	0.180	<0.000010	44.0	0.0018	0.00024
MWTF-CELL-3	7/11/2022 12:00	AXC957	M	C250181	0.00431	4.02	<0.00002	206	0.252	168	0.00002	<0.005	<0.005	0.00213	<0.005	<0.005	<0.0001	0.0172	0.00179	0.00123	0.036	<0.0001	<0.001	0.224	<0.00001	38.6	0.0033	0.00021
MWTF-CELL-3	7/19/2022 12:50	AXQ710	M	C252510	0.00392	6.08	<0.00002	192	0.173	127	0.000012	<0.005	<0.005	0.00294	<0.005	<0.005	<0.0001	0.0854	0.00145	0.0012	0.028	<0.0001	<0.001	0.198	<0.00001	27.9	0.0035	<0.0002
MWTF-CELL-3	7/28/2022 12:10	AYM158	M	C255903	0.00334	4.89	<0.00002	160	0.17	99.3	0.000015	<0.005	<0.005	0.0029	<0.005	0.0128	<0.0001	0.0359	0.0012	0.00093	0.03	<0.0001	<0.001	0.167	<0.00001	26.6	0.0017	<0.0002
MWTF-CELL-3	8/3/2022 11:10	AYX384	M	C257672	0.00274	4.46	<0.00002	156	0.102	80.6	0.000013	<0.005	<0.005	0.00209	<0.005	0.0097	0.00014	0.0429	0.00132	0.00109	0.026	<0.0001	<0.001	0.17	<0.00001	15.4	0.0023	<0.0002
MWTF-CELL-3	8/22/2022 15:00	BAG922	M	C263407	0.00232	4.86	<0.00002	173	0.0734	82.5	<0.00001	<0.005	<0.005	0.00232	<0.005	<0.005	<0.0001	0.0403	0.00153	0.00146	0.029	<0.0001	<0.001	0.204	<0.00001	11.5	0.0019	<0.0002
MWTF-CELL-3	9/4/2022 15:30	BBI408	M	C268301	0.00215	5.76	<0.00002	174	0.066	77.8	<0.00001	<0.005	<0.005	0.00224	<0.005	<0.005	<0.0001	0.0341	0.00196	0.00179	0.032	<0.0001	<0.001	0.214	<0.00001	9.35	0.0016	<0.0002
MWTF-CELL-3	9/8/2022 12:15	BBO448	M	C269143	0.00206	6.32	<0.00002	173	0.0668	82.7	<0.00001	<0.005	<0.005	0.00233	<0.005	<0.005	<0.0001	0.0482	0.00207	0.00175	0.024	<0.0001	<0.001	0.207	<0.00001	10.2	0.0017	<0.0002
MWTF-CELL-3	9/17/2022 12:20	BCF753	M	C272259	0.00188	4.28	<0.00002	257	0.184	181	0.000011	<0.005	<0.005	0.00304	<0.005	<0.005	<0.0001	0.0193	0.00128	0.00124	0.034	<0.0001	<0.001	0.201	<0.00001	25.5	0.0015	<0.0002
MWTF-CELL-3	9/22/2022 13:00	BCR618	M	C273969	0.00196	4.82	<0.00002	155	0.218	151	0.00001	<0.005	<0.005	0.00269	<0.005	<0.005	<0.0001	0.0225	0.00112	0.0012	0.052	<0.0001	<0.001	0.157	<0.00001	41.3	0.0035	<0.0002
MWTF-CELL-3	9/30/2022 11:40	BDH546	M	C276348	0.00236	6.02	<0.00002	138	0.16	111	<0.00001	<0.005	<0.005	0.00244	<0.005	<0.005	0.00011	0.0157	0.00136	0.00129	0.036	<0.0001	<0.001	0.155	<0.00001	29.6	0.0041	<0.0002
MWTF-CELL-3	10/6/2022 12:25	BDZ974	M	C278888	0.00323	8.35	<0.00002	134	0.197	102	0.000011	<0.005	<0.005	0.00252	<0.005	0.0063	0.00014	0.0316	0.00102	0.001	0.055	<0.0001	<0.001	0.127	<0.00001	62.6	0.003	<0.0002
MWTF-CELL-3	10/19/2022 11:35	BFA350	M	C282741	0.00502	7.58	<0.00002	90.6	0.28	86.2	0.000022	<0.005	0.018	0.00275	<0.005	0.0097	0.00063	0.0187	0.00111	0.00098	0.113	<0.0001	<0.001	0.098	0.000015	94.7	0.0032	0.00049
MWTF-CELL-3	10/29/2022 15:25	BFZ656	M	C286199	0.00427	6.46	<0.00002	45.7	0.234	50.1	<0.00001	<0.005	<0.005	0.00203	<0.005	0.006	0.00023	0.0445	0.00071	0.00067	0.074	<0.0001	<0.001	0.074	<0.00001	72.9	0.0019	<0.0002
MWTF-CELL-3	11/3/2022 13:00	BGJ745	M	C287759	0.00302	6.8	<0.00002	30.6	0.211	35.9	0.000017	<0.005	0.0191	0.00168	<0.005	0.0188	0.00089	0.0269	0.00064	0.00064	0.073	<0.0001	<0.001	<0.05	0.000018	67.1	0.0013	<0.0002
MWTF-CELL-3	11/9/2022 11:30	BGW285	M	C289508	0.00217	4.59	<0.00002	21.1	0.146	27.7	0.000012	<0.005	0.0081	0.00141	<0.005	0.009	0.00026	0.027	<0.0005	0.00039	0.061	<0.0001	<0.001	<0.05	0.000011	60.4	0.0026	<0.0002
MWTF-CELL-3	11/19/2022 12:50	BHL413	M	C291899	0.00212	3.72	<0.00002	18.6	0.145	22.8	0.000019	<0.005	<0.005	0.00126	<0.005	0.0056	0.0001	0.0214	<0.0005	0.00026	0.053	<0.0001	<0.001	<0.05	<0.00001	60.4	<0.001	<0.0002
MWTF-CELL-3	11/23/2022 13:15	BHR241	M	C292918	0.00194	5.26	<0.00002	18.1	0.155	21.2	0.000012	<0.005	0.0099	0.00114	<0.005	0.0114	0.00039	0.0281	<0.0005	0.00034	0.057	<0.0001	<0.001	<0.05	<0.00001	60.6	0.0013	<0.0002
MWTF-CELL-3	12/2/2022 11:30	BIF819	M	C295193	0.00184	3.94	<0.00002	15.6	0.136	20.2	<0.00001	<0.005	<0.005	0.00104	<0.005	<0.005	<0.0001	0.0264	<0.0005	0.00026	0.058	<0.0001	<0.001	<0.05	<0.00001	64.0	<0.001	<0.0002
MWTF-CELL-3	12/17/2022 11:30	BJL793	M	C299939	0.00198	4.77	<0.00002	14.2	0.153	25.8	0.000011	<0.005	<0.005	0.00149	<0.005	0.0072	0.0002	0.0207	<0.0005	0.00026	0.064	<0.0001	<0.001	<0.05	0.000018	70.6	<0.001	<0.0002
MWTF-CELL-3	12/20/2022 11:20	BJP135	M	C2A0603	0.00213	4.47	<0.00002	15.3	0.137	25.9	<0.00001	<0.005	<0.005	0.00138	<0.005	0.0138	0.00016	0.0259	<0.0005	0.00028	0.064	<0.0001	<0.001	<0.05	<0.00001	65.4	<0.001	<0.0002
MWTF-CELL-3	12/29/2022 13:00	BJT906	M	C2A1753	0.00178	4.87	<0.00002	23.2	0.118	22.6	<0.00001	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	0.0359	<0.0005	0.00035	0.056	<0.0001	<0.001	<0.05	<0.00001	61.8	<0.001	<0.0002
MWTF-PAG-POND	1/12/2022 8:50	AMY186	M	C201826	0.00210	8.81	0.000042	86.5	0.337	50.8	0.000036	<0.0050	0.0293	0.00394	0.0063	0.269	0.00027	0.0079	0.00149	0.00102	0.084	<0.00010	<0.0010	0.115	0.000029	72.2	<0.0010	0.00135
MWTF-PAG-POND	1/19/2022 8:50	ANG682	M	C203398	0.00209	7.38	<0.000020	84.5	0.281	44.5	<0.000010	<0.0050	0.0197	0.00318	<0.0050	0.0195	0.00051	0.0071	0.00118	0.00080	0.130	<0.00010	<0.0010	0.117	<0.000010	63.3	<0.0010	0.00098
MWTF-PAG-POND	1/26/2022 9:30	ANP080	M	C204889	0.00240	8.03	<0.000020	88.7	0.353	78.3	0.000027	<0.0050	0.0538	0.00328	0.0052	0.287	0.00117	0.0316	0.00123	0.00035	0.071	<0.00010	<0.0010	0.103	0.000558	80.8	0.0025	0.0198
MWTF-PAG-POND	2/2/2022 9:00	ANZ525	M	C206699	0.00192	6.98	<0.000020	113	0.289	48.5	0.000012	<0.0050	0.0069	0.00338	<0.0050	0.0212	0.00027	0.0168	0.00142	0.00115	0.067	<0.00010	<0.0010	0.116	0.000029	61.1	0.0045	0.00106
MWTF-PAG-POND	2/9/2022 8:45	AOI317	M	C208269	0.00538	2.70	0.000030	33.5	0.276	94.3	0.000025	<0.0050	<0.0050	0.00208	<0.0050	0.114	0.00017	0.0288	0.00075	0.00022	0.081	<0.00010	<0.0010	0.054	0.000802	102	<0.0010	0.0174
MWTF-PAG-POND	2/16/2022 8:45	AOS650	M	C210024	0.00427	3.95	<0.000020	35.3	0.352	68.2	0.000017	<0.0050	0.0122	0.00240	<0.0050	0.0311	0.00058	0.0611	0.00095	0.00072	0.122	<0.00010	<0.0010	0.051	0.000104	73.6	0.0017	0.00386
MWTF-PAG-POND	2/23/2022 9:00	APC511	M	C211586	0.00241	4.36	<0.000020	47.1	0.268	52.9	0.000017	<0.0050	0.0155	0.00219	<0.0050	0.0179	0.00057	0.0251	0.00066	0.00073	0.095	<0.00010	<0.0010	0.050	0.000076	63.6	<0.0010	0.00310
MWTF-PAG-POND	3/2/2022 9:00	APM687	M	C213453	0.00160	6.57	0.000038	68.7	0.248	45.3	0.000078	<0.0050	0.0297	0.00296	0.0070	0.0299	0.00054	0.0151	0.00102	0.00075	0.093	<0.00010	<0.0010	0.073	<0.000010	61.8	0.0012	0.00048
MWTF-PAG-POND	3/9/2022 8:50	APV998	M	C215209	0.00153	6.19	0.000022	66.1	0.277	31.7	0.000023	<0.0050	0.0161	0.00325	<0.0050	0.0242	0.00037	0.0222	0.00122	0.00115	0.175	<0.00010	<0.0010	0.089	<0.000010	65.8	0.0022	0.00073
MWTF-PAG-POND	3/16/2022 8:55	AQE361	M	C217028	0.00262	5.36	<0.000020	115	0.374	61.6	0.000021	<0.0050	0.0151	0.00429	<0.0050	0.0422	0.00040	0.0123	0.00151	0.00116	0.128	<0.00010	<0.0010	0.100	<0.000010	66.3	0.0025	0.00149
MWTF-PAG-POND	3/23/2022 9:00	AQN280	M	C218879	0.00378	10.4	0.000043	59.2	0.279	68.2	0.000066	<0.0050	0.114	0.00303	0.0107	0.0401	0.00228	0.0401	0.00123	0.00073	0.106	<0.00010	<0.0010	0.074	0.000059	61.1	0.0029	0.00459
MWTF-PAG-POND	3/30/2022 9:20	AQV053	M	C220559	0.00357	7.47	0.000046	62.9	0.247	75.5	0.000064	<0.0050	0.0382	0.00364	0.0076	0.106	0.00025	0.0278	0.00070	0.00040	0.112	<0.00010	<0.0010	0.063	0.000367	73.6	<0.0010	0.0103
MWTF-PAG-POND	4/6/2022 8:45	ARE616	M	C222526	0.00470	4.79	0.000021	109	0.272	85.5	0.000036	<0.0050	0.0082	0.00479	<0.0050	0.0241	0.00104	0.0113	0.00127	0.00090	0.099	<0.00010	<0.0010	0.104	0.000059	60.4	0.0022	0.00300
MWTF-PAG-POND	4/13/2022 8:00	ARN238	M	C224394	0.00407	5.43	<0.000020	71.6	0.257	67.3	0.000019	<0.0050	0.0144	0.00346	<0.0050	0.0323	0.00027	0.0164	0.00107	0.00093	0.173	<0.00010	<0.0010	0.091	0.000014	82.8	0.0018	0.00082
MWTF-PAG-POND	4/20/2022 9:00	ARV014	M	C225896	0.00390	6.77	<0.000020	63.6	0.236	55.6	0.000017	<0.0050	0.0224	0.00354	<0.0050	0.0190	0.00083	0.0173	0.00152	0.00120	0.197	<0.00010	<0.0010	0.068	<0.000010	64.7	0.0039	0.00043
MWTF-PAG-POND	4/27/2022 9:00	ASD261	M	C227745	0.00421	7.84	0.000047	79.2	0.269	60.0	0.000046	<0.0050	0.0363	0.00377	0.0073	0.0742	0.00075	0.0112	0.00138	0.00108	0.107	<0.00010	<0.0010	0.081	<0.000010	51.2	0.0015	0.00039
MWTF-PAG-POND	5/3/2022 8:45	ASK912	M	C229394	0.0176	4.63	0.000058	215	0.451	217	0.000022	<0.0050	0.0127	0.00446	<0.0050	0.205	0.00040	0.0213	0.00156	0.00097	0.096	<0.00010	<0.0010	0.141	0.000812	74.8	0.0011	0.0295
MWTF-PAG-POND	5/11/2022 8:45	ASW833	M	C231613	0.0156	7.75	0.000043	184	0.443	195	0.000037	<0.0050	0.0308	0.00426	<0.0050	0.183	0.00377	0.0057	0.00172	0.00074	0.101	<0.00010	<0.0010	0.158	0.000553	76.6	0.0011	0.0264
MWTF-PAG-POND	5/18/2022 9:05	ATH372	M	C233574	0.00760	5.07	<0.000020	143	0.364	129	0.000029	<0.0050	0.0118	0.00366	<0.0050	0.0205	0.00043	0.0167	0.00153	0.00094	0.133	<0.00010	<0.0010	0.140	0.000024	69.8	0.0014	0.00621
MWTF-PAG-POND	5/25/2022 9:00	ATQ474	M	C235131	0.00804	5.81	<0.000020	237	0.521	197	0.000027	<0.0050	0.0054	0.00479	<0.0050	0.0231	0.00015	0.0150	0.00212	0.00154	0.109	<0.00010	<0.0010	0.122	0.000031	65.9	0.0017	0.00574
MWTF-PAG-POND	6/1/2022 8:45	AUC438	M	C237402	0.00949	5.37	<0.000020	210	0.521	177	0.000033	<0.0050	<0.0050	0.00374	<0.0050	0.247	0.00016	0.238	0.00244	0.00185	0.163	<0.00010	<0.0010	0.251	0.00104	69.0	0.0039	0.0362
MWTF-PAG-POND	6/8/2022 8:45	AUR912	M	C239868	0.00595	8.82	0.000032	293	0.311	159	0.000025	<0.0050	0.0231	0.00300	0.0105	0.0535	0.00082	0.0569	0.00348	0.00322	0.102	<0.00010	<0.0010	0.380	<0.000010	38.7	0.0034	0.00071
MWTF-PAG-POND	6/12/2022 11:30	AUY704	M	C241043	0.0081	4.54	<0.00002	227	0.445	243	0.000027	<0.005	0.0052	0.00315	<0.005	0.0263	0.00018	0.0501	0.00166	0.00116	0.091	<0.0001	<0.001	0.302	0.000465	112	0.0029	0.0198
MWTF-PAG-POND	6/22/2022 9:45	AVQ400	M	C243950	0.00779	4.55	<0.000020	150	0.381	168	0.000022	<0.0050	0.0055	0.00296	<0.0050	0.0123	0.00021	0.0942	0.00206	0.00193	0.232	<0.00010	<0.0010	0.230	<0.000010	87.2	0.0023	0.00196
MWTF-PAG-POND	6/29/2022 8:45	AWE578	M	C246283	0.00481	5.05	<0.000020	199	0.309	143	0.000024	<0.0050	0.0137	0.00291	<0.0050	0.0400	0.00102	0.0331	0.00127	0.00122	0.0750	<0.00010	<0.0010	0.264	<0.000010	66.2	0.0036	0.00039
MWTF-PAG-POND	7/11/2022 23:25	AXC955	M	C250181	0.00492	7.46	<0.00002	216	0.416	187	0.000024	<0.005	0.0066	0.00421	<0.005	0.0101	0.00047	0.0447	0.00142	0.00134	0.11	<0.0001	<0.001	0.219	<0.00001	96.8	0.0041	0.00032
MWTF-PAG-POND	7/28/2022 11:20	AYM156	M	C255903	0.00292	5.42	<0.00002	175	0.228	97.6	0.000017	<0.005	<0.005	0.00288	<0.005	0.0063	0.00022	0.083	0.00135	0.00118	0.066	<0.0001	<0.001	0.195	<0.00001	59.2	0.0011	<0.0002
MWTF-PAG-POND	8/3/2022 10:40	AYX383	M	C257672	0.00337	5.51	<0.00002	111	0.21	61.0	0.000023	<0.005	0.0149	0.00203	<0.005	0.0145	0.00052	0.0543	0.001	0.00115	0.084	<0.0001	<0.001	0.131	0.000011	56.9	0.0012	<0.0002
MWTF-PAG-POND	8/22/2022 14:30	BAG921	M	C263407	0.00262	8.73	<0.00002	193	0.248	88.1	0.000025	<0.005	0.0308	0.00287	0.0066	0.0069	0.00155	0.0379	0.00185	0.00247	0.287	<0.0001	<0.001	0.219	<0.00001	46.3	0.0012	0.00028
MWTF-PAG-POND	9/4/2022 15:00	BBI406	M	C268301	0.0022	8.92	<0.00002	168	0.214	77.8	0.000023	<0.005	0.0179	0.00267	0.0065	0.0071	0.00177	0.0577	0.00232	0.00246	0.199	<0.0001	<0.001	0.217	<0.00001	44.0	0.0011	<0.0002

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
MWTF-PAG-POND	9/8/2022 12:45	BBO449	M	C269143	0.00217	8.59	<0.00002	240	0.298	158	0.000024	<0.005	0.0397	0.00356	0.0062	0.0064	0.00149	0.0553	0.00149	0.00186	0.157	<0.0001	<0.001	0.212	<0.00001	63.2	<0.001	0.00025
MWTF-PAG-POND	9/17/2022 12:00	BCF752	M	C272259	0.00244	6.61	<0.00002	140	0.286	114	0.000031	<0.005	0.0113	0.00368	<0.005	0.0519	0.00046	0.0613	0.00123	0.00078	0.189	<0.0001	<0.001	0.144	0.00021	68.0	<0.001	0.00469
MWTF-PAG-POND	9/22/2022 12:45	BCR617	M	C273969	0.00202	5.34	0.000033	136	0.354	152	0.000014	<0.005	<0.005	0.00324	<0.005	0.0056	0.00016	0.0445	0.00134	0.00143	0.13	<0.0001	<0.001	0.151	<0.00001	88.4	0.0018	0.00108
MWTF-PAG-POND	9/30/2022 11:25	BDH547	M	C276348	0.00273	7.99	<0.00002	126	0.219	89.6	0.00001	<0.005	<0.005	0.00244	<0.005	<0.005	0.00013	0.0463	0.00148	0.0019	0.106	<0.0001	<0.001	0.154	<0.00001	59.3	0.0039	<0.0002
PRHP-WTF-INFLUENT-PIPE	6/13/2022 12:30	AVD895	M	C241931	0.00679	4.64	<0.00002	232	0.39	199	0.000024	<0.005	0.0071	0.00301	<0.005	0.0081	0.00034	0.0351	0.00183	0.00115	0.042	<0.0001	<0.001	0.3	0.000017	54.4	0.0036	0.00191
PRHP-WTF-INFLUENT-PIPE	6/14/2022 16:05	AVD461	M	C241802														0.0463	0.00139	0.00094	0.07	<0.0001	<0.001	0.245	0.000094	124	0.0017	0.00471
PRHP-WTF-INFLUENT-PIPE	6/17/2022 18:20	AVK706	M	C242936														0.0764	0.00115	0.00116	0.119	<0.0001	<0.001	0.158	0.000143	101	0.0017	0.006
PRHP-WTF-INFLUENT-PIPE	6/18/2022 10:35	AVL921	M	C243145														0.179	0.00105	0.001	0.105	<0.0001	<0.001	0.152	0.000321	136	0.0013	0.0118
PRHP-WTF-REACTOR-EOP	6/13/2022 16:00	AVD896	M	C241931														0.0261	0.00183	0.00108	0.029	<0.0001	<0.001	0.32	<0.00001	42.4	0.0038	0.00043
PRHP-WTF-REACTOR-EOP	6/14/2022 15:50	AVD460	M	C241802														0.0032	0.00141	0.00044	0.029	<0.0001	<0.001	0.261	<0.00001	64.4	0.0024	0.0002
PRHP-WTF-REACTOR-EOP	6/17/2022 18:30	AVK707	M	C242936														0.0272	0.00119	0.00069	0.062	<0.0001	<0.001	0.16	<0.00001	78.0	0.0019	0.00036
PRHP-WTF-REACTOR-EOP	6/18/2022 10:50	AVL922	M	C243145														0.272	0.00106	0.00071	0.063	<0.0001	<0.001	0.156	<0.00001	120	0.0015	0.00054
PR-IDZ	1/1/2022 11:45	FJ2200029-005	M	FJ2200029	0.000265	2.31	<0.000010	1.15	0.106	4.92	<0.000010	<0.00010	<0.00090	0.000401	<0.00050	<0.0030	<0.00020	0.0044	<0.00010	0.00016	0.026	<0.000100	<0.000050	<0.010	0.0000106	22.1	<0.00050	<0.00010
PR-IDZ	1/5/2022 13:25	FJ2200018-002	M	FJ2200018	0.000347	2.40	<0.000010	2.30	0.119	6.71	<0.000010	<0.00010	0.00056	0.000550	0.00050	<0.0030	<0.00020	0.0055	<0.00010	0.00018	0.034	<0.000100	<0.000050	<0.010	0.0000072	29.5	<0.00050	<0.00010
PR-IDZ	1/13/2022 14:00	FJ2200098-002	M	FJ2200098	0.000340	2.41	<0.000010	1.22	0.112	5.23	<0.000010	<0.00010	0.00074	0.000493	0.00053	0.0035	<0.00020	0.0046	<0.00010	0.00018	0.0320	<0.000100	<0.000050	<0.010	0.0000110	28.4	<0.00050	<0.00010
PR-IDZ	1/19/2022 13:00	FJ2200185-003	M	FJ2200185	0.000322	2.55	<0.000010	1.38	0.120	5.66	<0.000010	<0.00010	0.00060	0.000470	<0.00050	<0.0030	<0.00020	0.0055	<0.00010	0.00017	0.032	<0.000100	<0.000050	<0.010	0.0000109	28.9	<0.00050	<0.00010
PR-IDZ	1/19/2022 13:30	FJ2200185-004	D	FJ2200185	0.000323	2.57	<0.000010	1.28	0.118	5.52	<0.000010	<0.00010	0.00056	0.000473	<0.00050	<0.0030	<0.00020	0.0047	<0.00010	0.00020	0.032	<0.000100	<0.000050	<0.010	0.0000126	28.5	<0.00050	<0.00010
PR-IDZ	1/26/2022 13:30	ANQ897	M	C205279	0.00033	2.28	<0.00002	1.23	0.108	3.5	<0.00001	<0.005	<0.005	0.0005	<0.005	0.0121	<0.0001	0.0039	<0.0005	<0.0001	0.029	<0.0001	<0.001	<0.05	<0.00001	28.5	<0.001	<0.0002
PR-IDZ	2/3/2022 14:00	AOC178	M	C207302	0.00036	2.34	<0.00002	1.17	0.106	<3.0	<0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00013	0.026	<0.0001	<0.001	<0.05	<0.00001	28.8	<0.001	<0.0002
PR-IDZ	2/8/2022 14:10	AOI291	M	C208265	0.00037	2.32	<0.00002	1.13	0.101	3.8	<0.00001	<0.005	<0.005	0.00046	<0.005	<0.005	<0.0001	0.0043	<0.0005	0.00014	0.026	<0.0001	<0.001	<0.05	<0.00001	28.5	<0.001	<0.0002
PR-IDZ	2/16/2022 13:00	AOU841	M	C210450	0.00035	2.49	<0.00002	1.30	0.141	8.8	<0.00001	<0.005	<0.005	0.00058	<0.005	<0.005	<0.0001	0.0179	<0.0005	0.00026	0.034	<0.0001	<0.001	<0.05	<0.00001	28.7	<0.001	<0.0002
PR-IDZ	2/24/2022 14:00	APF948	M	C212235	0.00027	2.54	<0.00002	1.21	0.113	5.2	<0.00001	<0.005	<0.005	0.00048	<0.005	<0.005	<0.0001	0.0055	<0.0005	0.00016	0.03	<0.0001	<0.001	<0.05	<0.00001	29.3	<0.001	<0.0002
PR-IDZ	3/2/2022 14:25	APO716	M	C213881	0.00025	1.87	<0.00002	1.11	0.0992	5.0	<0.00001	<0.005	<0.005	0.00043	<0.005	<0.005	<0.0001	0.0034	<0.0005	0.00014	0.024	<0.0001	<0.001	<0.05	<0.00001	31.3	<0.001	<0.0002
PR-IDZ	3/10/2022 11:55	APZ001	M	C215884	0.00033	2.4	<0.00002	1.25	0.113	5.8	<0.00001	<0.005	<0.005	0.00054	<0.005	<0.005	<0.0001	0.0044	<0.0005	0.00016	0.031	<0.0001	<0.001	<0.05	0.00001	30.4	<0.001	<0.0002
PR-IDZ	3/17/2022 17:00	AQH798	M	C217776	0.00039	2.53	<0.00002	1.71	0.126	6.5	<0.00001	<0.005	<0.005	0.00057	<0.005	<0.005	<0.0001	0.0063	<0.0005	0.00021	0.033	<0.0001	<0.001	<0.05	<0.00001	29.3	<0.001	<0.0002
PR-IDZ	3/23/2022 16:15	AQP258	M	C219363	0.00033	2.59	<0.00002	1.48	0.129	4.8	<0.00001	<0.005	<0.005	0.00054	<0.005	<0.005	<0.0001	0.0058	<0.0005	0.00015	0.03	<0.0001	<0.001	<0.05	<0.00001	27.0	<0.001	<0.0002
PR-IDZ	3/30/2022 13:40	AQX833	M	C221206	0.00029	2.23	<0.00002	1.08	0.0851	<3.0	<0.00001	<0.005	<0.005	0.00043	<0.005	<0.005	<0.0001	0.004	<0.0005	0.00015	0.027	<0.0001	<0.001	<0.05	<0.00001	27.0	<0.001	<0.0002
PR-IDZ	4/7/2022 15:00	ARI196	M	C223271	0.00038	2.52	<0.00002	1.48	0.116	5.9	<0.00001	<0.005	<0.005	0.00053	<0.005	<0.005	<0.0001	0.0036	<0.0005	0.00012	0.028	<0.0001	<0.001	<0.05	0.000012	29.3	<0.001	<0.0002
PR-IDZ	4/13/2022 15:00	ARP727	M	C224775	0.00028	2.3	<0.00002	1.29	0.0972	4.8	<0.00001	<0.005	<0.005	0.00045	<0.005	<0.005	<0.0001	0.0042	<0.0005	0.00012	0.025	<0.0001	<0.001	<0.05	<0.00001	27.4	<0.001	<0.0002
PR-IDZ	4/20/2022 13:30	ARW669	M	C226267	0.00029	2.6	<0.00002	1.39	0.124	4.8	<0.00001	<0.005	<0.005	0.00059	<0.005	<0.005	<0.0001	0.0038	<0.0005	0.00015	0.032	<0.0001	<0.001	<0.05	<0.00001	28.4	<0.001	<0.0002
PR-IDZ	4/28/2022 11:30	ASH218	M	C228650	0.00035	3.35	<0.00002	1.49	0.113	4.6	0.000012	<0.005	0.014	0.00055	<0.005	<0.005	0.00021	0.0072	<0.0005	0.00019	0.032	<0.0001	<0.001	<0.05	<0.00001	27.4	<0.001	<0.0002
PR-IDZ	5/4/2022 13:10	ASP677	M	C230320	0.00038	3.94	0.000026	1.51	0.115	7.8	0.000039	<0.005	0.022	0.00062	0.005	0.0132	0.00019	0.0076	<0.0005	0.00024	0.033	<0.0001	<0.001	<0.05	0.000011	26.2	<0.001	<0.0002
PR-IDZ	5/11/2022 14:15	ASZ425	M	C232133	0.00041	4.81	0.000023	1.74	0.124	7.3	0.000055	<0.005	0.0319	0.00067	0.0076	0.0205	0.00016	0.0213	<0.0005	0.00032	0.039	<0.0001	<0.001	<0.05	0.00001	30.0	<0.001	<0.0002
PR-IDZ	5/19/2022 14:00	ATL912	M	C234314	0.0003	4.7	<0.00002	1.78	0.107	5.0	0.000042	<0.005	0.0197	0.0006	0.0059	0.0153	0.00029	0.024	<0.0005	0.00027	0.042	<0.0001	<0.001	<0.05	0.000012	28.3	<0.001	<0.0002
PR-US-R5A	1/1/2022 10:00	FJ2200029-006	M	FJ2200029	0.000364	2.61	<0.000010	1.30	0.120	5.90	<0.000010	<0.00010	<0.00210	0.000456	0.00053	0.0038	<0.00020	0.0060	<0.00010	0.00019	0.034	<0.000100	<0.000050	<0.010	0.0000101	29.8	<0.00050	<0.00010
PR-US-R5A	1/13/2022 15:00	FJ2200098-003	M	FJ2200098	0.000319	2.42	<0.000010	1.20	0.113	5.13	<0.000010	<0.00010	0.00068	0.000497	0.00052	0.0061	<0.00020	0.0047	<0.00010	0.00019	0.031	<0.000100	<0.000050	<0.010	0.0000122	28.1	<0.00050	<0.00010
PR-US-R5A	1/26/2022 12:45	ANQ898	M	C205279	0.00032	2.24	<0.00002	1.12	0.106	<3.0	<0.00001	<0.005	<0.005	0.00047	<0.005	<0.005	<0.0001	0.0038	<0.0005	<0.0001	0.028	<0.0001	<0.001	<0.05	0.000012	28.3	<0.001	<0.0002
PR-US-R5A	2/16/2022 16:00	AOU842	M	C210450	0.00028	2.63	<0.00002	1.24	0.145	9.6	<0.00001	<0.005	<0.005	0.0006	<0.005	<0.005	<0.0001	0.0248	<0.0005	0.0003	0.035	<0.0001	<0.001	<0.05	0.000013	28.8	<0.001	<0.0002
PR-US-R5A	2/24/2022 14:00	APF949	M	C212235	0.00027	2.6	<0.00002	1.18	0.114	5.5	<0.00001	<0.005	<0.005	0.00047	<0.005	<0.005	<0.0001	0.0072	<0.0005	0.00014	0.03	<0.0001	<0.001	<0.05	<0.00001	27.8	<0.001	<0.0002
PR-US-R5A	3/10/2022 15:20	APZ002	M	C215884	0.00035	2.5	<0.00002	1.26	0.119	4.3	<0.00001	<0.005	<0.005	0.00055	<0.005	<0.005	<0.0001	0.005	<0.0005	0.00015	0.03	<0.0001	<0.001	<0.05	<0.00001	30.2	<0.001	<0.0002
PR-US-R5A	3/17/2022 18:30	AQH800	M	C217776	0.00028	2.04	<0.00002	1.20	0.113	5.4	<0.00001	<0.005	<0.005	0.00055	<0.005	<0.005	<0.0001	0.0053	<0.0005	0.00017	0.032	<0.0001	<0.001	<0.05	<0.00001	28.6	<0.001	<0.0002
PR-US-R5A	3/23/2022 16:15	AQP262	M	C219363	0.00032	2.6	<0.00002	1.32	0.126	4.1	<0.00001	<0.005	<0.005	0.00053	<0.005	<0.005	<0.0001	0.0043	<0.0005	0.00021	0.03	<0.0001	<0.001	<0.05	0.000011	26.9	<0.001	<0.0002
PR-US-R5A	4/7/2022 11:00	ARI197	M	C223271	0.0004	2.67	<0.00002	1.33	0.121	5.8	<0.00001	<0.005	<0.005	0.00055	<0.005	<0.005	<0.0001	0.0048	<0.0005	0.00013	0.029	<0.0001	<0.001	<0.05	<0.00001	29.5	<0.001	<0.0002
PR-US-R5A	4/28/2022 15:00	ASH219	M	C228650	0.00037	2.75	<0.00002	1.34	0.108	5.1	<0.00001	<0.005	0.0061	0.00057	<0.005	<0.005	<0.0001	0.0087	<0.0005	0.00024	0.03	<0.0001	<0.001	<0.05	0.00001	26.9	<0.001	<0.0002
PR-US-R5A	5/4/2022 16:00	ASP679	M	C230320	0.00044	2.94	<0.00002	2.86	0.116	9.1	0.000019	<0.005	0.0141	0.00057	<0.005	0.0065	0.00012	0.0063	<0.0005	0.00023	0.032	<0.0001	<0.001	<0.05	0.000017	26.7	<0.001	<0.0002
PR-US-R5A	5/19/2022 15:30	ATL913	M	C234314	0.00031	3.37	<0.00002	2.59	0.116	7.5	0.000023	<0.005	0.0131	0.00063	<0.005	0.0058	0.00017	0.0156	<0.0005	0.00025	0.042	<0.0001	<0.001	<0.05	0.000016	33.2	<0.001	<0.0002
QAQC_Curing_Tanks	6/23/2022 15:40	AVV602	M	C244839	0.00545	4.68	0.000033	310	0.0281	70.4	0.000023	<0.005	<0.005	0.00127	0.0058	0.301	0.00024	0.0402	0.00655	0.00186	0.018	<0.0001	<0.001	0.646	<0.00001	5.51	<0.001	<0.0002
RBAC-Sump-BT	1/22/2022 12:45	FJ2200193-003	M	FJ2200193	0.000879	6.84	<0.000010	184	0.230	68.1	0.000035	0.0055	0.0151	0.00136	0.00287	0.0710	<0.00060	0.277	0.00048	0.00065	0.104	<0.000100	<0.000050	0.163	0.000208	38.9	<0.00050	0.00357
RSEM-L5E-P2-EOP	1/23/2022 17:35	FJ2200194-003	M	FJ2200194	0.00157	3.76	0.000030	4.19	0.156	30.5	0.000045	0.0007	0.0236	0.00125	0.00488	0.0204	<0.00020	0.0262	0.00012	0.00039	0.03	<0.000100	<0.000050	0.011	0.0000670	44.4	<0.00050	0.00089
RSEM-L5E-P2-EOP	2/11/2022 12:10	AOM647	M	C208915	0.00745	1.21	<0.00002	15.3	0.285	97.2	0.00002	<0.005	<0.005	0.00227	<0.005	0.0122	<0.0001	0.0228	<0.0005	0.00013	0.03	<0.0001	<0.001	<0.05	0.000335	99.5	<0.001	0.00746
RSEM-L5E-P2-EOP	3/23/2022 17:55	AQP259	M	C219363	0.00697	1.91	<0.00002	25.0	0.335	97.6	0.000024	<0.005	0.0236	0.00255	<0.005	0.008	0.00034	0.0098	<0.0005	0.00036	0.035	<0.0001	<0.001	<0.05	0.000115	81.8	<0.001	0.00268
RSEM-L5E-P2-EOP	3/24/2022 17:20	AQP982	M	C219524	0.00541	1.64	<0.00002	23.7	0.254	75.5	0.000016	<0.005	0.0142	0.00194	<0.005	0.0053	0.00027	0.006	<0.0005	0.00033	0.036	<0.0001	<0.001	<0.05	0.000094	64.4	<0.001	0.00249
RSEM-L5E-P2-EOP	3/25/2022 13:40	AQP918	M	C219519	0.00548	1.25	<0.00002	23.9	0.243	73.1	0.00001	<0.005	0.0056	0.00188	<0.005	0.0072	0.00013	0.0063	<0.0005	0.00032	0.036	<0.0001	<0.001	<0.05	0.000085	59.3	<0.001	0.00219
RSEM-L5E-P2-EOP	4/12/2022 17:15	ARN335	M	C224402	0.00491	1.29	<0.00002	21.0	0.238	64.2	0.000014	<0.005	<0.005	0.00214	<0.005	<0.005	<0.0001	0.0108	<0.0005	0.00022	0.041	<0.0001	<0.001	<0.05	0.000073	72.5	<0.001	0.00058
RSEM-L5E-P2-EOP	4/13/2022 10:45	ARP730	M	C224775	0.00509	1.58	<0.00002	25.6	0.269	74.1	0.00002	<0.005	0.0102	0.00247	<0.005	<0.005	0.00016	0.0092	<0.0005	0.00018	0.039	<0.0001	<0.001	<0.05	0.000059	75.2	<0.001	0.00058
RSEM-L5E-P2-EOP	4/14/2022 11:35	ARQ066	M	C224815	0.00503	0.84	<0.00002	52.3	0.176	76.2	<0.00001	<0.005	<0.005	0.00186	<0.005	<0.005	0.00023	0.003	<0.0005	0.00018	0.039	<0.0001	<0.001	<0.05	0.000052	59.2	<0.001	0.00116
RSEM-L5E-P2-EOP	4/15/2022 11:30	ARQ202	M	C224832	0.00485	1.01	<0.00002	58.3	0.203	81.8	0.00001	<0.005	<0.005	0.00215	<0.005	<0.005	0.00047	0.0032	<0.0005	0.00025	0.047	<0.0001	<0.001	<0.05	0.000057	59.5	<0.001	0.00121
RSEM-L5E-P2-EOP	4/16/2022 11:30	ARR880	M	C225206	0.00562	0.884	<0.00002	65.4	0.207	92.7	<0.00001	<0.005	<0.005	0.00236	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00025	0.047	<0.0001	<0.001	<0.05	0.000054	59.0	<0.001	0.00143
RSEM-L5E-P2-EOP	4/20/2022 10:40	ARW671	M	C226267	0.00515	0.998	<0.00002	70.2	0.262	106	0.000011	<0.005	<0.005	0.00288	<0.005	0.0087	<0.0001	0.0066	<0.0005	0.00024	0.038	<0.0001	<0.001	<0.05	0.000036	63.5	<0.001	0.00059
RSEM-L5E-P2-EOP	5/28/2022 10:10	ATX754	M	C236620	0.0127	0.993	<0.00002	51.0	0.625	206	0.00002	<0.005	0.0096	0.00569	<0.005	<0.005	0.00011	0.0297	<0.0005	0.00023	0.021	<0.0001	<0.001	0.058	0.000018	138	<0.001	0.00116
RSEM-L5E-P2-EOP	5/29/2022 14:30	ATW970	M	C236421	0.0108	1.71	<0.00002	188	0.556	314	0.000021	<0.005	<0.005	0.00604	<0.005	0.0328	0.00012	0.008	<0.0005	0.00024	0.053	<0.0001	<0.001	0.097	0.000541	136	<0.001	0.00969
RSEM-L5E-P2-EOP	5/30/2022 11:10	ATZ467	M	C236894	0.0101	1.65	<0.00002	202	0.534	316	0.00002	<0.005	<0.005	0.00574	<0.005	0.0529	0.00018	0.008	<0.0005	0.00023	0.065	<0.0001	<0.001	0.111	0.000917	145	<0.001	0.0153
RSEM-L5E-P2-SP	1/24/2022 15:00	FJ2200237-003	M	FJ2200237	0.00328	3.06	0.000024	7.86	0.212	65.4	0.000036	0.0013	0.0324	0.00170	0.00487	0.0217	0.00061	0.0228	0.00015	0.00017	0.0240	<0.000100	<0.000050	0.016	0.000158	56.4	<0.00050	0.00358
RSEM-L5E-P2-SP	2/7/2022 6:30	AOE530	M	C207636	0.00791	1.51	<0.00002	13.5	0.309	122	0.000025	<0.005	<0.005	0.00159	<0.005	0.0891	<0.0001	0.0132	<0.0005	0.00017	0.035	<0.0001	<0.001	<0.05	0.00155	132	<0.001	0.024
RSEM-L5E-P2-SP	2/10/2022 12:55	AOM666	M	C208923	0.00765	2.15	0.000025	15.3	0.27	87.7	0.000033	<0.005	0.0175	0.00233	<0.005	0.0197	0.00012	0.0239	<0.0005	0.00017	0.029	<0.0001	<0.001	<0.05	0.000312	96.5	<0.001	0.00673
RSEM-L5E-P2-SP	2/12/2022 11:10	AOP213	M	C209346	0.00762	1.33	<0.00002	14.9	0.267	86.1	0.000016	<0.005	<0.005	0.00216	<0.005	0.0087	<0.0001	0.0222	<0.0005	0.00013	0.033	<0.0001	<0.001	<0.05	0.000321	101	<0.001	0.00848
RSEM-L5E-P2-SP	2/14/2022 10:45	AOQ980	M	C209670	0.00766	1.83	<0.00002	15.8	0.281	91.4	0.000023	<0.005	0.0109	0.0023	<0.005	0.0155	0.00019	0.0153	<0.0005	0.00019	0.033	<0.0001	<0.001	<0.05	0.000318	101	<0.001	0.00799
RSEM-L5E-P2-SP	3/17/2022 17:00	AQH801	M	C217776	0.00855	1.7	<0.00002	15.8	0.361	105	0.000026	<0.005	0.0124	0.00285	<0.005	0.0121	0.00023	0.0224	<0.0005	0.00026	0.036	<0.0001	<0.001	<0.05	0.000219	99.9	<0.001	0.00656
RSEM-L5E-P2-SP	3/18/2022 6:30	AQH795	M	C217775	0.00681	2.34	0.000022	15.1	0.315	88.0	0.000035	<0.005	0.0241	0.0026	<0.005	0.011	0.00032	0.0159	<0.0005	0.00022	0.03	<0.0001	<0.001	<0.05	0.000105	81.4	<0.001	0.00273

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
RSEM-L5E-P2-SP	3/19/2022 15:30	AQJ972	M	C218236	0.00581	1.91	<0.00002	17.2	0.277	77.9	0.000027	<0.005	0.0153	0.00227	<0.005	0.0082	0.0003	0.0149	<0.0005	0.00035	0.032	<0.0001	<0.001	<0.05	0.000103	75.6	<0.001	0.00219
RSEM-L5E-P2-SP	3/20/2022 18:00	AQJ916	M	C218219	0.0065	1.87	<0.00002	21.7	0.309	90.4	0.000028	<0.005	0.0134	0.00245	<0.005	0.0094	0.00023	0.0121	<0.0005	0.00028	0.035	<0.0001	<0.001	<0.05	0.000148	80.7	<0.001	0.00325
RSEM-L5E-P2-SP	3/21/2022 10:30	AQL267	M	C218465	0.00663	2.19	<0.00002	22.0	0.311	89.0	0.000025	<0.005	0.0184	0.00249	<0.005	0.0094	0.00044	0.0105	<0.0005	0.00032	0.036	<0.0001	<0.001	<0.05	0.000137	85.4	<0.001	0.003
RSEM-L5E-P2-SP	3/22/2022 17:40	AQN716	M	C218958	0.00622	2.13	<0.00002	21.5	0.282	83.1	0.000022	<0.005	0.0191	0.00227	<0.005	0.0077	0.00037	0.0096	<0.0005	0.00028	0.036	<0.0001	<0.001	<0.05	0.000144	82.3	<0.001	0.00275
RSEM-L5E-P2-SP	3/26/2022 18:15	AQS238	M	C219944	0.00599	1.37	<0.00002	19.5	0.246	70.7	0.000017	<0.005	<0.005	0.00227	<0.005	<0.005	<0.0001	0.0084	<0.0005	0.00033	0.034	<0.0001	<0.001	<0.05	0.000101	79.5	<0.001	0.00187
RSEM-L5E-P2-SP	3/27/2022 16:10	AQS344	M	C219976	0.00593	1.28	<0.00002	19.6	0.247	69.7	0.000017	<0.005	<0.005	0.00225	<0.005	<0.005	<0.0001	0.0096	<0.0005	0.00037	0.037	<0.0001	<0.001	<0.05	0.000102	84.1	<0.001	0.00178
RSEM-L5E-P2-SP	3/28/2022 17:20	AQU419	M	C220399	0.00556	1.2	<0.00002	19.1	0.238	66.2	0.000013	<0.005	<0.005	0.00221	<0.005	<0.005	<0.0001	0.01	<0.0005	0.00036	0.036	<0.0001	<0.001	<0.05	0.000095	79.5	<0.001	0.0016
RSEM-L5E-P2-SP	3/29/2022 16:35	AQV264	M	C220606	0.00453	0.969	<0.00002	16.8	0.198	56.8	0.000012	<0.005	<0.005	0.00181	<0.005	<0.005	0.00012	0.019	<0.0005	0.0003	0.035	<0.0001	<0.001	<0.05	0.000085	64.7	<0.001	0.00121
RSEM-L5E-P2-SP	3/30/2022 14:20	AQX837	M	C221206	0.00467	0.937	<0.00002	16.6	0.193	57.3	0.000012	<0.005	<0.005	0.00163	<0.005	<0.005	<0.0001	0.0139	<0.0005	0.0002	0.032	<0.0001	<0.001	<0.05	0.000072	62.3	<0.001	0.00096
RSEM-L5E-P2-SP	3/31/2022 17:20	AQY796	M	C221428	0.00558	1.21	<0.00002	17.9	0.216	57.8	0.000014	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	0.0089	<0.0005	0.00017	0.035	<0.0001	<0.001	<0.05	0.000081	75.6	<0.001	0.00124
RSEM-L5E-P2-SP	3/31/2022 17:30	AQY797	D	C221428	0.00573	1.25	<0.00002	19.8	0.22	62.7	0.000015	<0.005	<0.005	0.00208	<0.005	<0.005	<0.0001	0.0086	<0.0005	0.00018	0.036	<0.0001	<0.001	<0.05	0.000075	76.5	<0.001	0.00119
RSEM-L5E-P2-SP	4/1/2022 13:20	AQY728	M	C221415	0.00509	1.07	<0.00002	18.2	0.204	57.1	0.000013	<0.005	<0.005	0.00192	<0.005	<0.005	<0.0001	0.0114	<0.0005	0.00019	0.038	<0.0001	<0.001	<0.05	0.000089	71.3	<0.001	0.00116
RSEM-L5E-P2-SP	4/2/2022 12:35	ARB516	M	C222000	0.00452	0.958	<0.00002	17.5	0.19	54.3	0.000015	<0.005	<0.005	0.00174	<0.005	<0.005	0.00013	0.0105	<0.0005	0.00023	0.036	<0.0001	<0.001	<0.05	0.000073	61.5	<0.001	0.00096
RSEM-L5E-P2-SP	4/2/2022 12:45	ARB517	D	C222000	0.00538	1.18	<0.00002	19.1	0.243	66.5	0.000019	<0.005	<0.005	0.00199	<0.005	<0.005	0.00138	0.0084	<0.0005	0.00025	0.034	<0.0001	<0.001	<0.05	0.000076	67.8	<0.001	0.00099
RSEM-L5E-P2-SP	4/3/2022 11:10	ARB460	M	C221989	0.00424	0.842	<0.00002	16.1	0.167	47.4	0.00001	<0.005	<0.005	0.00157	<0.005	<0.005	<0.0001	0.01	<0.0005	0.00019	0.031	<0.0001	<0.001	<0.05	0.000057	56.3	<0.001	0.00072
RSEM-L5E-P2-SP	4/4/2022 10:45	ARB189	M	C221904	0.00404	0.911	<0.00002	16.9	0.185	51.2	0.000044	<0.005	<0.005	0.00169	<0.005	0.005	0.00018	0.0115	<0.0005	0.00021	0.032	<0.0001	<0.001	<0.05	0.000061	56.6	<0.001	0.00072
RSEM-L5E-P2-SP	4/6/2022 17:30	ARI190	M	C223269	0.00558	1.14	<0.00002	22.0	0.262	68.9	0.000015	<0.005	<0.005	0.00222	<0.005	<0.005	<0.0001	0.01	<0.0005	0.00018	0.035	<0.0001	<0.001	<0.05	0.000081	62.9	<0.001	0.00078
RSEM-L5E-P2-SP	4/8/2022 10:30	ARI200	M	C223273	0.00598	1.25	<0.00002	24.2	0.295	75.7	0.000019	<0.005	<0.005	0.00253	<0.005	<0.005	<0.0001	0.0091	<0.0005	0.00021	0.039	<0.0001	<0.001	<0.05	0.000084	72.6	<0.001	0.0008
RSEM-L5E-P2-SP	4/10/2022 10:30	ARK078	M	C223661	0.00442	1.15	<0.00002	20.1	0.241	64.9	0.000014	<0.005	<0.005	0.00206	<0.005	0.0064	0.00013	0.0092	<0.0005	0.0002	0.044	<0.0001	<0.001	<0.05	0.000095	75.4	<0.001	0.00072
RSEM-L5E-P2-SP	4/19/2022 12:00	ARV036	M	C225905	0.00656	1.01	<0.00002	66.5	0.206	91.3	<0.00001	<0.005	<0.005	0.00232	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00015	0.03	<0.0001	<0.001	<0.05	0.000017	59.3	<0.001	<0.0002
RSEM-L5E-P2-SP	4/21/2022 11:15	ARX709	M	C226546	0.00516	0.814	<0.00002	77.3	0.224	105	<0.00001	<0.005	<0.005	0.00262	<0.005	<0.005	<0.0001	0.0035	<0.0005	0.00026	0.051	<0.0001	<0.001	<0.05	0.000057	62.7	<0.001	0.00122
RSEM-L5E-P2-SP	5/5/2022 13:45	ASR007	M	C230531	0.008	0.976	<0.00002	97.0	0.371	145	0.000013	<0.005	<0.005	0.00479	<0.005	<0.005	<0.0001	0.0061	<0.0005	0.00034	0.051	<0.0001	<0.001	0.069	0.000052	102	<0.001	0.00073
RSEM-L5E-P2-SP	5/6/2022 13:15	ASR076	M	C230545	0.0107	1.27	<0.00002	44.6	0.535	178	0.000014	<0.005	<0.005	0.00507	<0.005	0.0307	<0.0001	0.0246	<0.0005	0.00045	0.05	<0.0001	<0.001	<0.05	0.00034	135	<0.001	0.0105
RSEM-L5E-P2-SP	5/9/2022 10:35	ASV293	M	C231306	0.0126	1.37	<0.00002	40.9	0.573	30500	0.000017	<0.005	<0.005	0.00493	<0.005	0.0227	<0.0001	0.0378	<0.0005	<0.0001	0.048	<0.0001	<0.001	0.05	0.000304	144	<0.001	0.0101
RSEM-L5E-P2-SP	5/12/2022 11:15	ATA815	M	C232369	0.0114	1.2	<0.00002	41.6	0.648	169	0.000016	<0.005	<0.005	0.00533	<0.005	0.0169	0.00012	0.023	<0.0005	0.00033	0.049	<0.0001	<0.001	<0.05	0.000199	141	<0.001	0.00811
RSEM-L5E-P2-SP	5/22/2022 15:30	ATO537	M	C234788	0.00919	0.984	<0.00002	47.3	0.61	170	0.000016	<0.005	<0.005	0.00572	<0.005	<0.005	<0.0001	0.0246	<0.0005	0.00032	0.028	<0.0001	<0.001	<0.05	<0.00001	155	<0.001	0.00198
RSEM-L5E-P2-SP	5/25/2022 13:10	ATT371	M	C235730	0.0104	0.896	<0.00002	47.2	0.673	191	0.000014	<0.005	<0.005	0.0051	<0.005	<0.005	<0.0001	0.0294	<0.0005	0.00017	0.021	<0.0001	<0.001	0.055	<0.00001	142	<0.001	0.00081
RSEM-L5E-P2-SP	5/27/2022 10:55	ATV303	M	C236089	0.0131	0.862	<0.00002	49.5	0.595	190	0.000015	<0.005	<0.005	0.00508	<0.005	<0.005	<0.0001	0.0233	<0.0005	0.00018	0.015	<0.0001	<0.001	<0.05	<0.00001	135	<0.001	0.00048
RSEM-L5E-P2-SP	5/31/2022 15:50	AUC341	M	C237377	0.0155	1.84	<0.00002	44.5	0.665	361	0.000026	<0.005	<0.005	0.00337	<0.005	0.249	<0.0001	0.0357	<0.0005	<0.0001	0.076	<0.0001	<0.001	0.061	0.00424	222	<0.001	0.0741
RSEM-L5E-P2-SP	6/2/2022 13:35	AUH702	M	C238258	0.0169	1.74	<0.00002	42.6	0.712	239	0.000024	<0.005	<0.005	0.003	<0.005	0.239	<0.0001	0.0156	<0.0005	0.00015	0.056	<0.0001	<0.001	0.056	0.00378	219	<0.001	0.0677
RSEM-L5E-P2-SP	6/5/2022 13:40	AUM445	M	C238986	0.0169	1.63	<0.00002	51.9	0.722	222	0.000025	<0.005	<0.005	0.00319	<0.005	0.165	<0.0001	0.02	<0.0005	0.00017	0.052	<0.0001	<0.001	0.072	0.00288	242	<0.001	0.0573
RSEM-L5E-P2-SP	6/11/2022 12:30	AUY736	M	C241062	0.0159	1.23	<0.00002	65.4	0.756	316	0.000026	<0.005	<0.005	0.00366	<0.005	0.078	<0.0001	0.0171	<0.0005	0.00016	0.028	<0.0001	<0.001	0.066	0.00105	251	<0.001	0.0328
RSEM-L5E-P2-SP	6/20/2022 13:35	AVO968	M	C243664	0.0153	0.701	<0.00002	64.6	0.704	328	0.000021	<0.005	<0.005	0.0043	<0.005	0.0221	<0.0001	0.0263	<0.0005	0.00024	0.021	<0.0001	<0.001	0.079	0.00019	222	<0.001	0.0108
RSEM-L5E-P2-SP	6/22/2022 12:05	AVT155	M	C244412	0.0159	0.605	<0.00002	87.2	0.695	317	0.000024	<0.005	<0.005	0.00448	<0.005	0.0136	<0.0001	0.0286	<0.0005	0.00026	0.022	<0.0001	<0.001	0.09	0.000139	260	<0.001	0.00832
RSEM-L5E-P2-SP	7/3/2022 16:00	AWM049	M	C247492	0.0115	0.266	<0.00002	150	0.732	382	0.000022	<0.005	<0.005	0.00546	<0.005	0.007	<0.0001	0.0169	<0.0005	0.00042	0.031	<0.0001	<0.001	0.113	0.000104	207	<0.001	0.00267
RSEM-L5E-P2-SP	7/12/2022 14:40	AXE620	M	C250400	0.00801	0.236	<0.00004	292	0.81	414	<0.00002	<0.01	<0.01	0.00739	<0.01	<0.01	<0.0002	0.0142	<0.001	0.00062	0.033	<0.0002	<0.002	0.163	0.000057	179	<0.002	0.00094
RSEM-L5E-P2-SP	8/4/2022 14:00	AYY906	M	C257848	0.00387	<0.2	<0.00004	326	0.769	432	<0.00002	<0.01	<0.01	0.00619	<0.01	<0.01	<0.0002	0.0102	<0.001	0.00082	0.023	<0.0002	<0.002	0.207	0.00002	151	<0.002	0.00068
RSEM-L5E-P2-SP	8/27/2022 15:00	BAR928	M	C265307	0.00199	<0.2	<0.00004	264	0.874	425	<0.00002	<0.01	<0.01	0.00572	<0.01	<0.01	<0.0002	0.0108	<0.001	0.00093	0.045	<0.0002	<0.002	0.187	<0.00002	176	<0.002	0.00043
RSEM-L5W-P2-EOP	3/25/2022 13:25	AQP917	M	C219519	0.00441	1.03	<0.00002	24.6	0.183	59.8	<0.00001	<0.005	0.011	0.00143	<0.005	0.0077	0.00014	0.0038	<0.0005	0.00016	0.036	<0.0001	<0.001	<0.05	0.000078	47.2	<0.001	0.00249
RSEM-L5W-P2-EOP	3/26/2022 18:35	AQS239	M	C219944	0.00459	0.859	<0.00002	22.8	0.147	53.4	<0.00001	<0.005	<0.005	0.0014	<0.005	0.0053	<0.0001	0.0058	<0.0005	0.0002	0.038	<0.0001	<0.001	0.052	0.000089	50.6	<0.001	0.00235
RSEM-L5W-P2-EOP	5/29/2022 14:10	ATW972	M	C236421	0.00979	1.53	<0.00002	214	0.57	331	0.00002	<0.005	<0.005	0.00649	<0.005	0.0087	<0.0001	0.004	<0.0005	0.00025	0.05	<0.0001	<0.001	0.107	0.000155	147	<0.001	0.0025
RSEM-L5W-P2-EOP	5/30/2022 11:30	ATZ468	M	C236894	0.00916	1.65	<0.00002	233	0.513	329	0.000019	<0.005	<0.005	0.00625	<0.005	0.0066	0.00025	0.0042	<0.0005	0.00026	0.061	<0.0001	<0.001	0.125	0.000143	135	<0.001	0.00213
RSEM-L5W-P2-SP	2/7/2022 6:00	AOE529	M	C207636	0.00569	1.46	<0.00002	13.2	0.258	101	<0.00001	<0.005	0.0071	0.00174	<0.005	0.0465	<0.0001	0.0103	<0.0005	0.00012	0.03	<0.0001	<0.001	<0.05	0.000749	103	<0.001	0.0142
RSEM-L5W-P2-SP	2/10/2022 13:00	AOM667	M	C208923	0.0027	3.19	0.000024	12.5	0.133	38.3	0.000037	<0.005	0.0265	0.00114	0.0051	0.0237	0.00025	0.0031	<0.0005	0.00015	0.044	<0.0001	<0.001	<0.05	0.000155	45.0	<0.001	0.00361
RSEM-L5W-P2-SP	2/14/2022 10:55	AOQ981	M	C209670	0.00422	1.81	0.000021	14.3	0.196	60.7	0.000017	<0.005	0.019	0.00154	<0.005	0.0166	0.00031	<0.003	<0.0005	0.00021	0.041	<0.0001	<0.001	<0.05	0.000345	72.2	<0.001	0.0074
RSEM-L5W-P2-SP	3/19/2022 16:30	AQJ973	M	C218236	0.00607	1.67	<0.00002	23.0	0.278	84.3	0.000021	<0.005	0.0116	0.00225	<0.005	0.0087	0.0002	0.0075	<0.0005	0.0003	0.037	<0.0001	<0.001	<0.05	0.000131	74.2	<0.001	0.00412
RSEM-L5W-P2-SP	3/20/2022 18:30	AQJ917	M	C218219	0.00532	1.24	<0.00002	19.2	0.231	69.4	0.000015	<0.005	0.0057	0.00194	<0.005	0.0052	0.00011	0.0059	<0.0005	0.00029	0.034	<0.0001	<0.001	<0.05	0.000095	60.0	<0.001	0.00274
RSEM-L5W-P2-SP	3/21/2022 10:10	AQL266	M	C218465	0.00496	1.94	<0.00002	19.7	0.219	65.7	0.000018	<0.005	0.0136	0.0019	<0.005	0.0076	0.00036	0.0057	<0.0005	0.00025	0.038	<0.0001	<0.001	<0.05	0.000089	58.9	<0.001	0.00275
RSEM-L5W-P2-SP	3/22/2022 17:50	AQN717	M	C218958	0.00433	1.97	<0.00002	21.2	0.172	55.0	0.000015	<0.005	0.028	0.00154	<0.005	0.0071	0.00052	0.005	<0.0005	0.00019	0.036	<0.0001	<0.001	<0.05	0.000081	49.6	<0.001	0.00219
RSEM-L5W-P2-SP	3/23/2022 18:15	AQP260	M	C219363	0.00486	1.08	<0.00002	26.0	0.19	64.1	<0.00001	<0.005	<0.005	0.00154	<0.005	<0.005	0.00013	0.0037	<0.0005	0.00024	0.036	<0.0001	<0.001	<0.05	0.000085	49.3	<0.001	0.00262
RSEM-L5W-P2-SP	3/24/2022 17:35	AQP983	M	C219524	0.00464	1	<0.00002	24.1	0.186	60.3	<0.00001	<0.005	<0.005	0.00149	<0.005	0.0053	0.00018	0.0037	<0.0005	0.00025	0.036	<0.0001	<0.001	<0.05	0.00008	46.9	<0.001	0.00259
RSEM-L5W-P2-SP	3/27/2022 16:30	AQS347	M	C219976	0.00469	0.866	<0.00002	25.5	0.166	58.0	<0.00001	<0.005	<0.005	0.00158	<0.005	<0.005	0.00022	0.0081	<0.0005	0.00024	0.038	<0.0001	<0.001	<0.05	0.000088	52.4	<0.001	0.0023
RSEM-L5W-P2-SP	3/28/2022 17:40	AQU420	M	C220399	0.00407	0.819	<0.00002	21.2	0.131	46.6	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	0.0047	<0.0005	0.00026	0.039	<0.0001	<0.001	<0.05	0.000078	48.4	<0.001	0.00185
RSEM-L5W-P2-SP	3/29/2022 16:55	AQV265	M	C220606	0.00381	0.761	<0.00002	20.0	0.124	47.9	<0.00001	<0.005	<0.005	0.0012	<0.005	<0.005	<0.0001	0.0043	<0.0005	0.00022	0.038	<0.0001	<0.001	<0.05	0.000073	45.9	<0.001	0.0018
RSEM-L5W-P2-SP	3/30/2022 14:50	AQX838	M	C221206	0.00372	0.714	<0.00002	18.9	0.117	39.5	<0.00001	<0.005	<0.005	0.0011	<0.005	<0.005	<0.0001	0.0035	<0.0005	<0.0001	0.034	<0.0001	<0.001	<0.05	0.000054	42.7	<0.001	0.00147
RSEM-L5W-P2-SP	3/31/2022 17:40	AQY798	M	C221428	0.00272	0.624	<0.00002	15.0	0.0871	29.5	<0.00001	<0.005	<0.005	0.00082	<0.005	<0.005	<0.0001	0.004	<0.0005	<0.0001	0.031	<0.0001	<0.001	<0.05	0.000035	31.0	<0.001	0.00095
RSEM-L5W-P2-SP	4/1/2022 13:30	AQY729	M	C221415	0.00376	0.77	<0.00002	20.9	0.103	37.8	<0.00001	<0.005	<0.005	0.00104	<0.005	<0.005	<0.0001	0.0034	<0.0005	<0.0001	0.036	<0.0001	<0.001	<0.05	0.000052	40.9	<0.001	0.00141
RSEM-L5W-P2-SP	4/2/2022 12:55	ARB518	M	C222000	0.0042	0.781	0.000027	24.3	0.133	49.9	0.000028	<0.005	<0.005	0.00121	<0.005	<0.005	0.00081	0.0034	<0.0005	0.00016	0.035	<0.0001	<0.001	<0.05	0.000056	40.6	<0.001	0.00137
RSEM-L5W-P2-SP	4/3/2022 11:05	ARB461	M	C221989	0.00342	0.684	<0.00002	20.5	0.101	37.8	<0.00001	<0.005	<0.005	0.00101	<0.005	<0.005	<0.0001	0.0032	<0.0005	0.00013	0.032	<0.0001	<0.001	<0.05	0.000042	38.4	<0.001	0.00113
RSEM-L5W-P2-SP	4/4/2022 11:00	ARB190	M	C221904	0.00341	0.71	<0.00002	22.4	0.121	44.5	<0.00001	<0.005	<0.005	0.00107	<0.005	<0.005	0.00096	<0.003	<0.0005	0.00012	0.029	<0.0001	<0.001	<0.05	0.000037	36.7	<0.001	0.001
RSEM-L5W-P2-SP	4/6/2022 18:00	ARI191	M	C223269	0.00501	0.932	<0.00002	33.0	0.161	59.6	0.000011	<0.005	<0.005	0.0015	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00011	0.032	<0.0001	<0.001	<0.05	0.000047	43.7	<0.001	0.00119
RSEM-L5W-P2-SP	4/8/2022 11:00	ARI201	M	C223273	0.00563	0.961	<0.00002	41.3	0.178	69.2	<0.00001	<0.005	<0.005	0.00173	<0.005	<0.005	<0.0001	0.0057	<0.0005	0.00016	0.038	<0.0001	<0.001	<0.05	0.000062	53.3	<0.001	0.0014
RSEM-L5W-P2-SP	4/10/2022 11:00	ARK079	M	C223661	0.00544	0.92	<0.00002	43.5	0.171	68.7	<0.00001	<0.005	<0.005	0.00174	<0.005	<0.005	0.00013	<0.003	<0.0005	0.00017	0.04	<0.0001	<0.001	<0.05	0.000051	59.1	<0.001	0.00136
RSEM-L5W-P2-SP	4/12/2022 17:30	ARN336	M	C224402	0.00504	0.912	<0.00002	51.1	0.172	75.1	0.00001	<0.005	<0.005	0.0018	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00019	0.039	<0.0001	<0.001	<0.05	0.000047	59.5	<0.001	0.0012
RSEM-L5W-P2-SP	5/5/2022 13:55	ASR008	M	C230531	0.00985	1.12	<0.00002	49.7	0.514	156	0.000016	<0.005	<0.005	0.0052	<0.005	0.0257	<0.0001	0.0203	<0.0005	0.00023	0.045	<0.0001	<0.001	0.05	0.000275	115	<0.001	0.00725
RSEM-L5W-P2-SP	5/9/2022 10:45	ASV294	M	C231306	0.00956	1.1	<0.00002	112	0.393	194	0.000014	<0.005	<0.005	0.0046	<0.005	<0.005	<0.0001	0.0396	<0.0005	0.00017	0.056	<0.0001	<0.001	0.06	0.000082	114	<0.001	0.00164
RSEM-L5W-P2-SP	5/12/2022 11:30	ATA816	M	C232369	0.00884	0.947	<0.00002	103	0.442	177	0.000013	<0.005	<0.005	0.00496	<0.005	<0.005	<0.0001	0.0058	<0.0005	0.00032	0.054	<0.0001	<0.001	0.062	0.00005	113	<0.001	0.00141
RSEM-L5W-P2-SP	5/22/2022 16:00	ATO538	M	C234788	0.00697	1.1	<0.00002	230	0.503	236	0.000017	<0.005	<0.005	0.00684	<0.005	<0.005	<0.0001	0.0066	<0.0005	0.00029	0.052	<0.0001	<0.001	0.074	0.000023	130	<0.001	0.00042
RSEM-L5W-P2-SP	5/25/2022 13:25	ATT372	M	C235730	0.00886	1.1	<0.00002	298	0.58	333	0.000018	<0.005	<0.005	0.00658	<0.005	<0.005	<0.0001	0.0044	<0.0005	0.00023	0.052	<0.0001	<0.001	0.107	0.000026	143	<0.001	0.00032

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
RSEM-L5W-P2-SP	5/27/2022 10:40	ATV302	M	C236089	0.0102	1.04	<0.00002	269	0.551	294	0.000017	<0.005	<0.005	0.0065	<0.005	<0.005	0.0001	0.0053	<0.0005	0.00026	0.051	<0.0001	<0.001	0.099	0.000022	143	<0.001	0.00034
RSEM-L5W-P2-SP	5/28/2022 9:45	ATX753	M	C236620	0.00979	1.23	<0.00002	237	0.555	323	0.000018	<0.005	<0.005	0.00675	<0.005	<0.005	0.00011	0.0064	<0.0005	0.00049	0.052	<0.0001	<0.001	0.116	0.000021	140	<0.001	0.0003
RSEM-L5W-P2-SP	5/31/2022 15:35	AUC342	M	C237377	0.0114	1.76	<0.00002	237	0.597	304	0.000019	<0.005	<0.005	0.00594	<0.005	0.0422	0.00013	0.0851	<0.0005	0.00033	0.058	<0.0001	<0.001	0.119	0.000746	154	<0.001	0.0126
RSEM-L5W-P2-SP	6/2/2022 13:50	AUH703	M	C238258	0.0142	1.81	<0.00002	185	0.751	262	0.000024	<0.005	<0.005	0.00546	<0.005	0.118	<0.0001	0.0091	<0.0005	0.00021	0.057	<0.0001	<0.001	0.097	0.00176	181	<0.001	0.0308
RSEM-L5W-P2-SP	6/5/2022 14:00	AUM446	M	C238986	0.0134	1.74	<0.00002	203	0.668	252	0.000022	<0.005	<0.005	0.00525	<0.005	0.0662	<0.0001	0.0057	<0.0005	0.00024	0.064	<0.0001	<0.001	0.133	0.00128	189	<0.001	0.0212
RSEM-L5W-P2-SP	6/11/2022 13:00	AUY737	M	C241062	0.0119	1.25	<0.00002	309	0.735	405	0.000025	<0.005	<0.005	0.00657	<0.005	0.0278	<0.0001	0.003	<0.0005	0.00022	0.047	<0.0001	<0.001	0.144	0.000486	193	<0.001	0.00927
RSEM-L5W-P2-SP	6/22/2022 12:15	AVT156	M	C244412	0.0135	0.747	<0.00002	420	0.821	468	0.000026	<0.005	<0.005	0.008	<0.005	<0.005	<0.0001	0.0035	<0.0005	0.00028	0.043	<0.0001	<0.001	0.204	<0.00001	202	<0.001	0.00226
RSEM-L5W-P2-SP	7/3/2022 16:30	AWM050	M	C247492	0.00978	0.262	<0.00002	533	0.774	530	0.000029	<0.005	<0.005	0.008	<0.005	<0.005	<0.0001	0.0059	<0.0005	0.00035	0.034	<0.0001	<0.001	0.219	<0.00001	163	<0.001	0.00031
RSEM-L5W-P2-SP	7/12/2022 14:55	AXE621	M	C250400	0.00976	<0.5	<0.0001	582	0.881	537	<0.00005	<0.025	<0.025	0.00971	<0.025	<0.025	<0.0005	<0.015	<0.0025	<0.0005	0.037	<0.0005	<0.005	0.262	<0.00005	165	<0.005	<0.001
RSEM-L5W-P2-SP	8/4/2022 14:10	AYY907	M	C257848	0.00694	0.212	<0.00004	617	0.759	553	0.00003	<0.01	<0.01	0.00822	<0.01	<0.01	<0.0002	0.0078	<0.001	0.00063	0.015	<0.0002	<0.002	0.328	<0.00002	115	<0.002	<0.0004
RSEM-L5W-P2-SP	8/27/2022 15:30	BAR929	M	C265307	0.00429	0.419	<0.00004	748	0.866	653	<0.00002	<0.01	<0.01	0.00733	<0.01	<0.01	<0.0002	<0.006	<0.001	0.00136	0.025	<0.0002	<0.002	0.339	<0.00002	113	<0.002	0.00074
RSEM-L6-EOP	4/24/2022 10:30	ASA414	M	C227083	0.00148	1.13	<0.00002	26.7	0.187	34.9	<0.00001	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	0.0052	<0.0005	0.00024	0.074	<0.0001	<0.001	<0.05	0.000031	49.7	<0.001	0.0002
RSEM-L6-EOP	5/17/2022 12:30	ATH852	M	C233625	0.00172	0.478	<0.00002	34.3	0.289	66.5	0.00001	<0.005	<0.005	0.00268	<0.005	<0.005	<0.0001	0.01	<0.0005	0.00024	0.072	<0.0001	<0.001	<0.05	0.000021	68.4	<0.001	<0.0002
RSEM-L6-EOP	5/18/2022 12:30	ATJ926	M	C234012	0.00246	0.443	<0.00002	32.0	0.313	58.9	<0.00001	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	0.013	<0.0005	0.00029	0.078	<0.0001	<0.001	<0.05	0.000011	68.5	<0.001	<0.0002
RSEM-L6-EOP	6/5/2022 11:20	AUM442	M	C238986	0.00179	1.12	<0.00002	20.8	0.396	38.1	<0.00001	<0.005	<0.005	0.00157	<0.005	<0.005	<0.0001	0.0103	<0.0005	0.00029	0.09	<0.0001	<0.001	0.052	<0.00001	62.7	<0.001	<0.0002
RSEM-L6-SP	3/19/2022 12:50	AQJ975	M	C218236	0.00084	1.96	<0.00002	30.2	0.181	20.6	0.000019	<0.005	0.0074	0.00112	<0.005	0.0051	0.00025	0.0042	<0.0005	0.00026	0.089	<0.0001	<0.001	<0.05	0.000057	43.8	<0.001	0.00022
RSEM-L6-SP	3/21/2022 11:45	AQL271	M	C218465	0.00093	1.77	<0.00002	29.4	0.176	20.9	0.000015	<0.005	0.006	0.0011	<0.005	0.0055	0.00017	0.0034	<0.0005	0.00025	0.087	<0.0001	<0.001	<0.05	0.000055	44.2	<0.001	0.00022
RSEM-L6-SP	4/19/2022 12:50	ARV037	M	C225905	0.00205	0.952	<0.00002	25.5	0.178	33.1	<0.00001	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	0.0038	<0.0005	0.00016	0.066	<0.0001	<0.001	<0.05	0.000033	47.7	<0.001	<0.0002
RSEM-L6-SP	4/21/2022 12:20	ARX710	M	C226546	0.0009	1.26	<0.00002	29.1	0.2	36.5	<0.00001	<0.005	<0.005	0.00157	<0.005	<0.005	<0.0001	0.0048	<0.0005	0.00019	0.085	<0.0001	<0.001	<0.05	0.000033	48.6	<0.001	0.00022
RSEM-L6-SP	4/23/2022 15:40	ARZ188	M	C226855	0.00149	1.13	<0.00002	26.6	0.189	34.0	<0.00001	<0.005	<0.005	0.00153	<0.005	<0.005	<0.0001	0.0051	<0.0005	0.00026	0.074	<0.0001	<0.001	<0.05	0.00003	49.6	<0.001	0.00021
RSEM-L6-SP	5/7/2022 10:15	ASS945	M	C230886	0.00297	0.964	<0.00002	32.0	0.291	65.6	0.000012	<0.005	<0.005	0.00241	<0.005	<0.005	<0.0001	0.0064	<0.0005	<0.0001	0.083	<0.0001	<0.001	<0.05	0.000027	69.2	<0.001	<0.0002
RSEM-L6-SP	5/31/2022 10:50	AUC337	M	C237377	0.00159	1.73	<0.00002	19.2	0.408	42.4	0.00001	<0.005	<0.005	0.0015	<0.005	<0.005	<0.0001	0.0065	<0.0005	0.00047	0.097	<0.0001	<0.001	<0.05	0.000019	62.8	<0.001	<0.0002
RSEM-L6-SP	6/4/2022 10:00	AUL722	M	C238905	0.00155	1.19	<0.00002	18.9	0.396	38.3	<0.00001	<0.005	<0.005	0.00151	<0.005	0.0073	<0.0001	0.0202	<0.0005	0.00029	0.092	<0.0001	<0.001	<0.05	0.000028	62.7	<0.001	<0.0002
RSEM-L6-SP	10/7/2022 12:20	BEA027	M	C278893	0.00049	0.151	<0.00002	61.5	0.798	131	<0.00001	<0.005	<0.005	0.00177	<0.005	<0.005	<0.0001	0.0057	<0.0005	0.00065	0.074	<0.0001	<0.001	0.126	<0.00001	105	<0.001	<0.0002
RSEM-L6-SP	10/22/2022 10:25	BFI045	M	C283756	0.00046	0.126	<0.00002	63.9	0.822	149	0.000011	<0.005	<0.005	0.00211	<0.005	<0.005	<0.0001	0.0047	<0.0005	0.00066	0.073	<0.0001	<0.001	0.119	<0.00001	110	<0.001	<0.0002
RSEM-R5A-P2-A-EOP	3/21/2022 14:25	AQL268	M	C218465	0.00611	3.27	<0.00002	25.5	0.127	38.4	0.000021	<0.005	0.0522	0.00124	<0.005	0.0161	0.00096	0.0063	<0.0005	0.0003	0.134	<0.0001	<0.001	<0.05	0.000033	33.1	<0.001	0.00077
RSEM-R5A-P2-A-EOP	3/22/2022 18:20	AQN714	M	C218958	0.00749	2.65	<0.00002	44.2	0.201	84.1	0.000025	<0.005	0.0224	0.0016	<0.005	0.0962	0.00063	0.0108	<0.0005	<0.0001	0.071	<0.0001	<0.001	<0.05	0.000576	52.5	<0.001	0.0171
RSEM-R5A-P2-A-EOP	3/23/2022 17:15	AQP261	M	C219363	0.00316	2.36	<0.00002	21.6	0.168	41.9	<0.00001	<0.005	0.0057	0.00094	<0.005	0.0661	0.00021	0.008	<0.0005	0.00017	0.041	<0.0001	<0.001	<0.05	0.000304	38.4	<0.001	0.00914
RSEM-R5A-P2-A-EOP	3/24/2022 14:25	AQP980	M	C219524	0.00326	2.47	<0.00002	22.6	0.173	43.3	<0.00001	<0.005	0.0057	0.00096	<0.005	0.0539	0.00011	0.0066	<0.0005	0.00025	0.037	<0.0001	<0.001	<0.05	0.000245	37.9	<0.001	0.00801
RSEM-R5A-P2-A-EOP	3/25/2022 12:20	AQP913	M	C219519	0.00327	2.87	<0.00002	20.8	0.172	40.3	0.000018	<0.005	0.0166	0.001	<0.005	0.0273	0.00017	0.0054	<0.0005	0.00017	0.035	<0.0001	<0.001	<0.05	0.000118	37.0	<0.001	0.00473
RSEM-R5A-P2-A-EOP	5/17/2022 16:30	ATH853	M	C233625	0.0169	5.58	<0.00002	339	0.72	346	0.000039	<0.005	0.005	0.00723	<0.005	0.0102	0.00016	0.005	0.00196	0.00111	0.052	<0.0001	<0.001	0.232	0.000097	160	0.0028	0.00561
RSEM-R5A-P2-A-EOP	5/19/2022 16:00	ATL915	M	C234314	0.0167	5.38	0.000049	349	0.491	326	0.000041	<0.005	0.0146	0.00554	<0.005	0.0221	0.00035	0.0048	0.00249	0.00168	0.061	<0.0001	<0.001	0.163	0.000108	114	0.0014	0.00527
RSEM-R5A-P2-A-EOP	5/20/2022 11:00	ATL360	M	C234241	0.0245	4.28	0.000055	338	0.477	248	0.000034	<0.005	0.0053	0.00453	<0.005	0.0268	0.00018	<0.003	0.0021	0.00223	0.058	<0.0001	<0.001	0.24	0.000116	87.5	<0.001	0.00572
RSEM-R5A-P2-A-EOP	5/21/2022 13:30	ATN139	M	C234510	0.0219	4.6	0.000047	310	0.468	290	0.00003	<0.005	0.0072	0.00459	<0.005	0.0246	0.00019	0.0045	0.00202	0.00239	0.056	<0.0001	<0.001	0.258	0.000115	82.9	<0.001	0.00556
RSEM-R5A-P2-A-EOP	5/29/2022 18:40	ATW971	M	C236421	0.013	4.89	0.000027	249	0.457	219	0.000039	<0.005	0.0465	0.00318	<0.005	0.0272	0.00056	0.0141	0.00161	0.00101	0.051	<0.0001	<0.001	0.197	0.000142	56.3	0.0012	0.00688
RSEM-R5A-P2-A-EOP	5/30/2022 12:30	ATZ469	M	C236894	0.0163	4.26	0.000034	275	0.573	231	0.000049	<0.005	0.0325	0.00427	<0.005	0.0286	0.00071	0.0193	0.00183	0.00106	0.075	<0.0001	<0.001	0.21	0.000232	71.6	<0.001	0.0128
RSEM-R5A-P2-A-EOP	5/31/2022 13:40	AUC338	M	C237377	0.0161	4.23	0.000022	293	0.608	225	0.000043	<0.005	<0.005	0.00426	<0.005	0.0264	0.00013	0.0085	0.00188	0.0012	0.077	<0.0001	<0.001	0.21	0.000231	74.5	0.0011	0.0138
RSEM-R5A-P2-A-EOP	6/2/2022 13:50	AUH704	M	C238258	0.0137	3.88	<0.00002	253	0.564	167	0.000035	<0.005	<0.005	0.00419	<0.005	0.0127	0.00012	0.0185	0.00162	0.00102	0.061	<0.0001	<0.001	0.199	0.000117	76.9	<0.001	0.00742
RSEM-R5A-P2-A-EOP	6/3/2022 13:20	AUH663	M	C238247	0.0119	3.95	<0.00002	230	0.545	166	0.000033	<0.005	0.0051	0.00428	<0.005	0.0098	0.00013	0.0215	0.00166	0.00107	0.061	<0.0001	<0.001	0.195	0.000057	71.2	<0.001	0.0046
RSEM-R5A-P2-A-EOP	6/4/2022 14:25	AUL723	M	C238905	0.00978	3.5	<0.00002	224	0.514	147	0.000033	<0.005	<0.005	0.00424	<0.005	0.0053	0.00019	0.0312	0.00167	0.00116	0.068	<0.0001	<0.001	0.196	<0.00001	65.1	<0.001	0.00206
RSEM-R5A-P2-A-EOP	6/5/2022 11:55	AUM444	M	C238986	0.00832	3.6	<0.00002	189	0.471	132	0.000029	<0.005	0.0052	0.00399	<0.005	<0.005	0.00015	0.0325	0.00157	0.00112	0.063	<0.0001	<0.001	0.189	<0.00001	61.5	<0.001	0.00113
RSEM-R5A-P2-A-EOP	6/6/2022 11:30	AUO791	M	C239365	0.00585	4.17	<0.00002	164	0.389	124	0.000031	<0.005	0.0132	0.00355	<0.005	0.0051	0.0003	0.026	0.00152	0.00125	0.068	<0.0001	<0.001	0.175	<0.00001	59.6	<0.001	0.00078
RSEM-R5A-P2-A-EOP	6/13/2022 17:20	AVO969	M	C243664	0.00529	3.16	<0.00002	180	0.354	133	0.000023	<0.005	0.0083	0.00378	<0.005	<0.005	0.00023	0.0216	0.00176	0.00125	0.067	<0.0001	<0.001	0.221	<0.00001	43.7	<0.001	<0.0002
RSEM-R5A-P2-A-EOP	6/14/2022 11:30	AVD544	M	C241829	0.00363	4.31	<0.00002	165	0.356	105	0.000024	<0.005	<0.005	0.00356	<0.005	<0.005	<0.0001	0.0206	0.00186	0.00198	0.105	<0.0001	<0.001	0.2	<0.00001	47.2	0.0012	<0.0002
RSEM-R5A-P2-A-EOP	6/15/2022 14:40	AVG249	M	C242252	0.00341	4.39	<0.00002	158	0.343	97.8	0.000024	<0.005	<0.005	0.00349	<0.005	<0.005	<0.0001	0.0223	0.0018	0.002	0.103	<0.0001	<0.001	0.208	<0.00001	45.0	0.0011	<0.0002
RSEM-R5A-P2-A-EOP	6/16/2022 14:00	AVK124	M	C242788	0.00332	4.6	<0.00002	154	0.335	95.6	0.000027	<0.005	0.0083	0.00346	<0.005	<0.005	0.00016	0.0212	0.00153	0.00172	0.09	<0.0001	<0.001	0.173	<0.00001	49.6	<0.001	<0.0002
RSEM-R5A-P2-A-EOP	6/17/2022 13:10	AVK725	M	C242942	0.00296	4.44	<0.00002	74.6	0.435	62.8	0.000026	<0.005	0.0124	0.00213	<0.005	0.0067	0.0004	0.0137	0.00058	0.00072	0.103	<0.0001	<0.001	0.086	0.000023	71.2	<0.001	0.00042
RSEM-R5A-P2-A-EOP	6/18/2022 14:35	AVL990	M	C243162	0.0106	3.95	<0.00002	213	0.435	169	0.000025	<0.005	<0.005	0.00286	<0.005	<0.005	0.00013	0.0228	0.00142	0.00184	0.068	<0.0001	<0.001	0.179	<0.00001	77.5	0.0012	0.00068
RSEM-R5A-P2-A-EOP	6/19/2022 13:35	AVM020	M	C243177	0.00939	4.82	<0.00002	230	0.439	189	0.000035	<0.005	0.011	0.00345	<0.005	0.0059	0.00061	0.0158	0.00157	0.0022	0.066	<0.0001	<0.001	0.193	<0.00001	71.0	0.0016	0.0005
RSEM-R5A-P2-A-EOP	6/20/2022 12:45	AVO966	M	C243664	0.0085	5.96	<0.00002	238	0.444	185	0.000035	<0.005	0.0209	0.00356	<0.005	<0.005	0.00078	0.0146	0.00174	0.00201	0.07	<0.0001	<0.001	0.25	<0.00001	50.9	0.0019	<0.0002
RSEM-R5A-P2-A-EOP	6/21/2022 13:00	AVQ612	M	C244010	0.00281	4.48	<0.00002	75.4	0.304	66.0	0.000022	<0.005	0.0054	0.00216	<0.005	0.0066	0.00018	0.0295	0.0007	0.00072	0.105	<0.0001	<0.001	0.107	0.000011	69.6	<0.001	0.00045
RSEM-R5A-P2-A-EOP	6/23/2022 13:00	AVV598	M	C244839	0.00719	2.85	<0.00002	206	0.411	181	0.000031	<0.005	<0.005	0.00386	<0.005	0.005	0.00016	0.0141	0.00129	0.0011	0.051	<0.0001	<0.001	0.225	<0.00001	60.9	<0.001	<0.0002
RSEM-R5A-P2-A-EOP	6/24/2022 12:00	AVV587	M	C244835	0.00841	2.22	<0.00002	214	0.441	200	0.00003	<0.005	0.0056	0.00415	<0.005	0.0066	0.00014	0.0141	0.00119	0.00089	0.05	<0.0001	<0.001	0.224	<0.00001	70.2	<0.001	<0.0002
RSEM-R5A-P2-A-EOP	6/26/2022 12:15	AVZ578	M	C245500	0.0031	4.08	<0.00002	160	0.32	103	0.000022	<0.005	0.0056	0.00359	<0.005	<0.005	0.00017	0.016	0.00155	0.00231	0.1	<0.0001	<0.001	0.209	<0.00001	35.8	0.001	<0.0002
RSEM-R5A-P2-A-EOP	6/27/2022 11:20	AVY534	M	C245274	0.00315	4.83	<0.00002	157	0.318	97.8	0.000035	<0.005	0.0117	0.00381	<0.005	<0.005	0.00028	0.0135	0.00163	0.0025	0.099	<0.0001	<0.001	0.206	<0.00001	36.2	<0.001	<0.0002
RSEM-R5A-P2-A-EOP	7/10/2022 15:55	AWZ488	M	C249617	0.00294	4.88	<0.00002	182	0.357	86.9	0.000042	<0.005	0.014	0.00442	<0.005	0.0081	0.00054	0.0362	0.00178	0.00231	0.111	<0.0001	<0.001	0.243	<0.00001	37.0	<0.001	<0.0002
RSEM-R5A-P2-A-EOP	7/12/2022 10:25	AXE617	M	C250400	0.00279	3.79	<0.00002	181	0.337	87.9	0.000023	<0.005	0.0087	0.00437	<0.005	<0.005	0.0003	0.0143	0.0017	0.00197	0.091	<0.0001	<0.001	0.233	<0.00001	35.8	0.0011	<0.0002
RSEM-R5A-P2-A-EOP	7/15/2022 13:30	AXJ366	M	C251330	0.00317	2.75	<0.00002	171	0.329	124	0.00002	<0.005	<0.005	0.00326	<0.005	<0.005	0.00015	0.008	0.00142	0.00156	0.079	<0.0001	<0.001	0.224	<0.00001	41.5	<0.001	<0.0002
RSEM-R5A-P2-A-EOP	7/16/2022 13:20	AXN332	M	C251927	0.00363	3.11	<0.00002	167	0.307	119	0.000024	<0.005	0.0066	0.00278	<0.005	0.0064	0.00029	0.0203	0.00167	0.00147	0.078	<0.0001	<0.001	0.244	<0.00001	41.5	0.0015	<0.0002
RSEM-R5A-P2-A-EOP	7/17/2022 11:55	AXN588	M	C251966	0.0035	3.25	<0.00002	170	0.286	119	0.000021	<0.005	<0.005	0.00282	<0.005	<0.005	0.00021	0.0338	0.00208	0.00169	0.073	<0.0001	<0.001	0.219	<0.00001	40.7	0.0019	<0.0002
RSEM-R5A-P2-A-EOP	7/28/2022 14:30	AYM154	M	C255903	0.00257	5.81	<0.00002	160	0.315	77.9	0.00003	<0.005	0.0245	0.00393	<0.005	<0.005	0.00098	0.0218	0.00237	0.00284	0.119	<0.0001	<0.001	0.281	<0.00001	27.4	<0.001	<0.0002
RSEM-R5A-P2-A-EOP	7/29/2022 11:45	AYM049	M	C255900	0.00278	3.62	<0.00002	160	0.263	107	0.00002	<0.005	0.0118	0.00309	<0.005	<0.005	0.00031	0.0239	0.00161	0.00181	0.083	<0.0001	<0.001	0.23	<0.00001	36.4	0.0015	<0.0002
RSEM-R5A-P2-A-EOP	8/3/2022 13:10	AYX382	M	C257672	0.00575	2.58	<0.00002	177	0.645	132	0.000021	<0.005	<0.005	0.00405	<0.005	<0.005	0.00017	0.0463	0.00204	0.00208	0.114	<0.0001	<0.001	0.278	0.000022	68.7	0.0017	0.00063
RSEM-R5A-P2-A-EOP	8/4/2022 11:45	AYY905	M	C257848	0.00518	2.54	<0.00002	176	0.539	131	0.000023	<0.005	<0.005	0.00436	<0.005	<0.005	0.00018	0.0774	0.002	0.00177	0.107	<0.0001	<0.001	0.288	0.000031	62.7	0.0011	0.00146
RSEM-R5A-P2-A-EOP	8/18/2022 15:30	BAA276	M	C262439	0.00474	5.31	<0.00002	196	0.453	130	0.000027	<0.005	0.025	0.0039	<0.005	<0.005	0.00085	0.022	0.00213	0.00232	0.079	<0.0001	<0.001	0.306	<0.00001	44.8	0.0016	<0.0002
RSEM-R5A-P2-A-EOP	8/19/2022 11:00	BAA262	M	C262436	0.00446	4.26	<0.00002	208	0.457	133	0.000028	<0.005	0.011	0.00384	<0.005	<0.005	0.00055	0.0227	0.00196	0.00225	0.081	<0.0001	<0.001	0.309	<0.00001	43.9	0.0014	<0.0002
RSEM-R5A-P2-A-EOP	9/9/2022 12:35	BBS003	M	C269764	0.00134	4.58	<0.00002	65.7	0.172	31.4	0.000013	<0.005	0.0148	0.0016	<0.005	<0.005	0.0006	0.0092	0.00095	0.0015	0.055	<0.0001	<0.001	0.115	<0.00001	24.9	<0.001	<0.0002
RSEM-R5A-P2-A-EOP	9/10/2022 14:00	BBR902	M	C269730	0.00257	3.88	<0.00002	165	0.206	85.3	0.000012	<0.005	<0.005	0.00323	<0.005	<0.005	0.00011	0.0218	0.00212	0.00255	0.064	<0.0001	<0.001	0.227	<0.00001	24.8	0.0015	<0.0002
RSEM-R5A-P2-A-EOP	9/11/2022 16:20	BBR961	M	C269754	0.00251	3.83	<0.00002	168	0.194	86.5	0.000014	<0.005	<0.005	0.00328	<0.005	<0.005	0.0002	0.021	0.00191	0.00219	0.055	<0.0001	<0.001	0.233	<0.00001	22.2	0.0014	<0.0002

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
RSEM-R5A-P2-A-EOP	9/18/2022 14:30	BCF724	M	C272251	0.00443	3.99	<0.00002	222	0.803	129	0.000023	<0.005	0.0054	0.00383	<0.005	0.0055	0.00038	0.0152	0.00206	0.00258	0.071	<0.0001	<0.001	0.275	0.000013	54.9	0.0019	0.00037
RSEM-R5A-P2-A-EOP	9/19/2022 10:20	BCI770	M	C272683	0.00368	3.27	<0.00002	200	0.473	124	0.000013	<0.005	<0.005	0.00304	<0.005	<0.005	<0.0001	0.0143	0.00186	0.00208	0.058	<0.0001	<0.001	0.223	0.000012	38.4	0.002	0.00022
RSEM-R5A-P2-A-EOP	9/30/2022 12:20	BDH545	M	C276348	0.00236	2.9	<0.00002	185	0.262	128	0.000014	<0.005	<0.005	0.00309	<0.005	0.0065	0.00022	0.0111	0.00164	0.00168	0.064	<0.0001	<0.001	0.23	<0.00001	35.9	0.0021	<0.0002
RSEM-R5A-P2-A-EOP	10/1/2022 13:30	BDL250	M	C276877	0.00235	3.27	<0.00002	193	0.272	127	0.000013	<0.005	<0.005	0.00308	<0.005	0.0068	0.00018	0.0083	0.00174	0.00182	0.062	<0.0001	<0.001	0.237	<0.00001	35.0	0.0021	<0.0002
RSEM-R5A-P2-A-EOP	10/19/2022 15:30	BFA347	M	C282741	0.00165	4.78	<0.00002	113	0.278	69.9	0.000016	<0.005	0.0065	0.0028	<0.005	<0.005	0.00036	0.0081	0.00133	0.00148	0.097	<0.0001	<0.001	0.132	<0.00001	49.7	0.0023	<0.0002
RSEM-R5A-P2-A-EOP	10/28/2022 10:00	BFU723	M	C285458	0.00353	7.58	<0.00002	117	0.291	84.2	0.000022	<0.005	0.0374	0.00296	0.0056	0.0084	0.00136	0.0204	0.00168	0.0017	0.072	<0.0001	<0.001	0.138	<0.00001	63.6	0.0023	<0.0002
RSEM-R5A-P2-A-EOP	10/29/2022 10:35	BFZ655	M	C286199	0.00357	6.77	<0.00002	107	0.273	75.1	0.000019	<0.005	0.0192	0.00281	<0.005	0.0055	0.0008	0.0201	0.00144	0.00153	0.072	<0.0001	<0.001	0.129	<0.00001	60.5	0.0023	<0.0002
RSEM-R5A-P2-A-SP	3/17/2022 19:00	AQH802	M	C217776	0.00313	19.6	0.000183	13.4	0.149	16.7	0.000216	<0.005	0.0986	0.00191	0.0434	0.102	0.00058	0.0472	<0.0005	0.00026	0.148	<0.0001	<0.001	<0.05	0.000011	20.2	<0.001	<0.0002
RSEM-R5A-P2-A-SP	3/20/2022 11:20	AQJ911	M	C218219	0.00455	2.68	<0.00002	24.1	0.131	38.3	0.000028	<0.005	0.0212	0.00115	<0.005	0.0088	0.00051	0.0112	<0.0005	0.00025	0.129	<0.0001	<0.001	<0.05	0.00004	30.1	<0.001	0.00131
RSEM-R5A-P2-A-SP	4/29/2022 11:00	ASH018	M	C228622	0.0314	5.1	0.000347	465	0.595	384	0.000031	<0.005	0.0146	0.00647	<0.005	0.0088	0.00052	<0.003	0.00204	0.00178	0.057	<0.0001	<0.001	0.273	0.000048	69.0	0.0035	0.00402
RSEM-R5A-P2-A-SP	5/6/2022 12:05	ASR073	M	C230545	0.0193	6.02	0.000168	351	0.574	344	0.000057	<0.005	0.0125	0.00595	0.0059	0.0373	0.00061	<0.003	0.00192	0.00184	0.039	<0.0001	<0.001	0.255	0.000172	90.9	<0.001	0.009
RSEM-R5A-P2-A-SP	5/18/2022 16:30	ATJ928	M	C234012	0.0262	4.75	<0.00002	324	0.72	345	0.000032	<0.005	<0.005	0.00638	<0.005	0.0078	0.00024	0.0075	0.00229	0.00058	0.053	<0.0001	<0.001	0.164	0.000091	157	0.0031	0.00444
RSEM-R5A-P2-A-SP	5/28/2022 12:45	ATX752	M	C236620	0.00776	5.74	<0.00002	134	0.957	128	0.000044	<0.005	0.0429	0.00318	<0.005	0.0075	0.00144	0.0274	0.00101	0.0007	0.104	<0.0001	<0.001	0.125	0.000054	106	<0.001	0.00214
RSEM-R5A-P2-A-SP	6/1/2022 13:20	AUE683	M	C237797	0.0158	4.04	<0.00002	260	0.587	174	0.000037	<0.005	<0.005	0.00418	<0.005	0.0184	0.0001	0.0197	0.00177	0.00146	0.068	<0.0001	<0.001	0.223	0.000173	72.3	0.0014	0.0102
RSEM-R5A-P2-A-SP	6/7/2022 13:00	AUT414	M	C240162	0.006	3.25	<0.00002	158	0.39	121	0.000021	<0.005	<0.005	0.00351	<0.005	<0.005	0.0003	0.023	0.00171	0.00125	0.074	<0.0001	<0.001	0.175	<0.00001	59.0	<0.001	0.00058
RSEM-R5A-P2-A-SP	6/8/2022 16:00	AUT296	M	C240147	0.00629	3.21	<0.00002	167	0.409	128	0.00002	<0.005	<0.005	0.00368	<0.005	<0.005	0.00013	0.023	0.00172	0.00122	0.073	<0.0001	<0.001	0.182	<0.00001	57.0	<0.001	0.00031
RSEM-R5A-P2-A-SP	6/10/2022 11:30	AUV212	M	C240508	0.00541	2.83	<0.00002	186	0.414	142	0.000023	<0.005	<0.005	0.00402	<0.005	<0.005	0.00012	0.0208	0.00171	0.00109	0.064	<0.0001	<0.001	0.186	<0.00001	54.8	<0.001	<0.0002
RSEM-R5A-P2-A-SP	6/22/2022 13:10	AVT154	M	C244412	0.00624	4.46	<0.00002	204	0.35	137	0.000026	<0.005	0.0053	0.00338	<0.005	<0.005	0.00021	0.0262	0.0019	0.00205	0.074	<0.0001	<0.001	0.229	<0.00001	45.6	0.001	<0.0002
RSEM-R5A-P2-A-SP	6/25/2022 11:50	AVZ708	M	C245512	0.00851	2.07	<0.00002	217	0.451	215	0.000027	<0.005	0.0062	0.00426	<0.005	<0.005	0.00015	0.0154	0.00108	0.00075	0.044	<0.0001	<0.001	0.23	<0.00001	70.3	<0.001	<0.0002
RSEM-R5A-P2-A-SP	6/28/2022 14:00	AWH754	M	C246896	0.00291	4.36	<0.00002	169	0.334	98.0	0.000034	<0.005	<0.005	0.00375	<0.005	0.0056	0.00017	0.0117	0.00145	0.00177	0.086	<0.0001	<0.001	0.223	<0.00001	43.6	<0.001	<0.0002
RSEM-R5A-P2-A-SP	7/9/2022 13:15	AWZ516	M	C249625	0.00279	4.2	<0.00002	173	0.346	82.8	0.000031	<0.005	0.0111	0.00414	<0.005	0.006	0.00036	0.473	0.00176	0.00242	0.128	<0.0001	<0.001	0.239	<0.00001	34.4	<0.001	0.00039
RSEM-R5A-P2-A-SP	7/11/2022 15:25	AXC659	M	C250105	0.00306	4.37	<0.00002	190	0.365	91.7	0.000032	<0.005	0.0111	0.00462	<0.005	0.0061	0.00041	0.0111	0.00171	0.00223	0.101	<0.0001	<0.001	0.249	<0.00001	35.9	<0.001	<0.0002
RSEM-R5A-P2-A-SP	7/13/2022 14:05	AXH416	M	C250934	0.00276	5.37	<0.00002	171	0.362	84.7	0.000042	<0.005	0.0216	0.00455	<0.005	0.0095	0.00114	0.0086	0.00176	0.00217	0.099	<0.0001	<0.001	0.231	<0.00001	32.7	<0.001	<0.0002
RSEM-R5A-P2-A-SP	7/14/2022 11:10	AXJ118	M	C251290	0.00341	2.45	<0.00002	167	0.331	128	0.000019	<0.005	<0.005	0.00295	<0.005	<0.005	0.00014	0.0118	0.00163	0.00164	0.083	<0.0001	<0.001	0.225	<0.00001	42.9	<0.001	<0.0002
RSEM-R5A-P2-A-SP	7/30/2022 14:00	AYP673	M	C256352	0.00238	7.07	<0.00002	178	0.31	87.3	0.000035	<0.005	0.029	0.00401	0.0053	0.0053	0.00126	0.0185	0.00234	0.00276	0.103	<0.0001	<0.001	0.288	<0.00001	27.5	<0.001	<0.0002
RSEM-R5A-P2-A-SP	8/6/2022 15:10	AZA355	M	C258076	0.00548	3.21	<0.00002	164	0.488	127	0.000025	<0.005	0.0123	0.0041	<0.005	<0.005	0.00037	0.0225	0.00187	0.00145	0.13	<0.0001	<0.001	0.262	<0.00001	55.5	0.0013	0.00043
RSEM-R5A-P2-A-SP	8/17/2022 12:30	BAA265	M	C262437	0.00495	5.74	<0.00002	201	0.489	136	0.000047	<0.005	0.0316	0.00392	0.0055	0.0112	0.00124	0.0158	0.00207	0.00202	0.073	<0.0001	<0.001	0.301	<0.00001	49.6	0.0017	<0.0002
RSEM-R5A-P2-A-SP	8/20/2022 16:30	BAD642	M	C262969	0.00414	2.54	<0.00002	191	0.465	130	0.000022	<0.005	<0.005	0.00357	<0.005	0.0062	<0.0001	0.0183	0.00193	0.00182	0.073	<0.0001	<0.001	0.29	<0.00001	45.5	0.0012	<0.0002
RSEM-R5A-P2-A-SP	8/21/2022 16:40	BAD603	M	C262959	0.00348	8.43	<0.00002	197	0.457	112	0.000056	<0.005	0.0681	0.00403	0.0107	0.0077	0.00285	0.0138	0.00187	0.00211	0.083	<0.0001	<0.001	0.298	<0.00001	39.1	0.0011	0.00033
RSEM-R5A-P2-A-SP	8/22/2022 17:00	BAG920	M	C263407	0.00325	3.56	<0.00002	190	0.448	117	0.000023	<0.005	0.0153	0.0039	<0.005	<0.005	0.00048	0.0159	0.00179	0.00188	0.077	<0.0001	<0.001	0.28	<0.00001	41.5	<0.001	<0.0002
RSEM-R5A-P2-A-SP	9/29/2022 17:30	BDH542	M	C276348	0.00404	4.3	<0.00002	223	0.4	120	0.000029	<0.005	0.0059	0.00432	<0.005	0.0076	0.00051	0.0056	0.0025	0.00288	0.075	<0.0001	<0.001	0.301	0.00001	30.7	0.002	<0.0002
RSEM-R5A-P2-A-SP	10/14/2022 15:45	BER009	M	C281389	0.00293	6.58	<0.00002	205	0.361	102	0.000025	<0.005	0.0088	0.00385	0.005	0.0113	0.00053	0.0123	0.00306	0.00346	0.071	<0.0001	<0.001	0.267	<0.00001	30.1	0.0051	<0.0002
RSEM-R5A-P2-A-SP	10/15/2022 17:30	BER010	M	C281389	0.00287	7.44	0.000031	201	0.34	95.9	0.000043	<0.005	0.0129	0.0039	0.0074	0.0239	0.00065	0.0095	0.00315	0.00365	0.079	<0.0001	<0.001	0.276	<0.00001	31.1	0.0046	0.00022
RSEM-R5A-P2-A-SP	10/16/2022 17:30	BER096	M	C281399	0.00256	6.35	<0.00002	200	0.368	104	0.000019	<0.005	0.0063	0.00392	<0.005	0.0211	0.00048	0.0044	0.00309	0.00357	0.076	<0.0001	<0.001	0.271	<0.00001	30.9	0.0044	0.00034
RSEM-R5A-P2-A-SP	10/17/2022 9:30	BER152	M	C281421	0.00288	7.8	<0.00002	212	0.373	102	0.000023	<0.005	0.0195	0.004	0.0058	0.008	0.00074	0.0039	0.00306	0.00348	0.076	<0.0001	<0.001	0.26	<0.00001	31.1	0.0043	0.00032
RSEM-R5A-P2-A-SP	10/18/2022 13:45	BEX621	M	C282315	0.00285	5.37	<0.00002	208	0.355	98.3	<0.00001	<0.005	<0.005	0.00387	<0.005	<0.005	0.00024	0.0037	0.00314	0.00341	0.077	<0.0001	<0.001	0.296	0.000011	32.5	0.0045	0.00025
RSEM-R5A-P2-A-SP	10/30/2022 13:20	BFZ647	M	C286196	0.00236	7.07	<0.00002	173	0.328	92.3	0.000023	<0.005	0.0301	0.00366	0.0052	0.0057	0.00095	0.0103	0.00223	0.00208	0.055	<0.0001	<0.001	0.208	<0.00001	41.4	0.0026	<0.0002
RSEM-R5A-P2-B-EOP	3/20/2022 11:40	AQJ913	M	C218219	0.00472	2.83	<0.00002	27.7	0.145	47.2	0.00003	<0.005	0.022	0.00121	<0.005	0.0324	0.00055	0.0101	<0.0005	0.00022	0.121	<0.0001	<0.001	<0.05	0.000175	33.2	<0.001	0.00489
RSEM-R5A-P2-B-EOP	3/21/2022 14:55	AQL269	M	C218465	0.00726	2.85	<0.00002	48.2	0.209	87.9	0.000028	<0.005	0.0309	0.00141	<0.005	0.159	0.0008	0.0084	<0.0005	0.00013	0.09	<0.0001	<0.001	<0.05	0.000846	49.3	<0.001	0.0213
RSEM-R5A-P2-B-SP	3/17/2022 19:30	AQH803	M	C217776	0.00224	11.2	0.000097	14.5	0.119	16.1	0.00015	<0.005	0.0559	0.00115	0.026	0.0649	0.00037	0.0347	<0.0005	0.00032	0.156	<0.0001	<0.001	<0.05	0.000023	16.9	<0.001	0.0004
RSEM-R5A-P2-B-SP	3/19/2022 16:05	AQJ974	M	C218236	0.00356	3.74	<0.00002	18.7	0.111	28.1	0.000043	<0.005	0.0371	0.00102	0.0063	0.0138	0.00112	0.0118	<0.0005	0.00031	0.125	<0.0001	<0.001	<0.05	0.000035	24.3	<0.001	0.00095
RSEM-R5A-P2-B-SP	5/6/2022 12:15	ASR074	M	C230545	0.0233	4.62	0.000104	329	0.753	411	0.000049	<0.005	0.0117	0.00679	<0.005	0.232	0.00027	0.0095	0.00083	0.00063	0.05	<0.0001	<0.001	0.176	0.00122	175	0.0012	0.0498
RSEM-R5A-P2-B-SP	5/31/2022 13:55	AUC339	M	C237377	0.0174	4.49	<0.00002	266	0.674	286	0.00004	<0.005	<0.005	0.00461	<0.005	0.057	0.0002	0.134	0.00125	0.00084	0.069	<0.0001	<0.001	0.201	0.000508	134	0.0021	0.0143
RSEM-R5A-P2-B-SP	6/4/2022 14:25	AUL724	M	C238905	0.0137	3.96	<0.00002	221	0.524	183	0.000027	<0.005	<0.005	0.0042	<0.005	0.0059	0.00015	0.0156	0.00149	0.00085	0.048	<0.0001	<0.001	0.209	0.000066	95.9	0.0017	0.00167
RSEM-R5A-P2-B-SP	6/19/2022 14:00	AVM018	M	C243177	0.00999	2.04	<0.00002	206	0.44	210	0.000024	<0.005	<0.005	0.00367	<0.005	<0.005	<0.0001	0.0125	0.00097	0.00069	0.05	<0.0001	<0.001	0.174	<0.00001	95.2	<0.001	0.00043
RSEM-R5A-P2-C-SP	3/20/2022 12:25	AQJ914	M	C218219	0.0028	2.51	<0.00002	17.0	0.117	40.1	0.000031	<0.005	0.0305	0.00082	<0.005	0.0688	0.00054	0.0069	<0.0005	<0.0001	0.105	<0.0001	<0.001	<0.05	0.000317	26.6	<0.001	0.00872
RSEM-R5A-P2-C-SP	5/6/2022 12:30	ASR075	M	C230545	0.0212	4.62	0.000172	271	0.413	256	0.00003	<0.005	0.0114	0.00439	<0.005	0.0367	0.00028	<0.003	0.00259	0.00342	0.067	<0.0001	<0.001	0.199	0.000149	67.6	0.0024	0.00839
RSEM-R5A-P2-C-SP	5/31/2022 13:55	AUC340	M	C237377	0.0172	4.12	<0.00002	247	0.592	307	0.000042	<0.005	<0.005	0.0037	<0.005	0.673	0.00012	0.0777	0.00077	0.00029	0.073	0.0001	<0.001	0.223	0.00372	133	<0.001	0.0673
RSEM-R5A-P2-C-SP	6/4/2022 14:25	AUL725	M	C238905	0.018	4.17	<0.00002	311	0.624	249	0.000036	<0.005	<0.005	0.00436	<0.005	0.245	0.00018	0.0325	0.00125	0.00054	0.068	<0.0001	<0.001	0.206	0.00173	136	0.001	0.0372
RSEM-R5A-P2-D-SP	5/7/2022 14:35	ASS947	M	C230886	0.0249	3.6	0.000123	243	0.659	391	0.000052	<0.005	<0.005	0.00611	<0.005	1.31	<0.0001	0.042	0.00118	0.00068	0.06	0.00013	<0.001	0.206	0.00492	141	<0.001	0.128
RSEM-R5A-P2-D-SP	6/1/2022 13:45	AUE684	M	C237797	0.0265	6.56	0.000031	319	1.06	702	0.000146	<0.005	<0.005	0.0311	<0.005	9.25	<0.0001	18.1	<0.0005	<0.0001	0.074	0.00653	<0.001	0.399	0.0324	253	0.0041	0.616
RSEM-R5B-P2-Sump	3/21/2022 16:30	AQL264	M	C218465	0.00365	2.98	<0.00002	51.4	0.275	79.9	0.000024	<0.005	0.0139	0.00251	<0.005	0.0673	0.00062	0.0072	0.00064	0.0004	0.099	<0.0001	<0.001	0.058	0.000384	52.1	<0.001	0.0171
RSEM-R5B-P2-Sump	3/30/2022 11:55	AQX831	M	C221206	0.00498	2.79	<0.00002	60.8	0.223	65.9	0.000023	<0.005	<0.005	0.0034	<0.005	0.0176	0.00011	0.0047	0.00097	0.00044	0.105	<0.0001	<0.001	0.08	0.000131	61.2	<0.001	0.00774
RSEM-R5B-P2-Sump	4/6/2022 16:20	ARI189	M	C223269	0.00534	2.53	<0.00002	77.4	0.307	77.1	0.000028	<0.005	<0.005	0.00457	<0.005	0.0106	0.00014	0.0045	0.00116	0.00067	0.098	<0.0001	<0.001	0.084	0.000062	49.7	<0.001	0.00357
RSEM-R5B-P2-Sump	4/13/2022 16:35	ARP729	M	C224775	0.00491	2.51	<0.00002	69.6	0.255	66.6	0.000023	<0.005	0.0054	0.00372	<0.005	0.0052	0.00014	0.005	0.00105	0.00058	0.089	<0.0001	<0.001	0.093	0.000026	46.3	<0.001	0.0017
RSEM-R5B-P2-Sump	4/19/2022 16:00	ARV038	M	C225905	0.00462	2.16	<0.00002	82.3	0.289	72.6	0.000022	<0.005	0.011	0.00456	<0.005	0.0069	0.00018	0.0052	0.00124	0.0006	0.094	<0.0001	<0.001	0.085	0.000012	43.6	<0.001	0.00131
RSEM-R5B-P2-Sump	5/3/2022 10:30	ASO450	M	C230063	0.0228	2.98	0.000069	351	0.464	248	0.00003	<0.005	<0.005	0.00498	<0.005	0.19	<0.0001	0.0208	0.00191	0.00123	0.081	<0.0001	<0.001	0.157	0.000909	61.3	<0.001	0.0324
RSEM-R5B-P2-Sump	5/7/2022 13:55	ASS946	M	C230886	0.0148	5.33	0.000067	229	0.537	236	0.000064	<0.005	0.0413	0.00542	0.0054	0.147	0.00126	0.0062	0.00207	0.00103	0.072	<0.0001	<0.001	0.156	0.000506	72.7	<0.001	0.0323
RSEM-R5B-P2-Sump	5/10/2022 13:45	ASX009	M	C231638	0.0156	3.99	0.000061	293	0.549	268	0.000034	<0.005	<0.005	0.00544	<0.005	0.0688	0.00011	0.0121	0.00163	0.00095	0.056	<0.0001	<0.001	0.197	0.00026	72.8	<0.001	0.02
RSEM-R5B-P2-Sump	5/13/2022 12:55	ATB016	M	C232410	0.0119	3.55	0.00002	250	0.517	226	0.000029	<0.005	<0.005	0.0051	<0.005	0.0588	0.00022	0.015	0.002	0.00135	0.07	<0.0001	<0.001	0.182	0.000078	67.1	<0.001	0.0228
RSEM-R5B-P2-Sump	5/16/2022 10:55	ATC673	M	C232726	0.0103	4.21	<0.00002	212	0.466	189	0.000038	<0.005	0.0081	0.00497	<0.005	0.039	0.00045	0.0117	0.00197	0.00149	0.097	<0.0001	<0.001	0.176	0.000087	69.0	<0.001	0.0172
RSEM-R5B-P2-Sump	5/19/2022 16:30	ATL914	M	C234314	0.00946	5.46	<0.00002	286	0.532	196	0.000032	<0.005	0.0118	0.0055	<0.005	0.0311	0.00016	0.0097	0.0023	0.00161	0.069	<0.0001	<0.001	0.155	0.00013	72.8	0.0015	0.015
RSEM-R5B-P2-Sump	5/22/2022 12:00	ATO536	M	C234788	0.00674	5.21	<0.00002	244	0.52	175	0.000033	<0.005	0.0108	0.00541	<0.005	0.0161	0.00044	0.01	0.00232	0.00225	0.083	<0.0001	<0.001	0.149	0.000059	67.5	0.0017	0.0107
RSEM-R5B-P2-Sump	5/25/2022 12:00	ATT370	M	C235730	0.0077	4.63	<0.00002	227	0.505	177	0.000031	<0.005	<0.005	0.0052	<0.005	0.0104	<0.0001	0.0121	0.00282	0.00225	0.101	<0.0001	<0.001	0.183	0.000037	74.1	0.002	0.00745
RSEM-R5B-P2-Sump	5/28/2022 14:10	ATX751	M	C236620	0.0137	9.3	0.000024	241	0.655	200	0.00007	<0.005	0.0858	0.0044	0.0084	0.0127	0.00148	0.017	0.00175	0.00154	0.077	<0.0001	<0.001	0.186	0.000019	72.7	<0.001	0.00209
RSEM-R5B-P2-Sump	5/29/2022 15:30	ATW987	M	C236421	0.0173	7.6	0.000046	291	0.601	244	0.000061	<0.005	0.0512	0.00445	0.0065	0.0349	0.00146	0.0351	0.00161	0.00094	0.062	<0.0001	<0.001	0.214	0.000229	74.6	<0.001	0.0122
RSEM-R5B-P2-Sump	6/1/2022 12:45	AUE682	M	C237797	0.0134	4.36	<0.00002	247	0.552	167	0.000036	<0.005	<0.005	0.00414	<0.005	0.0207	0.00014	0.0322	0.00175	0.00151	0.074	<0.0001	<0.001	0.22	0.000117	69.8	0.0014	0.00902
RSEM-R5B-P2-Sump	6/5/2022 12:25	AUM443	M	C238986	0.00638	7.51	<0.00002	166	0.437	105	0.000063	<0.005	0.0506	0.00397	0.0071	0.0158	0.0014	0.0222	0.0015	0.00112	0.059	<0.0001	<0.001	0.174	<0.00001	62.0	<0.001	0.00085
RSEM-R5B-P2-Sump	6/11/2022 13:00	AUY738	M	C241062	0.00363	4.34	<0.00002	173	0.373	120	0.000032	<0.005	0.0051	0.00371	<0.005	<0.005	<0.0001	0.0162	0.00149	0.00188	0.088	<0.0001	<0.001	0.176	<0.00001	53.8	0.0012	<0.0002

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
RSEM-R5B-P2-Sump	6/15/2022 14:10	AVG250	M	C242252	0.00329	4.27	<0.00002	146	0.324	91.2	0.000025	<0.005	<0.005	0.00329	<0.005	<0.005	0.0001	0.0242	0.00176	0.00203	0.107	<0.0001	<0.001	0.196	<0.00001	45.3	0.0011	0.0002
RSEM-R5B-P2-Sump	6/18/2022 14:00	AVL991	M	C243162	0.0101	3.93	<0.00002	211	0.43	167	0.000022	<0.005	<0.005	0.00308	<0.005	<0.005	<0.0001	0.0152	0.00144	0.00193	0.069	<0.0001	<0.001	0.184	<0.00001	73.3	0.0012	0.0007
RSEM-R5B-P2-Sump	6/23/2022 13:45	AVV599	M	C244839	0.00293	3.9	<0.00002	149	0.315	93.6	0.000027	<0.005	0.0057	0.00347	<0.005	0.0052	<0.0001	0.0864	0.00131	0.00173	0.062	<0.0001	<0.001	0.231	<0.00001	37.4	<0.001	<0.0002
RSEM-R5B-P2-Sump	6/26/2022 11:55	AVZ579	M	C245500	0.00314	4.52	<0.00002	155	0.315	102	0.000027	<0.005	0.0061	0.00369	<0.005	0.0053	0.00022	0.0138	0.00152	0.0024	0.102	<0.0001	<0.001	0.221	<0.00001	35.6	<0.001	<0.0002
RSEM-R5B-P2-Sump	7/3/2022 15:00	AWM048	M	C247492	0.00289	3.61	<0.00002	158	0.302	81.4	0.000023	<0.005	0.005	0.0037	<0.005	0.0053	0.00049	0.0129	0.00153	0.0023	0.103	<0.0001	<0.001	<0.05	<0.00001	32.7	<0.001	<0.0002
RSEM-R5B-P2-Sump	7/5/2022 13:30	AWR508	M	C248315	0.00318	4.39	<0.00002	156	0.291	78.0	0.000029	<0.005	0.0255	0.00375	<0.005	<0.005	0.00072	0.0136	0.0016	0.00209	0.108	<0.0001	<0.001	0.228	<0.00001	35.3	<0.001	<0.0002
RSEM-R5B-P2-Sump	7/8/2022 12:35	AWW524	M	C249170	0.00301	3.47	<0.00002	174	0.343	81.8	0.000029	<0.005	<0.005	0.00411	<0.005	0.0082	0.0002	0.0133	0.00178	0.00237	0.113	<0.0001	<0.001	0.222	<0.00001	31.7	<0.001	<0.0002
RSEM-R5B-P2-Sump	7/13/2022 13:35	AXH417	M	C250934	0.0028	6.43	<0.00002	161	0.347	77.5	0.00005	<0.005	0.0285	0.00428	0.0054	0.0143	0.00063	0.0105	0.00175	0.00228	0.121	<0.0001	<0.001	0.229	<0.00001	33.1	0.0012	<0.0002
RSEM-R5B-P2-Sump	7/16/2022 12:50	AXN333	M	C251927	0.00303	6.86	0.000034	164	0.315	75.2	0.000059	<0.005	0.0178	0.00381	0.0083	0.023	0.00056	0.0651	0.0041	0.00274	0.087	<0.0001	<0.001	0.267	<0.00001	24.0	0.0028	<0.0002
RSEM-R5B-P2-Sump	7/23/2022 13:00	AYB215	M	C254120	0.0029	4.71	<0.00002	169	0.322	82.3	0.000021	<0.005	<0.005	0.00404	<0.005	0.0051	0.0003	0.0215	0.00292	0.00314	0.109	<0.0001	<0.001	0.283	<0.00001	25.0	<0.001	<0.0002
RSEM-R5B-P2-Sump	7/28/2022 14:00	AYM155	M	C255903	0.00253	6.06	<0.00002	162	0.318	79.7	0.000031	<0.005	0.0275	0.00392	0.0055	<0.005	0.00146	0.0208	0.00235	0.00285	0.12	<0.0001	<0.001	0.267	<0.00001	24.0	<0.001	<0.0002
RSEM-R5B-P2-Sump	8/2/2022 13:05	AYU377	M	C257067	0.00481	2.32	<0.00002	159	0.773	108	0.000021	<0.005	<0.005	0.00338	<0.005	<0.005	0.0001	0.019	0.0016	0.0019	0.123	<0.0001	<0.001	0.227	<0.00001	60.8	0.0013	0.00068
RSEM-R5B-P2-Sump	8/6/2022 14:45	AZA358	M	C258076	0.0111	4.53	<0.00002	227	0.687	173	0.000033	<0.005	0.0129	0.0038	<0.005	<0.005	0.00075	0.0314	0.0022	0.00235	0.08	<0.0001	<0.001	0.299	<0.00001	69.1	0.002	0.00083
RSEM-R5B-P2-Sump	8/14/2022 16:30	AZR294	M	C260829	0.00587	3.53	<0.00002	199	0.459	138	0.000028	<0.005	0.0084	0.0036	<0.005	0.0089	0.00025	0.0211	0.00185	0.00207	0.068	<0.0001	<0.001	0.283	<0.00001	45.8	0.0014	0.00048
RSEM-R5B-P2-Sump	8/27/2022 14:30	BAR927	M	C265307	0.0026	10.1	<0.00002	201	0.352	102	0.000049	<0.005	0.0784	0.00387	0.0115	0.0088	0.00246	0.0198	0.00283	0.00367	0.1	<0.0001	<0.001	0.328	<0.00001	25.7	0.002	<0.0002
RSEM-R5B-P2-Sump	9/5/2022 16:00	BBI329	M	C268286	0.00429	10.1	0.000022	224	0.363	107	0.000049	<0.005	0.0384	0.0047	0.0105	0.015	0.00178	0.0228	0.00323	0.00484	0.098	<0.0001	<0.001	0.375	<0.00001	26.7	0.0019	<0.0002
RSEM-R5B-P2-Sump	9/8/2022 11:55	BBO447	M	C269143	0.00385	13.2	<0.00002	215	0.336	106	0.000058	<0.005	0.0993	0.00453	0.0158	0.0062	0.00428	0.0214	0.00299	0.00468	0.099	<0.0001	<0.001	0.368	<0.00001	29.2	0.0017	<0.0002
RSEM-R5B-P2-Sump	9/15/2022 14:35	BCC126	M	C271667	0.00324	9.17	<0.00002	192	0.35	98.6	0.000049	<0.005	0.0781	0.00511	0.0126	0.0105	0.003	0.0236	0.00276	0.00489	0.085	<0.0001	<0.001	0.293	<0.00001	24.7	<0.001	<0.0002
RSEM-R5B-P2-Sump	9/24/2022 12:20	BCV562	M	C274577	0.00488	5.54	<0.00002	214	0.45	127	0.000025	<0.005	0.0057	0.00418	<0.005	0.0073	0.00032	0.0169	0.00281	0.00363	0.083	<0.0001	<0.001	0.295	<0.00001	30.0	0.0026	<0.0002
RSEM-R5B-P2-Sump	9/28/2022 15:40	BDE182	M	C276033	0.00366	4.75	<0.00002	211	0.418	116	0.000028	<0.005	0.0114	0.00409	<0.005	0.007	0.00072	0.02	0.00256	0.00311	0.085	<0.0001	<0.001	0.284	<0.00001	28.6	0.0022	<0.0002
RSEM-R5B-P2-Sump	10/4/2022 11:50	BDR440	M	C277814	0.0033	10.8	0.000026	194	0.415	98.1	0.000065	<0.005	0.0553	0.00495	0.0119	0.0163	0.00215	0.0082	0.0024	0.00348	0.065	<0.0001	<0.001	0.25	<0.00001	30.4	0.002	<0.0002
RSEM-R5B-P2-Sump	10/9/2022 11:45	BED927	M	C279394	0.00304	5.27	<0.00002	194	0.334	93.6	0.000015	<0.005	0.008	0.00399	<0.005	<0.005	0.00043	0.0179	0.00272	0.00313	0.069	<0.0001	<0.001	0.253	<0.00001	24.7	0.0044	<0.0002
RSEM-R5B-P2-Sump	10/13/2022 16:40	BEN621	M	C280837	0.00268	10.1	<0.00002	195	0.345	92.1	0.000038	<0.005	0.0518	0.00383	0.0106	0.0115	0.0022	0.0122	0.00316	0.00348	0.078	<0.0001	<0.001	0.258	<0.00001	27.0	0.0053	0.0002
RSEM-R5B-P2-Sump	10/20/2022 12:15	BFD238	M	C283174	0.00271	9.08	0.000045	202	0.346	100	0.000048	<0.005	0.0113	0.00431	0.0096	0.0192	0.00064	0.01	0.00321	0.00412	0.068	<0.0001	<0.001	0.273	<0.00001	25.5	0.0034	<0.0002
RSEM-R5B-P2-Sump	10/25/2022 14:35	BFP709	M	C284665	0.00263	6.34	<0.00002	181	0.347	91.4	0.000024	<0.005	0.0078	0.00373	<0.005	0.0087	0.00035	0.013	0.00299	0.0034	0.079	<0.0001	<0.001	0.221	<0.00001	32.1	0.0029	0.00024
RSEM-R6E-EOP	1/23/2022 11:15	FJ2200194-002	M	FJ2200194	0.000344	3.82	0.000015	4.86	0.124	7.35	0.000033	0.0002	0.0215	0.000603	0.00435	0.0161	<0.00020	0.0204	0.00012	0.00025	0.053	<0.000100	<0.000050	<0.010	0.0000169	30.5	<0.00050	0.00015
RSEM-R6E-EOP	2/8/2022 11:35	AOI289	M	C208265	0.00073	3.8	<0.00002	24.6	0.214	19.2	0.000017	<0.005	0.0131	0.00082	<0.005	0.0066	0.00022	0.0101	<0.0005	0.0003	0.088	<0.0001	<0.001	<0.05	<0.00001	51.8	0.0011	0.00047
RSEM-R6E-EOP	2/12/2022 13:50	AOP216	M	C209346	0.00201	2.51	<0.00002	26.4	0.195	38.1	<0.00001	<0.005	<0.005	0.00073	<0.005	<0.005	<0.0001	0.0109	0.00065	0.00026	0.056	<0.0001	<0.001	<0.05	0.000023	49.8	<0.001	0.00057
RSEM-R6E-EOP	2/13/2022 10:35	AOP245	M	C209355	0.00046	2.02	<0.00002	19.0	0.204	15.2	0.000011	<0.005	<0.005	0.00082	<0.005	<0.005	<0.0001	0.0229	<0.0005	0.00027	0.062	<0.0001	<0.001	<0.05	<0.00001	43.9	<0.001	0.00036
RSEM-R6E-EOP	2/14/2022 13:00	AOQ978	M	C209670	0.00048	2.08	<0.00002	20.4	0.231	16.9	0.00001	<0.005	<0.005	0.00088	<0.005	<0.005	<0.0001	0.0214	<0.0005	0.0003	0.064	<0.0001	<0.001	<0.05	<0.00001	45.4	<0.001	0.00037
RSEM-R6E-EOP	2/15/2022 15:45	AOS723	M	C210043	0.00038	2.31	<0.00002	21.4	0.305	22.2	<0.00001	<0.005	0.0058	0.00098	<0.005	0.0052	0.00016	0.028	0.00057	0.00046	0.086	<0.0001	<0.001	<0.05	0.000018	50.4	0.0011	0.00049
RSEM-R6E-EOP	2/16/2022 10:30	AOU839	M	C210450	0.00057	2.17	<0.00002	22.3	0.333	25.4	<0.00001	<0.005	<0.005	0.00099	<0.005	<0.005	<0.0001	0.0566	0.00055	0.00039	0.086	<0.0001	<0.001	<0.05	0.000024	48.0	<0.001	0.0004
RSEM-R6E-EOP	3/16/2022 7:00	AQE821	M	C217156	0.00209	4.58	<0.00002	68.8	0.124	44.9	<0.00001	<0.005	<0.005	0.00188	<0.005	<0.005	<0.0001	0.0088	0.00117	0.00086	0.021	<0.0001	<0.001	0.075	<0.00001	20.8	0.0033	0.0002
RSEM-R6E-EOP	3/17/2022 16:30	AQH796	M	C217776	0.00083	5.88	0.000061	19.9	0.411	34.4	0.000082	<0.005	0.0776	0.0023	0.0145	0.0795	0.00064	0.0481	<0.0005	0.00025	0.07	<0.0001	<0.001	<0.05	0.000029	61.3	<0.001	0.00052
RSEM-R6E-EOP	3/18/2022 5:00	AQH793	M	C217775	0.0008	3	<0.00002	34.6	0.423	42.4	0.00001	<0.005	<0.005	0.00146	<0.005	<0.005	0.0001	0.0166	<0.0005	0.00037	0.088	<0.0001	<0.001	<0.05	0.00003	71.9	<0.001	0.00223
RSEM-R6E-EOP	4/6/2022 12:30	ARI187	M	C223269	0.00103	2.35	<0.00002	19.7	0.243	30.8	<0.00001	<0.005	<0.005	0.00129	<0.005	0.0072	<0.0001	0.0141	<0.0005	0.00034	0.103	<0.0001	<0.001	<0.05	0.000011	46.9	<0.001	0.00073
RSEM-R6E-EOP	4/8/2022 12:30	ARI202	M	C223273	0.00122	3.43	<0.00002	26.7	0.304	41.6	0.000028	<0.005	0.0141	0.00167	<0.005	0.0087	0.00019	0.0087	<0.0005	0.00034	0.104	<0.0001	<0.001	<0.05	0.000011	57.8	<0.001	0.00086
RSEM-R6E-EOP	4/10/2022 12:30	ARK076	M	C223661	0.00125	2.37	<0.00002	29.0	0.305	42.0	0.000013	<0.005	<0.005	0.00166	<0.005	<0.005	0.00012	0.0082	<0.0005	0.00035	0.11	<0.0001	<0.001	<0.05	0.000011	69.7	<0.001	0.00092
RSEM-R6E-EOP	4/11/2022 9:30	ARK111	M	C223675	0.00122	2.34	<0.00002	28.8	0.306	42.0	0.000011	<0.005	<0.005	0.00164	<0.005	<0.005	0.00011	0.0086	<0.0005	0.00033	0.106	<0.0001	<0.001	<0.05	<0.00001	68.9	<0.001	0.00092
RSEM-R6E-EOP	4/12/2022 10:20	ARN333	M	C224402	0.00136	2.64	<0.00002	28.1	0.29	41.5	<0.00001	<0.005	<0.005	0.00155	<0.005	<0.005	<0.0001	0.0081	<0.0005	0.00036	0.116	<0.0001	<0.001	0.053	0.000013	69.1	<0.001	0.00089
RSEM-R6E-EOP	4/13/2022 12:00	ARP725	M	C224775	0.0013	2.63	<0.00002	28.6	0.3	43.1	0.000011	<0.005	<0.005	0.00161	<0.005	<0.005	<0.0001	0.0092	<0.0005	0.00042	0.134	<0.0001	<0.001	0.052	0.000012	70.6	<0.001	0.00103
RSEM-R6E-EOP	4/14/2022 9:25	ARQ064	M	C224815	0.00127	2.63	<0.00002	29.1	0.307	43.8	0.000011	<0.005	<0.005	0.00167	<0.005	<0.005	<0.0001	0.05	<0.0005	0.00038	0.131	<0.0001	<0.001	0.052	0.000011	71.0	<0.001	0.00102
RSEM-R6E-EOP	4/15/2022 13:35	ARQ198	M	C224832	0.00116	3.03	<0.00002	31.5	0.337	43.8	0.000013	<0.005	<0.005	0.00189	<0.005	0.0061	<0.0001	0.0071	<0.0005	0.00047	0.139	<0.0001	<0.001	0.053	0.000015	70.3	<0.001	0.00094
RSEM-R6E-EOP	4/15/2022 13:45	ARQ199	D	C224832	0.00119	2.71	<0.00002	32.1	0.34	46.2	0.000012	<0.005	0.0067	0.0019	<0.005	<0.005	<0.0001	0.007	<0.0005	0.00046	0.141	<0.0001	<0.001	<0.05	0.000015	69.2	<0.001	0.00091
RSEM-R6E-EOP	4/16/2022 13:35	ARR878	M	C225206	0.00137	2.79	<0.00002	28.3	0.299	41.3	<0.00001	<0.005	<0.005	0.00167	<0.005	<0.005	<0.0001	0.0096	<0.0005	0.00043	0.137	<0.0001	<0.001	<0.05	0.000019	69.6	<0.001	0.00119
RSEM-R6E-EOP	4/17/2022 16:55	ARR903	M	C225213	0.00229	3.31	<0.00002	35.1	0.365	51.1	<0.00001	<0.005	<0.005	0.00215	<0.005	<0.005	<0.0001	0.0061	<0.0005	0.0004	0.143	<0.0001	<0.001	<0.05	0.000017	71.8	<0.001	0.00111
RSEM-R6E-EOP	4/18/2022 13:45	ARU247	M	C225693	0.00204	3.2	<0.00002	32.3	0.335	47.0	<0.00001	<0.005	<0.005	0.00205	<0.005	<0.005	<0.0001	0.0055	<0.0005	0.00031	0.125	<0.0001	<0.001	<0.05	<0.00001	70.6	<0.001	0.00087
RSEM-R6E-EOP	4/19/2022 13:30	ARV034	M	C225905	0.00214	3.61	<0.00002	31.1	0.322	45.3	<0.00001	<0.005	<0.005	0.002	<0.005	<0.005	<0.0001	0.0067	<0.0005	0.00037	0.147	<0.0001	<0.001	<0.05	<0.00001	69.6	<0.001	0.00097
RSEM-R6E-EOP	4/20/2022 12:25	ARW667	M	C226267	0.00141	3.3	<0.00002	34.8	0.357	49.6	<0.00001	<0.005	<0.005	0.00219	<0.005	<0.005	<0.0001	0.0068	<0.0005	0.00048	0.147	<0.0001	<0.001	<0.05	0.000014	69.7	<0.001	0.00101
RSEM-R6E-EOP	4/21/2022 13:15	ARX706	M	C226546	0.00155	3.62	<0.00002	37.2	0.38	52.4	0.00001	<0.005	<0.005	0.00238	<0.005	<0.005	<0.0001	0.0062	<0.0005	0.00042	0.17	<0.0001	<0.001	<0.05	0.00001	75.6	<0.001	0.00101
RSEM-R6E-EOP	4/22/2022 11:25	ARX719	M	C226550	0.0014	3.51	<0.00002	35.3	0.359	49.6	0.00001	<0.005	<0.005	0.00227	<0.005	<0.005	<0.0001	0.0059	<0.0005	0.0004	0.177	<0.0001	<0.001	<0.05	0.000015	76.5	<0.001	0.00108
RSEM-R6E-EOP	4/22/2022 11:35	ARX720	D	C226550	0.0014	3.49	<0.00002	34.9	0.356	49.6	0.000011	<0.005	<0.005	0.00228	<0.005	0.0068	<0.0001	0.006	<0.0005	0.00044	0.176	<0.0001	<0.001	<0.05	0.000017	71.5	<0.001	0.00096
RSEM-R6E-EOP	4/23/2022 15:20	ARZ185	M	C226855	0.00187	3.35	<0.00002	32.6	0.337	45.5	0.000012	<0.005	<0.005	0.00212	<0.005	0.0108	<0.0001	0.0057	<0.0005	0.00048	0.153	<0.0001	<0.001	<0.05	<0.00001	71.8	<0.001	0.00082
RSEM-R6E-EOP	4/24/2022 11:10	ASA415	M	C227083	0.00178	3.1	<0.00002	30.9	0.319	43.9	<0.00001	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	0.0055	<0.0005	0.00049	0.148	<0.0001	<0.001	<0.05	<0.00001	68.9	<0.001	0.00082
RSEM-R6E-EOP	4/24/2022 11:20	ASA416	D	C227083	0.00186	3.18	<0.00002	31.5	0.315	43.6	<0.00001	<0.005	<0.005	0.00202	<0.005	0.0075	<0.0001	0.0055	<0.0005	0.00049	0.149	<0.0001	<0.001	<0.05	<0.00001	69.4	<0.001	0.00083
RSEM-R6E-EOP	4/25/2022 11:10	ASA412	M	C227083	0.00183	3.07	<0.00002	30.0	0.303	40.6	<0.00001	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	0.0057	<0.0005	0.00046	0.146	<0.0001	<0.001	<0.05	<0.00001	67.4	<0.001	0.00078
RSEM-R6E-EOP	4/26/2022 11:30	ASD456	M	C227799	0.00108	3	<0.00002	31.0	0.306	41.4	0.00001	<0.005	<0.005	0.00182	<0.005	<0.005	<0.0001	0.0068	<0.0005	0.00043	0.146	<0.0001	<0.001	0.056	0.000011	66.5	<0.001	0.00072
RSEM-R6E-EOP	4/27/2022 11:30	ASH196	M	C228648	0.00198	3.16	<0.00002	31.5	0.31	41.2	<0.00001	<0.005	<0.005	0.00185	<0.005	<0.005	<0.0001	0.0065	<0.0005	0.00039	0.146	<0.0001	<0.001	0.056	<0.00001	67.4	<0.001	0.0007
RSEM-R6E-EOP	4/28/2022 12:00	ASH216	M	C228650	0.00172	4.66	<0.00002	32.3	0.355	39.6	0.000021	<0.005	0.0251	0.00184	<0.005	0.0082	0.00048	0.0085	<0.0005	0.00041	0.124	<0.0001	<0.001	0.055	0.000014	68.4	<0.001	0.00061
RSEM-R6E-EOP	4/29/2022 9:30	ASH016	M	C228622	0.00121	3.93	<0.00002	30.6	0.404	46.7	0.000017	<0.005	0.0151	0.00204	<0.005	0.007	0.00055	0.02	<0.0005	0.0004	0.11	<0.0001	<0.001	0.06	0.000032	73.5	<0.001	0.00229
RSEM-R6E-EOP	4/30/2022 11:30	ASL379	M	C229488	0.00135	3.1	<0.00002	31.4	0.413	60.1	0.00001	<0.005	<0.005	0.00203	<0.005	0.019	0.00011	0.0204	<0.0005	0.00023	0.115	<0.0001	<0.001	0.056	0.000146	80.3	<0.001	0.0092
RSEM-R6E-EOP	5/1/2022 10:30	ASL426	M	C229493	0.00181	3.39	<0.00002	39.7	0.45	80.4	0.000012	<0.005	<0.005	0.00218	<0.005	0.0331	0.00036	0.0195	<0.0005	0.0002	0.12	<0.0001	<0.001	0.065	0.000238	88.4	<0.001	0.0156
RSEM-R6E-EOP	5/2/2022 10:30	ASL339	M	C229475	0.00195	3.04	<0.00002	42.5	0.464	87.9	0.000017	<0.005	<0.005	0.00239	<0.005	0.0259	<0.0001	0.0187	<0.0005	0.00019	0.123	<0.0001	<0.001	0.059	0.000197	90.7	<0.001	0.0144
RSEM-R6E-EOP	5/3/2022 14:15	ASO447	M	C230063	0.00201	3.28	<0.00002	46.9	0.483	97.4	0.000025	<0.005	0.0069	0.00242	<0.005	0.0249	0.00014	0.016	<0.0005	0.00033	0.12	<0.0001	<0.001	0.067	0.000173	90.4	<0.001	0.0138
RSEM-R6E-EOP	5/4/2022 12:10	ASP675	M	C230320	0.00196	2.93	<0.00002	46.3	0.468	95.2	0.000019	<0.005	<0.005	0.00244	<0.005	0.018	<0.0001	0.0152	<0.0005	0.0002	0.116	<0.0001	<0.001	0.065	0.00013	90.6	<0.001	0.0111
RSEM-R6E-EOP	5/5/2022 11:05	ASR003	M	C230531	0.00213	2.65	<0.00002	45.5	0.442	87.8	0.000017	<0.005	<0.005	0.00243	<0.005	0.013	<0.0001	0.0203	<0.0005	0.00035	0.119	<0.0001	<0.001	0.068	0.000113	91.3	<0.001	0.00966
RSEM-R6E-EOP	5/5/2022 11:15	ASR004	D	C230531	0.00218	2.75	<0.00002	44.1	0.442	86.1	0.000017	<0.005	<0.005	0.0024	<0.005	0.0123	<0.0001	0.0163	<0.0005	0.00033	0.118	<0.0001	<0.001	0.071	0.000125	93.6	<0.001	0.00984
RSEM-R6E-EOP	5/6/2022 10:20	ASR071	M	C230545	0.00183	2.93	<0.00002	47.2	0.448	91.5	0.000019	<0.005	<0.005	0.0025	<0.005	0.0118	0.00019	0.0212	<0.0005	0.00043	0.117	<0.0001	<0.001	0.06	0.000105	96.8	<0.001	0.00865
RSEM-R6E-EOP	5/7/2022 11:15	ASS942	M	C230886	0.00188	3.22	<0.00002	47.2	0.468	83.0	0.000021	<0.005	<0.005	0.00258	<0.005	0.0069	0.0002	0.0197	<0.0005	0.00014	0.116	<0.0001	<0.001	0.067	0.000065	92.1	<0.001	0.0065

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
RSEM-R6E-EOP	5/8/2022 14:35	ASS883	M	C230861	0.00152	3.03	<0.00002	47.2	0.455	79.5	0.000022	<0.005	0.006	0.00258	<0.005	0.0064	0.00013	0.0261	<0.0005	0.00021	0.098	<0.0001	<0.001	0.068	0.000045	91.3	<0.001	0.00464
RSEM-R6E-EOP	5/9/2022 13:40	ASV291	M	C231306	0.00194	3.2	<0.00002	41.5	0.431	79.2	0.00001	<0.005	<0.005	0.00234	<0.005	<0.005	0.0001	0.0759	<0.0005	0.0002	0.108	<0.0001	<0.001	0.065	0.000063	92.6	<0.001	0.00486
RSEM-R6E-EOP	5/10/2022 10:50	ASX003	M	C231638	0.00152	2.81	<0.00002	45.7	0.523	76.7	0.000016	<0.005	<0.005	0.00253	<0.005	0.0059	<0.0001	0.0291	<0.0005	0.00019	0.092	<0.0001	<0.001	0.085	0.000054	93.8	<0.001	0.00433
RSEM-R6E-EOP	5/11/2022 12:15	ASZ423	M	C232133	0.00156	2.8	<0.00002	46.3	0.51	82.3	0.00002	<0.005	<0.005	0.00277	<0.005	0.0074	<0.0001	0.0362	<0.0005	0.00045	0.094	<0.0001	<0.001	0.075	0.000087	109	<0.001	0.00752
RSEM-R6E-EOP	5/12/2022 13:55	ATA813	M	C232369	0.00127	2.68	<0.00002	46.7	0.484	81.8	0.000019	<0.005	<0.005	0.00266	<0.005	0.0078	<0.0001	0.0386	<0.0005	0.00036	0.094	<0.0001	<0.001	0.072	0.00009	97.5	<0.001	0.00757
RSEM-R6E-EOP	5/13/2022 11:00	ATB011	M	C232410	0.00122	2.61	<0.00002	48.5	0.518	86.2	0.000016	<0.005	<0.005	0.00267	<0.005	0.0067	<0.0001	0.0421	<0.0005	0.00027	0.091	<0.0001	<0.001	0.076	0.000061	90.2	<0.001	0.00743
RSEM-R6E-EOP	5/14/2022 14:25	ATD058	M	C232817	0.00212	2.32	<0.00002	43.6	0.508	79.6	0.000019	<0.005	<0.005	0.00252	<0.005	<0.005	<0.0001	0.04	<0.0005	0.00037	0.087	<0.0001	<0.001	0.087	0.00007	95.6	<0.001	0.00604
RSEM-R6E-EOP	5/15/2022 11:30	ATD050	M	C232812	0.00177	2.22	<0.00002	46.8	0.468	81.3	0.000017	<0.005	<0.005	0.00259	<0.005	<0.005	<0.0001	0.0436	<0.0005	0.00036	0.087	<0.0001	<0.001	0.09	0.000065	98.0	<0.001	0.00531
RSEM-R6E-EOP	5/16/2022 10:00	ATC671	M	C232726	0.00184	2.21	<0.00002	46.5	0.507	85.1	0.000015	<0.005	<0.005	0.00266	<0.005	<0.005	0.00017	0.0488	<0.0005	0.0003	0.084	<0.0001	<0.001	0.089	0.000058	101	<0.001	0.00564
RSEM-R6E-EOP	5/17/2022 11:30	ATH850	M	C233625	0.00135	2.71	<0.00002	56.8	0.734	85.2	0.000021	<0.005	<0.005	0.00303	<0.005	<0.005	<0.0001	0.0461	<0.0005	0.00023	0.081	<0.0001	<0.001	0.093	0.00005	111	<0.001	0.00413
RSEM-R6E-EOP	5/18/2022 11:30	ATJ924	M	C234012	0.00175	2.38	<0.00002	53.8	1.06	67.8	0.00002	<0.005	<0.005	0.00247	<0.005	<0.005	0.00017	0.0496	<0.0005	0.00023	0.11	<0.0001	<0.001	0.073	0.000043	129	<0.001	0.00442
RSEM-R6E-EOP	5/19/2022 12:30	ATL910	M	C234314	0.00124	2.42	<0.00002	54.4	1.23	76.2	0.000024	<0.005	<0.005	0.00275	<0.005	<0.005	<0.0001	0.0453	<0.0005	0.00031	0.116	<0.0001	<0.001	0.08	0.000023	137	<0.001	0.00361
RSEM-R6E-EOP	5/20/2022 10:00	ATL358	M	C234241	0.00158	2.37	<0.00002	51.6	1.21	60.3	0.00002	<0.005	<0.005	0.00233	<0.005	<0.005	<0.0001	0.0449	<0.0005	0.00027	0.106	<0.0001	<0.001	0.082	<0.00001	136	<0.001	0.00281
RSEM-R6E-EOP	5/21/2022 10:00	ATN137	M	C234510	0.001	2.93	<0.00002	48.4	1.11	69.4	0.000022	<0.005	<0.005	0.00232	<0.005	<0.005	0.00013	0.0347	<0.0005	0.00025	0.101	<0.0001	<0.001	0.098	<0.00001	120	<0.001	0.00235
RSEM-R6E-EOP	5/22/2022 14:30	ATO534	M	C234788	0.00082	2.72	<0.00002	43.7	0.794	52.1	0.000018	<0.005	<0.005	0.00217	<0.005	<0.005	<0.0001	0.0346	<0.0005	0.00029	0.106	<0.0001	<0.001	0.06	<0.00001	106	<0.001	0.00171
RSEM-R6E-EOP	5/23/2022 10:30	ATO583	M	C234797	0.00093	2.9	<0.00002	40.7	0.736	50.2	0.000019	<0.005	<0.005	0.00207	<0.005	<0.005	0.00015	0.0334	<0.0005	0.00024	0.111	<0.0001	<0.001	0.061	<0.00001	105	<0.001	0.00145
RSEM-R6E-EOP	5/24/2022 10:30	ATR509	M	C235358	0.00087	2.98	<0.00002	39.0	0.751	52.7	0.000018	<0.005	<0.005	0.00187	<0.005	<0.005	<0.0001	0.032	<0.0005	0.00031	0.118	<0.0001	<0.001	0.071	<0.00001	102	<0.001	0.00102
RSEM-R6E-EOP	5/25/2022 15:15	ATT368	M	C235730	0.00106	3.12	<0.00002	38.2	0.622	46.6	0.000017	<0.005	<0.005	0.00182	<0.005	<0.005	<0.0001	0.0283	<0.0005	0.00019	0.118	<0.0001	<0.001	0.064	<0.00001	95.8	<0.001	0.00062
RSEM-R6E-EOP	5/26/2022 15:10	ATV282	M	C236083	0.00091	2.81	<0.00002	32.0	0.475	37.2	0.000014	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	0.0249	<0.0005	0.0002	0.126	<0.0001	<0.001	0.058	<0.00001	101	<0.001	0.00054
RSEM-R6E-EOP	5/26/2022 15:20	ATV283	D	C236083	0.00096	2.93	<0.00002	33.4	0.498	39.5	0.000014	<0.005	<0.005	0.00157	<0.005	<0.005	<0.0001	0.0229	<0.0005	<0.0001	0.113	<0.0001	<0.001	0.055	<0.00001	94.4	<0.001	0.00051
RSEM-R6E-EOP	5/27/2022 13:25	ATV300	M	C236089	0.00089	2.84	<0.00002	29.7	0.424	34.7	0.000013	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	0.0222	<0.0005	0.00011	0.12	<0.0001	<0.001	0.055	<0.00001	89.3	<0.001	0.00047
RSEM-R6E-EOP	5/28/2022 16:15	ATX746	M	C236620	0.00115	3.08	<0.00002	31.0	1.3	50.4	0.000025	<0.005	0.0076	0.00211	<0.005	<0.005	0.00016	0.0501	<0.0005	0.0003	0.126	<0.0001	<0.001	0.072	0.000089	137	<0.001	0.00215
RSEM-R6E-EOP	5/29/2022 17:30	ATW968	M	C236421	0.00193	2.69	<0.00002	39.2	1.01	82.5	0.000025	<0.005	0.0054	0.00269	<0.005	0.0355	0.00011	0.0597	<0.0005	0.00019	0.101	<0.0001	<0.001	0.067	0.000328	129	<0.001	0.0122
RSEM-R6E-EOP	5/30/2022 16:10	ATZ465	M	C236894	0.00264	3.06	<0.00002	52.9	0.711	86.1	0.000023	<0.005	<0.005	0.00285	<0.005	0.0365	<0.0001	0.0914	<0.0005	0.00021	0.124	<0.0001	<0.001	0.082	0.000396	108	<0.001	0.0147
RSEM-R6E-EOP	5/31/2022 11:10	AUC335	M	C237377	0.0032	3.06	<0.00002	58.7	0.638	82.8	0.000022	<0.005	<0.005	0.00263	<0.005	0.0247	<0.0001	0.0816	<0.0005	0.00036	0.115	<0.0001	<0.001	0.081	0.000282	100	<0.001	0.0116
RSEM-R6E-EOP	6/1/2022 11:10	AUE680	M	C237797	0.00325	3.4	<0.00002	57.2	0.541	62.5	0.00002	<0.005	<0.005	0.00247	<0.005	0.013	<0.0001	0.0706	<0.0005	0.00038	0.124	<0.0001	<0.001	0.081	0.000153	96.7	<0.001	0.00681
RSEM-R6E-EOP	6/2/2022 10:30	AUH700	M	C238258	0.00236	3.56	<0.00002	39.9	0.412	46.6	0.000018	<0.005	<0.005	0.00203	<0.005	<0.005	<0.0001	0.0432	<0.0005	0.00026	0.123	<0.0001	<0.001	0.06	0.000016	98.0	<0.001	0.0027
RSEM-R6E-EOP	6/3/2022 11:55	AUH661	M	C238247	0.00193	3.67	<0.00002	34.4	0.386	42.1	0.000015	<0.005	<0.005	0.00189	<0.005	<0.005	<0.0001	0.0373	<0.0005	0.00027	0.137	<0.0001	<0.001	0.058	<0.00001	94.8	<0.001	0.00117
RSEM-R6E-EOP	6/4/2022 10:25	AUL720	M	C238905	0.0018	4.42	<0.00002	32.2	0.383	34.9	0.000017	<0.005	<0.005	0.00192	<0.005	<0.005	<0.0001	0.0283	<0.0005	0.00026	0.141	<0.0001	<0.001	0.055	<0.00001	94.2	<0.001	0.00078
RSEM-R6E-EOP	6/5/2022 11:45	AUM440	M	C238986	0.00127	3.68	<0.00002	25.4	0.341	28.8	0.000016	<0.005	<0.005	0.00177	<0.005	<0.005	<0.0001	0.02	<0.0005	0.00024	0.134	<0.0001	<0.001	0.05	<0.00001	90.9	<0.001	0.00049
RSEM-R6E-EOP	6/6/2022 10:40	AUO789	M	C239365	0.00124	3.38	<0.00002	21.8	0.284	28.9	0.000013	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	0.0206	<0.0005	0.00025	0.137	<0.0001	<0.001	0.056	<0.00001	92.1	<0.001	0.00052
RSEM-R6E-EOP	6/7/2022 11:30	AUT412	M	C240162	0.00108	3.27	<0.00002	19.0	0.267	27.2	0.000012	<0.005	<0.005	0.0016	<0.005	<0.005	<0.0001	0.0163	<0.0005	0.00019	0.135	<0.0001	<0.001	<0.05	<0.00001	87.3	<0.001	0.00037
RSEM-R6E-EOP	6/8/2022 12:30	AUT294	M	C240147	0.00125	3.51	<0.00002	21.1	0.294	29.9	0.000012	<0.005	<0.005	0.00175	<0.005	<0.005	<0.0001	0.0147	<0.0005	0.0002	0.134	<0.0001	<0.001	0.06	<0.00001	90.3	<0.001	0.00038
RSEM-R6E-EOP	6/9/2022 13:00	AUV205	M	C240504	0.00085	3.18	<0.00002	21.7	0.32	29.8	0.000014	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	0.0159	<0.0005	0.00019	0.128	<0.0001	<0.001	0.057	<0.00001	87.4	<0.001	0.00035
RSEM-R6E-EOP	6/10/2022 10:30	AUV210	M	C240508	0.00088	3.17	<0.00002	21.3	0.337	29.7	0.000012	<0.005	<0.005	0.0018	<0.005	<0.005	<0.0001	0.0208	<0.0005	0.00018	0.131	<0.0001	<0.001	0.054	<0.00001	89.8	<0.001	0.00046
RSEM-R6E-EOP	6/11/2022 9:30	AUY734	M	C241062	0.00097	3.17	<0.00002	21.1	0.324	35.1	0.000015	<0.005	<0.005	0.00176	<0.005	<0.005	<0.0001	0.0141	<0.0005	0.00022	0.125	<0.0001	<0.001	<0.05	<0.00001	90.5	<0.001	0.00027
RSEM-R6E-EOP	6/12/2022 10:00	AUY702	M	C241043	0.00091	3.07	<0.00002	20.2	0.291	35.5	0.000013	<0.005	<0.005	0.00166	<0.005	<0.005	<0.0001	0.0129	<0.0005	0.0002	0.157	<0.0001	<0.001	0.06	0.000015	86.0	<0.001	0.00028
RSEM-R6E-EOP	6/13/2022 11:30	AVD503	M	C241814	0.00094	3.31	<0.00002	18.6	0.266	30.1	0.000013	<0.005	<0.005	0.00145	<0.005	<0.005	<0.0001	0.0109	<0.0005	0.00032	0.15	<0.0001	<0.001	0.059	0.000021	78.5	<0.001	0.00027
RSEM-R6E-EOP	6/14/2022 10:00	AVD542	M	C241829	0.00099	3.16	<0.00002	17.6	0.243	29.3	0.000011	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	0.0097	<0.0005	0.00027	0.149	<0.0001	<0.001	0.065	0.000026	78.1	<0.001	0.00025
RSEM-R6E-EOP	6/15/2022 11:45	AVG247	M	C242252	0.00099	3.12	<0.00002	16.5	0.227	25.1	0.000011	<0.005	<0.005	0.00119	<0.005	<0.005	<0.0001	0.0092	<0.0005	0.00027	0.146	<0.0001	<0.001	0.067	0.000032	78.5	<0.001	0.00024
RSEM-R6E-EOP	6/16/2022 12:35	AVK122	M	C242788	0.00101	3.16	<0.00002	15.9	0.227	30.1	0.000012	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	0.0086	<0.0005	0.0002	0.127	<0.0001	<0.001	<0.05	0.000015	91.2	<0.001	0.00021
RSEM-R6E-EOP	6/17/2022 11:25	AVK723	M	C242942	0.00108	3.38	<0.00002	18.6	0.414	32.9	0.000016	<0.005	<0.005	0.00154	<0.005	<0.005	0.00013	0.016	<0.0005	0.00032	0.121	<0.0001	<0.001	<0.05	0.000038	81.3	<0.001	0.0004
RSEM-R6E-EOP	6/18/2022 12:35	AVL988	M	C243162	0.00111	3.12	<0.00002	17.1	0.395	33.7	0.000015	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	0.0243	<0.0005	0.00026	0.103	<0.0001	<0.001	<0.05	0.000016	104	<0.001	0.0004
RSEM-R6E-EOP	6/19/2022 11:30	AVM016	M	C243177	0.00122	3.21	<0.00002	17.8	0.356	32.9	0.000015	<0.005	<0.005	0.00139	<0.005	<0.005	<0.0001	0.0349	<0.0005	0.00025	0.1	<0.0001	<0.001	<0.05	0.000017	110	<0.001	0.00054
RSEM-R6E-EOP	6/19/2022 11:40	AVM017	D	C243177	0.00115	3.22	<0.00002	18.1	0.361	33.0	0.000013	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	0.0352	<0.0005	0.00022	0.099	<0.0001	<0.001	<0.05	0.000018	110	<0.001	0.00054
RSEM-R6E-EOP	6/20/2022 10:40	AVO964	M	C243664	0.00119	3.17	<0.00002	18.2	0.32	34.4	0.000015	<0.005	<0.005	0.00145	<0.005	<0.005	<0.0001	0.0401	<0.0005	0.00023	0.11	<0.0001	<0.001	0.052	0.000024	81.5	<0.001	0.00068
RSEM-R6E-EOP	6/21/2022 11:25	AVQ610	M	C244010	0.00152	3.76	<0.00002	19.6	0.292	36.7	0.000016	<0.005	<0.005	0.00159	<0.005	<0.005	<0.0001	0.0374	<0.0005	0.00025	0.117	<0.0001	<0.001	0.052	0.000016	78.0	<0.001	0.00053
RSEM-R6E-EOP	6/22/2022 10:55	AVT152	M	C244412	0.00142	3.28	<0.00002	18.8	0.268	34.4	0.000013	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	0.0319	<0.0005	0.00024	0.117	<0.0001	<0.001	0.05	<0.00001	79.5	<0.001	0.00035
RSEM-R6E-EOP	6/23/2022 11:05	AVV596	M	C244839	0.00121	3.04	<0.00002	17.0	0.256	34.4	0.000013	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	0.0249	<0.0005	0.00026	0.116	<0.0001	<0.001	0.054	0.000011	77.5	<0.001	0.00033
RSEM-R6E-EOP	6/24/2022 10:50	AVV585	M	C244835	0.00115	3.2	<0.00002	17.2	0.259	33.6	0.000014	<0.005	<0.005	0.00139	<0.005	<0.005	<0.0001	0.0287	<0.0005	0.00027	0.117	<0.0001	<0.001	<0.05	0.000016	78.6	<0.001	0.00048
RSEM-R6E-EOP	6/24/2022 11:00	AVV586	D	C244835	0.00114	3.11	<0.00002	17.6	0.269	32.9	0.000013	<0.005	<0.005	0.00145	<0.005	<0.005	<0.0001	0.024	<0.0005	0.00025	0.114	<0.0001	<0.001	<0.05	0.000012	77.2	<0.001	0.0005
RSEM-R6E-EOP	6/25/2022 10:30	AVZ706	M	C245512	0.0013	3.14	<0.00002	16.7	0.243	30.9	0.000013	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	0.0452	<0.0005	0.00022	0.116	<0.0001	<0.001	<0.05	<0.00001	75.9	<0.001	0.00038
RSEM-R6E-EOP	6/26/2022 9:55	AVZ576	M	C245500	0.00138	3.16	<0.00002	17.9	0.255	32.9	0.000014	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	0.026	<0.0005	0.00023	0.112	<0.0001	<0.001	0.05	<0.00001	71.5	<0.001	0.00032
RSEM-R6E-EOP	6/26/2022 10:05	AVZ577	D	C245500	0.00132	3.09	<0.00002	17.3	0.25	39.6	0.000014	<0.005	<0.005	0.00135	<0.005	<0.005	<0.0001	0.0336	<0.0005	0.00025	0.115	<0.0001	<0.001	<0.05	<0.00001	72.8	<0.001	0.00032
RSEM-R6E-EOP	6/27/2022 10:15	AVY532	M	C245274	0.00135	3.04	<0.00002	16.8	0.231	30.3	0.000013	<0.005	<0.005	0.00127	<0.005	<0.005	<0.0001	0.0216	<0.0005	0.00028	0.109	<0.0001	<0.001	<0.05	<0.00001	72.6	<0.001	0.00026
RSEM-R6E-EOP	6/28/2022 12:30	AWH752	M	C246896	0.00117	3.24	<0.00002	17.6	0.249	37.2	0.000017	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	0.0136	<0.0005	0.0003	0.113	<0.0001	<0.001	<0.05	0.000012	73.0	<0.001	0.00022
RSEM-R6E-EOP	6/29/2022 14:30	AWH757	M	C246898	0.00111	3.51	<0.00002	16.1	0.229	31.4	0.000013	<0.005	<0.005	0.00146	<0.005	<0.005	<0.0001	0.0097	<0.0005	0.00028	0.12	<0.0001	<0.001	<0.05	0.000012	73.9	<0.001	0.00027
RSEM-R6E-EOP	6/30/2022 12:30	AWH755	M	C246897	0.00113	3.67	<0.00002	16.6	0.233	31.1	0.000018	<0.005	<0.005	0.00157	<0.005	<0.005	0.00013	0.0101	<0.0005	0.00026	0.119	<0.0001	<0.001	<0.05	<0.00001	72.5	<0.001	<0.0002
RSEM-R6E-EOP	7/1/2022 12:30	AWJ893	M	C247203	0.00106	3.21	<0.00002	17.2	0.237	28.4	0.000015	<0.005	<0.005	0.00153	<0.005	<0.005	<0.0001	0.0071	<0.0005	0.00034	0.134	<0.0001	<0.001	<0.05	0.000013	69.0	<0.001	0.00023
RSEM-R6E-EOP	7/2/2022 12:00	AWJ848	M	C247196	0.00106	3.09	<0.00002	17.8	0.256	29.4	0.000013	<0.005	<0.005	0.00161	<0.005	<0.005	0.0001	0.0068	<0.0005	0.00052	0.132	<0.0001	<0.001	<0.05	0.000012	68.5	<0.001	0.00032
RSEM-R6E-EOP	7/3/2022 11:00	AWM045	M	C247492	0.00109	3.68	<0.00002	16.5	0.228	29.9	0.000016	<0.005	<0.005	0.00152	<0.005	<0.005	<0.0001	0.0181	<0.0005	0.0004	0.151	<0.0001	<0.001	0.064	0.000023	78.7	<0.001	0.0003
RSEM-R6E-EOP	7/4/2022 10:00	AWM515	M	C247552	0.00109	3.63	<0.00002	16.6	0.223	36.2	0.000017	<0.005	<0.005	0.00153	<0.005	<0.005	0.0001	0.0107	<0.0005	0.00032	0.139	<0.0001	<0.001	0.07	0.000016	73.2	<0.001	0.00024
RSEM-R6E-EOP	7/5/2022 10:00	AWR506	M	C248315	0.00123	3.71	<0.00002	17.1	0.219	29.3	0.000017	<0.005	<0.005	0.00159	<0.005	<0.005	<0.0001	0.0115	<0.0005	0.00031	0.13	<0.0001	<0.001	0.052	<0.00001	79.8	<0.001	0.00022
RSEM-R6E-EOP	7/6/2022 14:05	AWV908	M	C249077	0.00113	3.64	<0.00002	19.3	0.252	31.8	0.000017	<0.005	<0.005	0.00172	<0.005	<0.005	<0.0001	0.0161	<0.0005	0.00039	0.117	<0.0001	<0.001	<0.05	0.000011	73.2	<0.001	0.00025
RSEM-R6E-EOP	7/6/2022 14:15	AWV909	D	C249077	0.0011	3.64	<0.00002	19.5	0.251	30.8	0.000016	<0.005	<0.005	0.00175	<0.005	<0.005	<0.0001	0.0144	<0.0005	0.00036	0.112	<0.0001	<0.001	<0.05	<0.00001	71.4	<0.001	0.00022
RSEM-R6E-EOP	7/7/2022 11:45	AWW342	M	C249139	0.00114	3.76	<0.00002	20.5	0.259	33.4	0.000017	<0.005	<0.005	0.00173	<0.005	<0.005	<0.0001	0.0165	<0.0005	0.00036	0.107	<0.0001	<0.001	<0.05	<0.00001	70.8	<0.001	<0.0002
RSEM-R6E-EOP	7/8/2022 11:35	AWW521	M	C249170	0.00117	3.96	<0.00002	22.4	0.273	35.5	0.000019	<0.005	<0.005	0.00173	<0.005	<0.005	<0.0001	0.0133	<0.0005	0.00046	0.126	<0.0001	<0.001	<0.05	<0.00001	65.4	0.0011	0.00022
RSEM-R6E-EOP	7/9/2022 10:30	AWZ514	M	C249625	0.00107	3.71	<0.00002	21.2	0.251	32.3	0.000016	<0.005	<0.005	0.00156	<0.005	0.0191	<0.0001	0.0488	<0.0005	0.00056	0.131	<0.0001	<0.001	0.053	0.000014	69.4	<0.001	0.00024
RSEM-R6E-EOP	7/9/2022 10:40	AWZ515	D	C249625	0.00103	3.7	<0.00002	21.5	0.256	33.1	0.000016	<0.005	<0.005	0.00156	<0.005	<0.005	<0.0001	0.116	<0.0005	0.00057	0.131	<0.0001	<0.001	0.054	0.000012	68.9	<0.001	0.00025

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
RSEM-R6E-EOP	7/10/2022 14:10	AWZ486	M	C249617	0.00101	3.57	<0.00002	20.5	0.246	31.0	0.000018	<0.005	<0.005	0.00147	<0.005	<0.005	<0.0001	0.021	<0.0005	0.0005	0.119	<0.0001	<0.001	<0.05	<0.00001	61.6	<0.001	<0.0002
RSEM-R6E-EOP	7/11/2022 12:35	AXC657	M	C250105	0.00104	3.76	<0.00002	21.8	0.255	33.0	0.000017	<0.005	<0.005	0.00152	<0.005	<0.005	<0.0001	0.0148	<0.0005	0.0005	0.119	<0.0001	<0.001	0.052	0.00001	65.5	<0.001	<0.0002
RSEM-R6E-EOP	7/12/2022 12:05	AXE615	M	C250400	0.00103	3.7	<0.00002	21.2	0.252	32.3	0.000017	<0.005	<0.005	0.00146	<0.005	<0.005	<0.0001	0.0189	<0.0005	0.00048	0.115	<0.0001	<0.001	<0.05	0.000013	63.0	<0.001	<0.0002
RSEM-R6E-EOP	7/12/2022 12:15	AXE616	D	C250400	0.00104	3.81	<0.00002	21.6	0.253	31.5	0.000017	<0.005	<0.005	0.00148	<0.005	<0.005	<0.0001	0.0135	<0.0005	0.00046	0.116	<0.0001	<0.001	<0.05	<0.00001	62.8	<0.001	<0.0002
RSEM-R6E-EOP	7/13/2022 11:25	AXH414	M	C250934	0.00094	3.58	<0.00002	19.4	0.244	30.3	0.000017	<0.005	<0.005	0.00135	<0.005	<0.005	<0.0001	0.0096	<0.0005	0.00048	0.124	<0.0001	<0.001	0.051	0.000011	64.4	<0.001	0.0002
RSEM-R6E-EOP	7/14/2022 11:10	AXJ116	M	C251290	0.00097	4.02	<0.00002	21.0	0.275	34.8	0.000016	<0.005	<0.005	0.00148	<0.005	<0.005	<0.0001	0.0116	<0.0005	0.00054	0.127	<0.0001	<0.001	<0.05	0.000011	63.9	<0.001	<0.0002
RSEM-R6E-EOP	7/14/2022 11:20	AXJ117	D	C251290	0.00095	3.85	<0.00002	20.0	0.26	32.9	0.000016	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	0.0088	<0.0005	0.00055	0.125	<0.0001	<0.001	<0.05	0.000012	64.4	<0.001	<0.0002
RSEM-R6E-EOP	7/15/2022 13:10	AXJ364	M	C251330	0.00093	3.85	<0.00002	20.0	0.262	33.4	0.000019	<0.005	<0.005	0.00141	<0.005	<0.005	0.00014	0.0052	<0.0005	0.00044	0.115	<0.0001	<0.001	<0.05	0.00001	62.1	<0.001	<0.0002
RSEM-R6E-EOP	7/16/2022 11:30	AXN330	M	C251927	0.0011	3.62	<0.00002	20.1	0.244	30.9	0.000018	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	0.0053	<0.0005	0.00042	0.12	<0.0001	<0.001	0.052	0.000012	63.7	<0.001	<0.0002
RSEM-R6E-EOP	7/17/2022 10:30	AXN586	M	C251966	0.00101	3.47	<0.00002	20.1	0.231	30.4	0.000014	<0.005	<0.005	0.00127	<0.005	<0.005	<0.0001	0.0051	<0.0005	0.00047	0.123	<0.0001	<0.001	<0.05	<0.00001	65.8	<0.001	<0.0002
RSEM-R6E-EOP	7/17/2022 10:40	AXN587	D	C251966	0.00104	3.62	<0.00002	20.7	0.243	30.9	0.000017	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	0.0048	<0.0005	0.00045	0.121	<0.0001	<0.001	0.051	<0.00001	64.9	<0.001	<0.0002
RSEM-R6E-EOP	7/18/2022 14:00	AXQ723	M	C252515	0.00105	3.68	<0.00002	20.2	0.24	31.1	0.000018	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	0.0046	<0.0005	0.00048	0.117	<0.0001	<0.001	0.051	<0.00001	61.1	<0.001	<0.0002
RSEM-R6E-EOP	7/19/2022 12:00	AXQ708	M	C252510	0.00101	3.49	<0.00002	21.2	0.244	31.7	0.000017	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	0.0044	<0.0005	0.00046	0.117	<0.0001	<0.001	0.051	<0.00001	62.3	<0.001	<0.0002
RSEM-R6E-EOP	7/20/2022 14:00	AXX165	M	C253451	0.00101	3.96	<0.00002	20.7	0.255	33.0	0.000018	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	0.0043	<0.0005	0.00048	0.121	<0.0001	<0.001	<0.05	<0.00001	59.7	<0.001	<0.0002
RSEM-R6E-EOP	7/21/2022 13:00	AXX154	M	C253447	0.00096	4.27	<0.00002	19.6	0.261	31.6	0.000017	<0.005	<0.005	0.00134	<0.005	<0.005	<0.0001	0.0046	<0.0005	0.00043	0.128	<0.0001	<0.001	<0.05	<0.00001	63.6	<0.001	<0.0002
RSEM-R6E-EOP	7/22/2022 10:00	AXX133	M	C253442	0.00089	4.47	<0.00002	18.8	0.274	30.0	0.000016	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	0.004	<0.0005	0.00043	0.13	<0.0001	<0.001	<0.05	<0.00001	64.0	<0.001	<0.0002
RSEM-R6E-EOP	7/23/2022 9:30	AYB213	M	C254120	0.0009	3.87	<0.00002	18.2	0.265	27.5	0.000014	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	0.0048	<0.0005	0.00036	0.126	<0.0001	<0.001	<0.05	<0.00001	65.5	<0.001	<0.0002
RSEM-R6E-EOP	7/24/2022 12:30	AYC676	M	C254290	0.00099	4.21	<0.00002	18.2	0.267	28.6	0.000014	<0.005	<0.005	0.00146	<0.005	<0.005	0.00013	0.005	<0.0005	0.00035	0.131	<0.0001	<0.001	<0.05	<0.00001	66.7	<0.001	<0.0002
RSEM-R6E-EOP	7/24/2022 13:00	AYC679	D	C254290	0.00101	4.2	<0.00002	18.3	0.272	27.1	0.000015	<0.005	<0.005	0.00145	<0.005	<0.005	<0.0001	0.0049	<0.0005	0.00036	0.132	<0.0001	<0.001	0.05	<0.00001	66.8	<0.001	<0.0002
RSEM-R6E-EOP	7/25/2022 9:00	AYC674	M	C254289	0.0011	4.22	<0.00002	17.5	0.258	30.1	0.000015	<0.005	<0.005	0.00163	<0.005	<0.005	<0.0001	0.0044	<0.0005	0.00036	0.13	<0.0001	<0.001	<0.05	<0.00001	69.4	<0.001	<0.0002
RSEM-R6E-EOP	7/26/2022 11:15	AYG701	M	C254966	0.00124	4.7	<0.00002	18.6	0.262	31.0	0.000014	<0.005	<0.005	0.00158	<0.005	<0.005	<0.0001	0.0057	<0.0005	0.00037	0.128	<0.0001	<0.001	<0.05	<0.00001	68.7	<0.001	<0.0002
RSEM-R6E-EOP	7/27/2022 11:40	AYK060	M	C255556	0.00112	4.41	<0.00002	18.9	0.255	33.3	0.000016	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	0.0051	<0.0005	0.0004	0.119	<0.0001	<0.001	<0.05	<0.00001	60.3	<0.001	<0.0002
RSEM-R6E-EOP	7/27/2022 11:50	AYK061	D	C255556	0.00108	4.34	<0.00002	18.7	0.246	32.0	0.000015	<0.005	<0.005	0.0015	<0.005	<0.005	<0.0001	0.0055	<0.0005	0.00041	0.119	<0.0001	<0.001	<0.05	<0.00001	60.2	<0.001	<0.0002
RSEM-R6E-EOP	7/28/2022 12:40	AYM152	M	C255903	0.00095	4.33	<0.00002	16.2	0.233	27.3	0.000018	<0.005	<0.005	0.0015	<0.005	<0.005	<0.0001	0.0053	<0.0005	0.00039	0.119	<0.0001	<0.001	0.054	<0.00001	62.8	<0.001	<0.0002
RSEM-R6E-EOP	7/29/2022 12:20	AYM047	M	C255900	0.0009	4.48	<0.00002	17.1	0.236	29.3	0.000018	<0.005	<0.005	0.00153	<0.005	<0.005	<0.0001	0.0064	<0.0005	0.00042	0.12	<0.0001	<0.001	0.051	<0.00001	62.7	<0.001	<0.0002
RSEM-R6E-EOP	7/30/2022 12:05	AYP671	M	C256352	0.0009	4.79	<0.00002	17.9	0.245	28.9	0.000017	<0.005	<0.005	0.00155	<0.005	<0.005	<0.0001	0.0049	<0.0005	0.00043	0.119	<0.0001	<0.001	0.051	<0.00001	61.3	<0.001	<0.0002
RSEM-R6E-EOP	7/31/2022 11:45	AYO872	M	C256301	0.0009	4.68	<0.00002	17.8	0.262	28.8	0.000016	<0.005	<0.005	0.00157	<0.005	<0.005	<0.0001	0.0066	<0.0005	0.00049	0.119	<0.0001	<0.001	<0.05	<0.00001	59.2	<0.001	<0.0002
RSEM-R6E-EOP	7/31/2022 11:55	AYO873	D	C256301	0.00092	4.67	<0.00002	18.1	0.265	29.6	0.000016	<0.005	<0.005	0.00159	<0.005	<0.005	<0.0001	0.0063	<0.0005	0.0005	0.12	<0.0001	<0.001	<0.05	<0.00001	58.6	<0.001	<0.0002
RSEM-R6E-EOP	8/1/2022 11:55	AYR821	M	C256691	0.00098	4.36	<0.00002	19.3	0.306	34.6	0.000015	<0.005	<0.005	0.00144	<0.005	<0.005	<0.0001	0.0413	<0.0005	0.00055	0.12	<0.0001	<0.001	0.052	0.00001	64.6	<0.001	<0.0002
RSEM-R6E-EOP	8/2/2022 11:35	AYU375	M	C257067	0.00103	4	<0.00002	22.0	1.39	40.6	0.000024	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	0.0225	<0.0005	0.00063	0.137	<0.0001	<0.001	0.061	0.000044	112	<0.001	0.00044
RSEM-R6E-EOP	8/2/2022 11:45	AYU376	D	C257067	0.00101	4.08	<0.00002	22.8	1.43	42.3	0.000023	<0.005	<0.005	0.00196	<0.005	<0.005	<0.0001	0.0196	<0.0005	0.00061	0.138	<0.0001	<0.001	0.063	0.000026	126	<0.001	0.00043
RSEM-R6E-EOP	8/3/2022 11:50	AYX380	M	C257672	0.00101	3.93	<0.00002	22.1	1.22	38.5	0.000019	<0.005	<0.005	0.00183	<0.005	<0.005	<0.0001	0.0181	<0.0005	0.00056	0.132	<0.0001	<0.001	0.065	0.000017	118	<0.001	<0.0002
RSEM-R6E-EOP	8/4/2022 11:00	AYY903	M	C257848	0.00105	4.61	<0.00002	22.2	0.99	31.1	0.000019	<0.005	<0.005	0.0017	<0.005	<0.005	<0.0001	0.0116	<0.0005	0.00047	0.133	<0.0001	<0.001	0.063	<0.00001	103	<0.001	<0.0002
RSEM-R6E-EOP	8/5/2022 10:10	AYY783	M	C257846	0.00097	4.07	<0.00002	21.9	0.946	36.1	0.000019	<0.005	<0.005	0.00176	<0.005	<0.005	<0.0001	0.0149	<0.0005	0.0005	0.124	<0.0001	<0.001	0.068	<0.00001	103	<0.001	<0.0002
RSEM-R6E-EOP	8/6/2022 11:20	AZA353	M	C258076	0.0011	5.03	<0.00002	22.2	0.772	30.5	0.000016	<0.005	<0.005	0.00159	<0.005	<0.005	<0.0001	0.0096	<0.0005	0.00046	0.139	<0.0001	<0.001	0.058	<0.00001	91.3	<0.001	<0.0002
RSEM-R6E-EOP	8/6/2022 11:20	AZA354	D	C258076	0.00114	5.01	<0.00002	22.0	0.754	30.0	0.000016	<0.005	<0.005	0.00158	<0.005	<0.005	<0.0001	0.0089	<0.0005	0.00042	0.138	<0.0001	<0.001	0.059	<0.00001	89.8	<0.001	0.00034
RSEM-R6E-EOP	8/7/2022 12:10	AZC300	M	C258444	0.00106	4.74	<0.00002	21.0	0.588	27.7	0.000018	<0.005	<0.005	0.00164	<0.005	<0.005	<0.0001	0.009	<0.0005	0.0004	0.129	<0.0001	<0.001	0.056	<0.00001	78.1	<0.001	<0.0002
RSEM-R6E-EOP	8/8/2022 16:00	AZK277	M	C259762	0.00089	4.57	<0.00002	21.9	0.429	27.9	0.000017	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	0.0072	<0.0005	0.00039	0.107	<0.0001	<0.001	0.056	<0.00001	57.5	<0.001	<0.0002
RSEM-R6E-EOP	8/9/2022 13:00	AZK373	M	C259776	0.00091	4.62	<0.00002	21.6	0.475	28.7	0.000016	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	0.0075	<0.0005	0.00048	0.114	<0.0001	<0.001	0.08	<0.00001	64.8	<0.001	0.0005
RSEM-R6E-EOP	8/10/2022 15:00	AZL947	M	C259983	0.00084	4.53	<0.00002	21.2	0.35	27.9	0.000014	<0.005	<0.005	0.00144	<0.005	<0.005	<0.0001	0.0086	<0.0005	0.0004	0.093	<0.0001	<0.001	0.05	<0.00001	54.6	<0.001	<0.0002
RSEM-R6E-EOP	8/11/2022 13:30	AZL943	M	C259981	0.00082	4.61	<0.00002	21.0	0.311	27.9	0.000013	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	0.0079	<0.0005	0.00038	0.084	<0.0001	<0.001	0.058	<0.00001	52.9	<0.001	<0.0002
RSEM-R6E-EOP	8/12/2022 12:00	AZL945	M	C259982	0.00085	4.81	<0.00002	19.4	0.331	28.1	0.000012	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	0.0077	<0.0005	0.00037	0.075	<0.0001	<0.001	0.055	<0.00001	45.3	<0.001	0.00025
RSEM-R6E-EOP	8/13/2022 10:00	AZR090	M	C260796	0.00083	5.1	<0.00002	21.4	0.304	28.2	0.000013	<0.005	<0.005	0.00144	<0.005	<0.005	<0.0001	0.0072	<0.0005	0.0004	0.066	<0.0001	<0.001	0.053	<0.00001	43.4	<0.001	0.00021
RSEM-R6E-EOP	8/14/2022 14:30	AZR292	M	C260829	0.0009	5.65	<0.00002	19.4	0.276	29.8	0.000013	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	0.0084	<0.0005	0.00043	0.067	<0.0001	<0.001	0.053	<0.00001	50.6	<0.001	<0.0002
RSEM-R6E-EOP	8/14/2022 14:40	AZR295	D	C260829	0.00086	5.6	<0.00002	20.0	0.274	29.6	0.000015	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	0.0089	<0.0005	0.00046	0.07	<0.0001	<0.001	0.056	<0.00001	50.9	<0.001	0.00021
RSEM-R6E-EOP	8/15/2022 14:30	AZW324	M	C261663	0.00084	5.3	<0.00002	21.4	0.481	27.9	0.000014	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	0.0106	<0.0005	0.00055	0.09	<0.0001	<0.001	0.057	<0.00001	64.0	<0.001	<0.0002
RSEM-R6E-EOP	8/16/2022 13:00	AZW500	M	C261690	0.00085	4.74	<0.00002	21.6	0.447	26.4	0.000014	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	0.0104	<0.0005	0.00048	0.083	<0.0001	<0.001	0.057	<0.00001	59.5	<0.001	0.00037
RSEM-R6E-EOP	8/17/2022 13:30	BAA263	M	C262437	0.00088	4.94	<0.00002	22.0	0.41	30.3	0.000014	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	0.0097	<0.0005	0.0005	0.083	<0.0001	<0.001	0.06	<0.00001	55.6	<0.001	<0.0002
RSEM-R6E-EOP	8/18/2022 13:00	BAA274	M	C262439	0.00079	4.54	<0.00002	21.1	0.351	28.8	0.000011	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	0.0091	<0.0005	0.00048	0.073	<0.0001	<0.001	0.058	<0.00001	48.3	<0.001	<0.0002
RSEM-R6E-EOP	8/19/2022 10:00	BAA260	M	C262436	0.00086	4.94	<0.00002	22.7	0.35	30.3	0.000014	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	0.0087	<0.0005	0.00051	0.07	<0.0001	<0.001	0.057	<0.00001	45.1	<0.001	<0.0002
RSEM-R6E-EOP	8/20/2022 11:30	BAD640	M	C262969	0.00074	4.7	<0.00002	21.4	0.325	25.3	0.000014	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	0.0091	<0.0005	0.00059	0.073	<0.0001	<0.001	0.059	<0.00001	45.5	<0.001	<0.0002
RSEM-R6E-EOP	8/21/2022 11:00	BAD601	M	C262959	0.00083	4.53	<0.00002	21.9	0.308	26.8	0.000011	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	0.0089	<0.0005	0.00062	0.072	<0.0001	<0.001	0.057	<0.00001	41.5	<0.001	<0.0002
RSEM-R6E-EOP	8/22/2022 13:30	BAG918	M	C263407	0.00081	4.43	<0.00002	21.9	0.291	27.0	0.000012	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	0.0078	<0.0005	0.00066	0.072	<0.0001	<0.001	0.063	<0.00001	41.3	<0.001	0.00022
RSEM-R6E-EOP	8/23/2022 13:30	BAM964	M	C264451	0.00069	3.91	<0.00002	22.5	0.251	27.7	0.00001	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	0.0034	<0.0005	0.00075	0.075	<0.0001	<0.001	0.055	<0.00001	43.2	<0.001	<0.0002
RSEM-R6E-EOP	8/23/2022 14:00	BAM967	D	C264451	0.00073	3.86	<0.00002	22.5	0.26	28.0	0.00001	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.0007	0.074	<0.0001	<0.001	0.052	<0.00001	43.2	<0.001	<0.0002
RSEM-R6E-EOP	8/24/2022 13:30	BAM915	M	C264441	0.00074	4.2	<0.00002	23.0	0.266	28.4	0.000011	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	0.0035	<0.0005	0.00069	0.074	<0.0001	<0.001	0.056	<0.00001	43.3	<0.001	<0.0002
RSEM-R6E-EOP	8/25/2022 15:15	BAO144	M	C264632	0.00071	4.9	<0.00002	22.6	0.262	25.6	0.000012	<0.005	<0.005	0.0012	<0.005	<0.005	<0.0001	0.0095	<0.0005	0.00074	0.082	<0.0001	<0.001	0.074	<0.00001	42.2	<0.001	<0.0002
RSEM-R6E-EOP	8/26/2022 6:30	BAO137	M	C264629	0.00067	4.34	<0.00002	22.8	0.26	27.3	0.00001	<0.005	<0.005	0.00121	<0.005	<0.005	<0.0001	0.0084	<0.0005	0.00067	0.088	<0.0001	<0.001	0.078	<0.00001	44.5	<0.001	<0.0002
RSEM-R6E-EOP	8/27/2022 12:30	BAR925	M	C265307	0.00066	4.29	<0.00002	20.9	0.258	26.4	<0.00001	<0.005	<0.005	0.00112	<0.005	<0.005	<0.0001	0.0065	<0.0005	0.0008	0.098	<0.0001	<0.001	0.052	<0.00001	46.9	<0.001	<0.0002
RSEM-R6E-EOP	8/28/2022 14:00	BAR946	M	C265316	0.00064	3.75	<0.00002	18.8	0.247	24.7	<0.00001	<0.005	<0.005	0.00116	<0.005	<0.005	<0.0001	0.0061	<0.0005	0.00073	0.111	<0.0001	<0.001	<0.05	<0.00001	52.5	<0.001	<0.0002
RSEM-R6E-EOP	8/29/2022 14:10	BAU337	D	C265774	0.00061	4.27	<0.00002	17.3	0.253	24.5	<0.00001	<0.005	<0.005	0.00118	<0.005	<0.005	<0.0001	0.0057	<0.0005	0.00062	0.118	<0.0001	<0.001	<0.05	<0.00001	54.9	<0.001	<0.0002
RSEM-R6E-EOP	8/29/2022 14:30	BAU335	M	C265774	0.00062	4.23	<0.00002	17.0	0.254	24.1	<0.00001	<0.005	<0.005	0.00112	<0.005	<0.005	<0.0001	0.0056	<0.0005	0.00061	0.117	<0.0001	<0.001	<0.05	<0.00001	55.1	<0.001	<0.0002
RSEM-R6E-EOP	8/30/2022 13:30	BBA809	M	C266812	0.00055	4.02	<0.00002	15.1	0.242	22.8	<0.00001	<0.005	<0.005	0.00114	<0.005	<0.005	<0.0001	0.006	<0.0005	0.00055	0.124	<0.0001	<0.001	<0.05	<0.00001	58.0	<0.001	<0.0002
RSEM-R6E-EOP	8/31/2022 14:10	BBA806	M	C266810	0.00065	4.4	<0.00002	16.6	0.244	24.2	0.000013	<0.005	<0.005	0.00111	<0.005	<0.005	<0.0001	0.0069	<0.0005	0.00054	0.125	<0.0001	<0.001	<0.05	<0.00001	58.5	<0.001	<0.0002
RSEM-R6E-EOP	9/1/2022 13:00	BBC912	M	C267169	0.00058	4.22	<0.00002	15.6	0.238	24.0	<0.00001	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	0.0066	<0.0005	0.00058	0.126	<0.0001	<0.001	<0.05	<0.00001	59.0	<0.001	<0.0002
RSEM-R6E-EOP	9/2/2022 9:00	BBC920	M	C267172	0.00057	4.33	<0.00002	15.1	0.245	24.3	<0.00001	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0001	0.006	<0.0005	0.00053	0.134	<0.0001	<0.001	<0.05	<0.00001	62.4	<0.001	<0.0002
RSEM-R6E-EOP	9/3/2022 14:30	BBE154	M	C267383	0.00056	4.12	<0.00002	13.8	0.226	23.1	<0.00001	<0.005	<0.005	0.00109	<0.005	<0.005	0.00011	0.0057	<0.0005	0.00045	0.136	<0.0001	<0.001	<0.05	<0.00001	59.2	<0.001	<0.0002
RSEM-R6E-EOP	9/4/2022 14:00	BBI404	M	C268301	0.00058	4.43	<0.00002	13.2	0.217	20.2	<0.00001	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	0.0047	<0.0005	0.00043	0.143	<0.0001	<0.001	<0.05	<0.00001	60.1	<0.001	<0.0002

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
RSEM-R6E-EOP	9/4/2022 14:10	BBI407	D	C268301	0.00059	4.47	<0.00002	13.7	0.223	19.8	<0.00001	<0.005	<0.005	0.00112	<0.005	<0.005	<0.0001	0.0047	<0.0005	0.00044	0.14	<0.0001	<0.001	<0.05	<0.00001	60.6	<0.001	<0.0002
RSEM-R6E-EOP	9/5/2022 13:00	BBI327	M	C268286	0.00058	4.31	<0.00002	13.5	0.216	21.0	<0.00001	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	0.0041	<0.0005	0.00043	0.142	<0.0001	<0.001	<0.05	<0.00001	59.7	<0.001	<0.0002
RSEM-R6E-EOP	9/6/2022 15:15	BBI318	M	C268280	0.0006	4.18	<0.00002	13.7	0.211	21.8	<0.00001	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	0.0087	<0.0005	0.00041	0.137	<0.0001	<0.001	<0.05	<0.00001	57.7	<0.001	<0.0002
RSEM-R6E-EOP	9/7/2022 11:50	BBM321	M	C268788	0.00049	3.81	<0.00002	13.9	0.207	21.3	<0.00001	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0001	0.0033	<0.0005	0.00031	0.135	<0.0001	<0.001	<0.05	<0.00001	63.7	<0.001	<0.0002
RSEM-R6E-EOP	9/7/2022 12:00	BBM322	D	C268788	0.00054	3.97	<0.00002	13.9	0.203	21.2	<0.00001	<0.005	<0.005	0.00115	<0.005	<0.005	<0.0001	0.0031	<0.0005	0.0003	0.136	<0.0001	<0.001	<0.05	<0.00001	63.6	<0.001	<0.0002
RSEM-R6E-EOP	9/8/2022 13:30	BBO445	M	C269143	0.00049	4.18	<0.00002	11.6	0.19	19.3	<0.00001	<0.005	<0.005	0.00103	<0.005	<0.005	0.00021	0.0079	<0.0005	0.00031	0.142	<0.0001	<0.001	<0.05	<0.00001	66.2	<0.001	<0.0002
RSEM-R6E-EOP	9/9/2022 10:30	BBS001	M	C269764	0.00049	4.52	<0.00002	10.6	0.181	17.6	<0.00001	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	0.0076	<0.0005	0.00029	0.148	<0.0001	<0.001	<0.05	<0.00001	63.2	<0.001	<0.0002
RSEM-R6E-EOP	9/10/2022 12:20	BBR900	M	C269730	0.00047	4.34	<0.00002	8.77	0.177	16.7	0.000016	<0.005	<0.005	0.00098	<0.005	<0.005	<0.0001	0.0063	<0.0005	0.00027	0.142	<0.0001	<0.001	<0.05	<0.00001	69.4	<0.001	<0.0002
RSEM-R6E-EOP	9/10/2022 12:30	BBR901	D	C269730	0.00046	4.22	<0.00002	8.85	0.179	17.4	0.000016	<0.005	<0.005	0.00098	<0.005	<0.005	<0.0001	0.0067	<0.0005	0.00027	0.144	<0.0001	<0.001	<0.05	<0.00001	71.0	<0.001	<0.0002
RSEM-R6E-EOP	9/11/2022 14:30	BBR959	M	C269754	0.00056	4.22	<0.00002	7.72	0.17	15.0	0.000018	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	0.0055	<0.0005	0.00026	0.134	<0.0001	<0.001	<0.05	<0.00001	62.1	<0.001	<0.0002
RSEM-R6E-EOP	9/12/2022 11:50	BBU605	M	C270263	0.00057	4.28	<0.00002	7.55	0.173	14.4	0.000018	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	0.005	<0.0005	0.00023	0.137	<0.0001	<0.001	<0.05	<0.00001	59.4	<0.001	<0.0002
RSEM-R6E-EOP	9/13/2022 14:10	BBX514	M	C270776	0.0006	4.25	<0.00002	7.76	0.171	15.3	0.00002	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	0.0048	<0.0005	0.00021	0.138	<0.0001	<0.001	<0.05	<0.00001	66.1	<0.001	<0.0002
RSEM-R6E-EOP	9/14/2022 10:05	BBZ913	M	C271275	0.00059	4.35	<0.00002	7.90	0.182	17.8	0.000022	<0.005	<0.005	0.00098	<0.005	<0.005	<0.0001	0.0044	<0.0005	0.00025	0.153	<0.0001	<0.001	<0.05	<0.00001	65.4	<0.001	<0.0002
RSEM-R6E-EOP	9/14/2022 10:15	BBZ914	D	C271275	0.00059	4.36	<0.00002	7.89	0.177	15.1	0.00002	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	0.004	<0.0005	0.00024	0.155	<0.0001	<0.001	<0.05	<0.00001	64.3	<0.001	<0.0002
RSEM-R6E-EOP	9/15/2022 9:30	BCC124	M	C271667	0.00053	4.21	<0.00002	8.11	0.168	15.5	0.000018	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	0.0037	<0.0005	0.00023	0.157	<0.0001	<0.001	<0.05	<0.00001	66.1	<0.001	<0.0002
RSEM-R6E-EOP	9/16/2022 12:40	BCF677	M	C272242	0.00056	4.25	<0.00002	8.89	0.171	17.0	0.000017	<0.005	<0.005	0.00104	<0.005	<0.005	<0.0001	0.0039	<0.0005	0.00026	0.154	<0.0001	<0.001	<0.05	0.00001	63.7	<0.001	<0.0002
RSEM-R6E-EOP	9/16/2022 12:50	BCF678	D	C272242	0.00056	4.49	<0.00002	9.34	0.176	17.7	0.000016	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0001	0.0036	<0.0005	0.00026	0.158	<0.0001	<0.001	<0.05	0.000012	63.1	<0.001	<0.0002
RSEM-R6E-EOP	9/17/2022 11:10	BCF750	M	C272259	0.00065	4.56	<0.00002	13.5	0.667	23.3	0.000022	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	0.0086	<0.0005	0.00029	0.16	<0.0001	<0.001	0.05	<0.00001	88.9	<0.001	<0.0002
RSEM-R6E-EOP	9/18/2022 11:10	BCF722	M	C272251	0.00072	4.42	<0.00002	14.5	0.804	24.7	0.000019	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	0.0084	<0.0005	0.0003	0.144	<0.0001	<0.001	<0.05	<0.00001	95.9	<0.001	<0.0002
RSEM-R6E-EOP	9/19/2022 9:20	BCI768	M	C272683	0.00071	4.87	<0.00002	12.8	0.584	23.1	0.000017	<0.005	<0.005	0.00113	<0.005	<0.005	<0.0001	0.0068	<0.0005	0.00029	0.131	<0.0001	<0.001	<0.05	<0.00001	84.4	<0.001	<0.0002
RSEM-R6E-EOP	9/20/2022 14:50	BCL543	M	C273070	0.00061	4.4	<0.00002	10.8	0.328	18.9	0.000015	<0.005	<0.005	0.00103	<0.005	<0.005	<0.0001	0.0059	<0.0005	0.0002	0.126	<0.0001	<0.001	<0.05	<0.00001	71.3	<0.001	<0.0002
RSEM-R6E-EOP	9/21/2022 13:15	BCR697	M	C273972	0.00061	4.18	<0.00002	11.0	0.254	20.1	0.000014	<0.005	<0.005	0.00104	<0.005	0.03	<0.0001	0.0057	<0.0005	0.00023	0.125	<0.0001	<0.001	<0.05	<0.00001	65.1	<0.001	<0.0002
RSEM-R6E-EOP	9/22/2022 14:30	BCR616	D	C273969	0.00055	3.93	<0.00002	11.6	0.234	20.7	0.000013	<0.005	<0.005	0.00096	<0.005	<0.005	<0.0001	0.0084	<0.0005	0.00023	0.124	<0.0001	<0.001	<0.05	<0.00001	63.1	<0.001	<0.0002
RSEM-R6E-EOP	9/22/2022 14:45	BCR614	M	C273969	0.00054	3.95	<0.00002	11.5	0.234	20.4	0.000014	<0.005	<0.005	0.00099	<0.005	<0.005	<0.0001	0.0091	<0.0005	0.00023	0.124	<0.0001	<0.001	<0.05	<0.00001	62.8	<0.001	<0.0002
RSEM-R6E-EOP	9/23/2022 11:15	BCR891	M	C273985	0.00058	4	<0.00002	11.5	0.236	20.7	0.000014	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	0.0068	<0.0005	0.00026	0.13	<0.0001	<0.001	<0.05	<0.00001	65.0	<0.001	<0.0002
RSEM-R6E-EOP	9/24/2022 10:00	BCV560	M	C274577	0.00057	4.05	<0.00002	11.2	0.251	20.1	0.000013	<0.005	<0.005	0.00092	<0.005	<0.005	<0.0001	0.0074	<0.0005	0.00025	0.127	<0.0001	<0.001	<0.05	<0.00001	61.9	<0.001	<0.0002
RSEM-R6E-EOP	9/25/2022 14:15	BCV619	M	C274593	0.00055	3.95	<0.00002	11.6	0.235	20.0	0.000014	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	0.0066	<0.0005	0.00026	0.124	<0.0001	<0.001	<0.05	<0.00001	59.1	<0.001	<0.0002
RSEM-R6E-EOP	9/26/2022 9:15	BCV504	M	C274562	0.00053	3.91	<0.00002	11.1	0.22	19.7	0.000014	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	0.0067	<0.0005	0.00025	0.129	<0.0001	<0.001	<0.05	<0.00001	58.7	<0.001	<0.0002
RSEM-R6E-EOP	9/27/2022 10:20	BDB609	M	C275584	0.00052	3.57	<0.00002	10.6	0.189	20.4	<0.00001	<0.005	<0.005	0.00088	<0.005	<0.005	<0.0001	0.0086	<0.0005	0.00025	0.133	<0.0001	<0.001	<0.05	<0.00001	58.3	<0.001	<0.0002
RSEM-R6E-EOP	9/28/2022 10:20	BDE178	M	C276033	0.00046	3.7	<0.00002	9.54	0.2	17.6	0.000015	<0.005	<0.005	0.00082	<0.005	<0.005	<0.0001	0.0096	<0.001	0.00024	0.134	<0.0002	<0.002	<0.1	<0.00002	58.6	<0.002	<0.0004
RSEM-R6E-EOP	9/28/2022 10:30	BDE179	D	C276033	0.00048	3.82	<0.00002	9.83	0.208	18.0	0.000016	<0.005	<0.005	0.00083	<0.005	<0.005	<0.0001	0.0099	<0.0005	0.00026	0.135	<0.0001	<0.001	<0.05	<0.00001	58.1	<0.001	<0.0002
RSEM-R6E-EOP	9/29/2022 10:30	BDH540	M	C276348	0.00052	4.18	<0.00002	7.94	0.177	17.5	0.000016	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	0.0079	<0.0005	0.00029	0.146	<0.0001	<0.001	<0.05	<0.00001	62.7	<0.001	<0.0002
RSEM-R6E-EOP	9/30/2022 10:45	BDH543	M	C276348	0.00051	4.04	<0.00002	7.30	0.163	17.4	0.000013	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	0.0066	<0.0005	0.00029	0.153	<0.0001	<0.001	<0.05	0.00001	63.2	<0.001	<0.0002
RSEM-R6E-EOP	10/1/2022 9:30	BDL248	M	C276877	0.00053	4.26	<0.00002	7.62	0.164	18.2	0.000013	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0001	0.009	<0.0005	0.0003	0.159	<0.0001	<0.001	<0.05	0.00001	63.0	<0.001	<0.0002
RSEM-R6E-EOP	10/1/2022 9:40	BDL251	D	C276877	0.00051	4.18	<0.00002	7.35	0.157	17.6	0.000012	<0.005	<0.005	0.00104	<0.005	<0.005	<0.0001	0.0088	<0.0005	0.0003	0.159	<0.0001	<0.001	<0.05	0.000011	62.4	<0.001	<0.0002
RSEM-R6E-EOP	10/2/2022 10:15	BDL180	M	C276859	0.00051	4.17	<0.00002	8.02	0.162	18.4	0.000014	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	0.0073	<0.0005	0.00029	0.161	<0.0001	<0.001	<0.05	0.000012	60.8	<0.001	<0.0002
RSEM-R6E-EOP	10/3/2022 10:20	BDP149	M	C277443	0.00059	4.08	<0.00002	8.49	0.164	19.1	0.00001	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	0.0068	<0.0005	0.00032	0.16	<0.0001	<0.001	<0.05	<0.00001	61.1	<0.001	<0.0002
RSEM-R6E-EOP	10/4/2022 10:25	BDR435	M	C277814	0.00058	4.61	<0.00002	10.2	0.174	21.2	0.000023	<0.005	0.0114	0.00118	<0.005	<0.005	0.00018	0.008	<0.0005	0.00035	0.142	<0.0001	<0.001	<0.05	0.000013	62.2	<0.001	<0.0002
RSEM-R6E-EOP	10/5/2022 10:45	BDV020	M	C278393	0.0016	3.19	<0.00002	105	0.18	88.1	0.000011	<0.005	<0.005	0.00199	<0.005	0.0054	<0.0001	0.0075	0.00085	0.00074	0.09	<0.0001	<0.001	0.099	0.000011	48.7	0.0017	<0.0002
RSEM-R6E-EOP	10/6/2022 10:40	BDZ970	M	C278888	0.00056	4.22	<0.00002	8.56	0.162	23.0	0.000013	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	0.0111	<0.0005	0.00028	0.162	<0.0001	<0.001	<0.05	0.000016	70.2	<0.001	<0.0002
RSEM-R6E-EOP	10/7/2022 12:00	BEA025	M	C278893	0.00062	4.14	<0.00002	8.71	0.163	23.0	<0.00001	<0.005	<0.005	0.0011	<0.005	<0.005	<0.0001	0.0082	<0.0005	0.00027	0.162	<0.0001	<0.001	<0.05	0.000014	68.9	<0.001	<0.0002
RSEM-R6E-EOP	10/8/2022 10:15	BED963	M	C279402	0.00059	3.92	<0.00002	8.23	0.172	21.5	<0.00001	<0.005	<0.005	0.00109	<0.005	<0.005	<0.0001	0.0125	<0.0005	0.00025	0.18	<0.0001	<0.001	<0.05	0.000012	67.7	<0.001	<0.0002
RSEM-R6E-EOP	10/9/2022 9:35	BED925	M	C279394	0.00055	3.76	<0.00002	7.59	0.165	21.1	<0.00001	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	0.0118	<0.0005	0.00024	0.18	<0.0001	<0.001	<0.05	0.000012	66.2	<0.001	<0.0002
RSEM-R6E-EOP	10/10/2022 9:55	BED792	M	C279368	0.00054	3.72	<0.00002	8.05	0.164	21.6	<0.00001	<0.005	<0.005	0.00102	<0.005	<0.005	<0.0001	0.0186	<0.0005	0.00024	0.179	<0.0001	<0.001	<0.05	0.000011	64.9	<0.001	<0.0002
RSEM-R6E-EOP	10/11/2022 12:15	BEK435	M	C280406	0.00052	3.83	<0.00002	7.84	0.169	20.4	0.00001	<0.005	<0.005	0.00104	<0.005	<0.005	<0.0001	0.0139	<0.0005	0.00025	0.158	<0.0001	<0.001	<0.05	0.000014	65.0	<0.001	<0.0002
RSEM-R6E-EOP	10/12/2022 14:30	BEK645	M	C280448	0.00048	3.69	<0.00002	7.89	0.161	20.7	0.000011	<0.005	<0.005	0.00101	<0.005	<0.005	<0.0001	0.0188	<0.0005	0.00025	0.164	<0.0001	<0.001	<0.05	0.000014	63.9	<0.001	<0.0002
RSEM-R6E-EOP	10/13/2022 13:00	BEN617	M	C280837	0.00045	3.39	<0.00002	8.37	0.155	20.6	0.00001	<0.005	<0.005	0.00099	<0.005	<0.005	<0.0001	0.0139	<0.0005	0.00023	0.161	<0.0001	<0.001	<0.05	0.000011	63.2	<0.001	<0.0002
RSEM-R6E-EOP	10/13/2022 13:30	BEN619	D	C280837	0.00046	3.18	<0.00002	8.00	0.149	19.0	<0.00001	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	0.0138	<0.0005	0.00023	0.162	<0.0001	<0.001	<0.05	<0.00001	65.9	<0.001	<0.0002
RSEM-R6E-EOP	10/14/2022 11:30	BEN599	M	C280833	0.00046	3.17	<0.00002	7.77	0.149	18.8	0.00001	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	0.0154	<0.0005	0.00024	0.16	<0.0001	<0.001	<0.05	<0.00001	65.5	<0.001	<0.0002
RSEM-R6E-EOP	10/15/2022 13:30	BER007	M	C281389	0.00047	3.49	<0.00002	7.85	0.151	17.7	<0.00001	<0.005	<0.005	0.00084	<0.005	<0.005	<0.0001	0.0136	<0.0005	0.00025	0.149	<0.0001	<0.001	<0.05	<0.00001	61.4	<0.001	<0.0002
RSEM-R6E-EOP	10/16/2022 15:30	BER094	M	C281399	0.00051	3.68	<0.00002	8.23	0.155	19.8	0.000011	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	0.0124	<0.0005	0.00025	0.155	<0.0001	<0.001	<0.05	<0.00001	63.6	<0.001	<0.0002
RSEM-R6E-EOP	10/17/2022 11:15	BER150	M	C281421	0.00054	3.5	<0.00002	7.76	0.153	18.6	0.00001	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	0.0113	<0.0005	0.00024	0.157	<0.0001	<0.001	<0.05	<0.00001	65.6	<0.001	<0.0002
RSEM-R6E-EOP	10/18/2022 9:30	BEX619	M	C282315	0.00052	3.66	<0.00002	7.40	0.155	20.0	<0.00001	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	0.009	<0.0005	0.00024	0.159	<0.0001	<0.001	<0.05	<0.00001	65.2	<0.001	<0.0002
RSEM-R6E-EOP	10/19/2022 12:30	BFA345	M	C282741	0.00053	3.68	<0.00002	7.86	0.167	19.5	0.000012	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	0.0121	<0.0005	0.00024	0.145	<0.0001	<0.001	<0.05	<0.00001	59.0	<0.001	<0.0002
RSEM-R6E-EOP	10/19/2022 12:40	BFA346	D	C282741	0.00052	3.72	<0.00002	7.85	0.171	19.9	0.000012	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	0.014	<0.0005	0.00025	0.144	<0.0001	<0.001	<0.05	<0.00001	60.3	<0.001	<0.0002
RSEM-R6E-EOP	10/20/2022 10:00	BFD236	M	C283174	0.0005	3.86	<0.00002	8.10	0.163	19.4	0.000014	<0.005	<0.005	0.00103	<0.005	<0.005	<0.0001	0.0112	<0.0005	0.00027	0.148	<0.0001	<0.001	<0.05	<0.00001	63.8	<0.001	<0.0002
RSEM-R6E-EOP	10/21/2022 10:10	BFD223	M	C283172	0.00051	4.06	<0.00002	8.30	0.165	20.0	0.000015	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0001	0.0101	<0.0005	0.00028	0.146	<0.0001	<0.001	<0.05	<0.00001	64.9	<0.001	<0.0002
RSEM-R6E-EOP	10/22/2022 11:20	BFI041	M	C283756	0.00057	3.89	<0.00002	8.20	0.171	21.2	0.000011	<0.005	<0.005	0.00101	<0.005	<0.005	<0.0001	0.0112	<0.0005	0.00026	0.148	<0.0001	<0.001	<0.05	0.000011	62.9	<0.001	<0.0002
RSEM-R6E-EOP	10/22/2022 11:30	BFI042	D	C283756	0.00054	3.81	<0.00002	8.02	0.161	20.1	0.00001	<0.005	<0.005	0.00097	<0.005	<0.005	<0.0001	0.0108	<0.0005	0.00027	0.147	<0.0001	<0.001	<0.05	0.00001	63.2	<0.001	<0.0002
RSEM-R6E-EOP	10/23/2022 10:15	BFI228	M	C283774	0.00053	3.61	<0.00002	7.31	0.163	18.9	0.000012	<0.005	<0.005	0.00101	<0.005	<0.005	<0.0001	0.0115	<0.0005	0.00024	0.149	<0.0001	<0.001	<0.05	<0.00001	64.3	<0.001	<0.0002
RSEM-R6E-EOP	10/24/2022 9:45	BFL669	M	C284145	0.00051	3.9	<0.00002	7.26	0.164	20.2	0.000011	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	0.0111	<0.0005	0.00021	0.145	<0.0001	<0.001	<0.05	0.000014	64.2	<0.001	<0.0002
RSEM-R6E-EOP	10/25/2022 10:35	BFP705	M	C284665	0.00055	4.04	<0.00002	8.63	0.247	21.3	0.000012	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	0.0113	<0.0005	0.00018	0.142	<0.0001	<0.001	<0.05	0.000015	67.2	<0.001	<0.0002
RSEM-R6E-EOP	10/25/2022 10:45	BFP706	D	C284665	0.00056	4.31	<0.00002	8.73	0.247	21.1	0.000011	<0.005	<0.005	0.00096	<0.005	<0.005	<0.0001	0.0119	<0.0005	0.00019	0.14	<0.0001	<0.001	<0.05	0.000015	67.1	<0.001	<0.0002
RSEM-R6E-EOP	10/26/2022 12:30	BFS034	M	C285038	0.00059	4.16	<0.00002	8.43	0.24	21.1	<0.00001	<0.005	<0.005	0.00099	<0.005	<0.005	<0.0001	0.0125	<0.0005	0.00018	0.142	<0.0001	<0.001	<0.05	0.000014	66.0	<0.001	<0.0002
RSEM-R6E-EOP	10/27/2022 10:05	BFU904	M	C285466	0.00057	3.88	<0.00002	8.25	0.201	20.2	<0.00001	<0.005	0.0084	0.00091	<0.005	<0.005	<0.0001	0.0098	<0.0005	0.00018	0.141	<0.0001	<0.001	<0.05	0.000016	64.8	<0.001	<0.0002
RSEM-R6E-EOP	10/27/2022 10:15	BFU905	D	C285466	0.00054	3.84	<0.00002	7.77	0.2	19.5	<0.00001	<0.005	<0.005	0.0009	<0.005	<0.005	0.0005	0.0096	<0.0005	0.00019	0.14	<0.0001	<0.001	<0.05	0.000016	65.1	<0.001	<0.0002
RSEM-R6E-EOP	10/28/2022 11:30	BFU721	M	C285458	0.0006	3.9	<0.00002	8.61	0.177	20.4	0.000011	<0.005	<0.005	0.00092	<0.005	<0.005	0.00013	0.0076	<0.0005	0.00022	0.135	<0.0001	<0.001	<0.05	0.000016	68.8	<0.001	<0.0002
RSEM-R6E-EOP	10/29/2022 9:45	BFZ653	M	C286199	0.00068	5.71	<0.00002	9.06	0.168	19.9	0.00003	<0.005	0.017	0.00101	<0.005	<0.005	0.00063	0.0052	<0.0005	0.00021	0.13	<0.0001	<0.001	<0.05	0.000022	63.0	<0.001	<0.0002

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
RSEM-R6E-EOP	10/30/2022 11:20	BFZ645	M	C286196	0.00061	3.92	<0.00002	7.42	0.153	19.1	0.000014	<0.005	<0.005	0.00093	<0.005	<0.005	0.00022	0.0047	<0.0005	0.0002	0.134	<0.0001	<0.001	<0.05	0.000023	63.3	<0.001	<0.0002
RSEM-R6E-EOP	10/31/2022 11:00	BGA235	M	C286288	0.00066	4.05	<0.00002	7.86	0.147	18.7	0.000013	<0.005	0.0071	0.00087	<0.005	<0.005	<0.0001	0.0085	<0.0005	0.0002	0.133	<0.0001	<0.001	<0.05	0.000025	63.4	<0.001	<0.0002
RSEM-R6E-EOP	11/1/2022 15:20	BGE763	M	C286877	0.0006	4.07	<0.00002	7.09	0.155	19.6	0.000013	<0.005	<0.005	0.0008	<0.005	<0.005	<0.0001	0.0089	<0.0005	0.00021	0.131	<0.0001	<0.001	<0.05	0.000027	64.8	0.0154	0.00024
RSEM-R6E-EOP	11/2/2022 12:30	BGJ735	M	C287754	0.00058	3.9	<0.00002	7.59	0.161	20.5	<0.00001	<0.005	<0.005	0.00081	<0.005	<0.005	<0.0001	0.0081	<0.0005	0.00019	0.139	<0.0001	<0.001	<0.05	0.000025	67.7	<0.001	<0.0002
RSEM-R6E-EOP	11/3/2022 14:00	BGJ743	M	C287759	0.00066	4.67	<0.00002	7.32	0.17	20.4	0.000013	<0.005	0.0103	0.00089	<0.005	<0.005	0.00021	0.0087	<0.0005	0.00021	0.147	<0.0001	<0.001	<0.05	0.000031	68.2	<0.001	<0.0002
RSEM-R6E-EOP	11/4/2022 11:00	BGJ738	M	C287756	0.00066	4.28	<0.00002	6.84	0.168	20.0	0.00001	<0.005	<0.005	0.00077	<0.005	<0.005	<0.0001	0.0123	<0.0005	0.00021	0.149	<0.0001	<0.001	<0.05	0.000029	68.6	<0.001	<0.0002
RSEM-R6E-EOP	11/5/2022 13:30	BGO362	M	C288361	0.00059	3.74	<0.00002	6.65	0.153	18.8	<0.00001	<0.005	<0.005	0.00077	<0.005	<0.005	<0.0001	0.01	<0.0005	0.0002	0.147	<0.0001	<0.001	<0.05	0.000024	66.7	<0.001	<0.0002
RSEM-R6E-EOP	11/6/2022 14:15	BGO251	M	C288323	0.00071	4.14	<0.00002	7.06	0.158	19.9	0.000013	<0.005	0.0073	0.00084	<0.005	<0.005	0.00021	0.0075	<0.0005	0.0002	0.148	<0.0001	<0.001	<0.05	0.000024	65.9	<0.001	<0.0002
RSEM-R6E-EOP	11/6/2022 14:30	BGO253	D	C288323	0.00067	4.07	<0.00002	6.96	0.158	19.1	<0.00001	<0.005	<0.005	0.00081	<0.005	<0.005	0.00011	0.0076	<0.0005	0.00021	0.149	<0.0001	<0.001	<0.05	0.000025	67.4	<0.001	<0.0002
RSEM-R6E-EOP	11/7/2022 10:00	BGO319	M	C288345	0.00067	3.84	<0.00002	7.23	0.158	19.5	<0.00001	<0.005	<0.005	0.00085	<0.005	<0.005	<0.0001	0.0058	<0.0005	0.00022	0.151	<0.0001	<0.001	<0.05	0.000021	68.4	<0.001	<0.0002
RSEM-R6E-EOP	11/8/2022 10:30	BGT300	M	C289111	0.00075	3.8	<0.00002	7.01	0.137	20.1	<0.00001	<0.005	<0.005	0.00087	<0.005	<0.005	<0.0001	0.0097	<0.0005	0.00022	0.144	<0.0001	<0.001	<0.05	0.000031	70.5	<0.001	<0.0002
RSEM-R6E-EOP	11/9/2022 10:40	BGW281	M	C289508	0.00083	3.83	<0.00002	6.81	0.137	19.7	<0.00001	<0.005	<0.005	0.00085	<0.005	0.0066	<0.0001	0.0117	<0.0005	0.0002	0.149	<0.0001	<0.001	<0.05	0.000023	69.4	<0.001	<0.0002
RSEM-R6E-EOP	11/9/2022 10:50	BGW282	D	C289508	0.00076	3.79	<0.00002	7.03	0.152	20.6	<0.00001	<0.005	<0.005	0.00085	<0.005	<0.005	<0.0001	0.0113	<0.0005	0.00019	0.145	<0.0001	<0.001	<0.05	0.000022	70.0	<0.001	<0.0002
RSEM-R6E-EOP	11/10/2022 10:50	BGV715	M	C289423	0.0008	3.91	<0.00002	6.84	0.134	19.0	<0.00001	<0.005	<0.005	0.00078	<0.005	<0.005	0.00011	0.013	<0.0005	0.00018	0.132	<0.0001	<0.001	<0.05	0.000021	68.7	<0.001	<0.0002
RSEM-R6E-EOP	11/11/2022 10:50	BHA031	M	C290104	0.00077	3.77	<0.00002	6.72	0.138	17.0	<0.00001	<0.005	0.0058	0.00079	<0.005	<0.005	<0.0001	0.0078	<0.0005	0.00017	0.131	<0.0001	<0.001	<0.05	0.000014	70.0	<0.001	<0.0002
RSEM-R6E-EOP	11/11/2022 11:00	BHA032	D	C290104	0.00077	3.7	<0.00002	7.20	0.148	18.6	<0.00001	<0.005	<0.005	0.00082	<0.005	<0.005	<0.0001	0.0084	<0.0005	0.00017	0.134	<0.0001	<0.001	<0.05	0.000015	69.0	<0.001	<0.0002
RSEM-R6E-EOP	11/12/2022 10:30	BHA061	M	C290112	0.00074	3.68	<0.00002	7.35	0.147	18.3	<0.00001	<0.005	<0.005	0.00086	<0.005	<0.005	<0.0001	0.0063	<0.0005	0.00018	0.131	<0.0001	<0.001	<0.05	0.000015	67.6	<0.001	<0.0002
RSEM-R6E-EOP	11/13/2022 11:10	BHA077	M	C290117	0.0008	3.54	<0.00002	7.13	0.141	13.4	<0.00001	<0.005	<0.005	0.00086	<0.005	<0.005	<0.0001	0.005	<0.0005	0.00018	0.127	<0.0001	<0.001	<0.05	0.000014	67.6	<0.001	<0.0002
RSEM-R6E-EOP	11/14/2022 10:50	BHC286	M	C290544	0.00097	3.92	<0.00002	8.65	0.156	18.3	<0.00001	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	0.0037	<0.0005	0.00019	0.131	<0.0001	<0.001	<0.05	0.000011	70.2	<0.001	<0.0002
RSEM-R6E-EOP	11/15/2022 10:50	BHD949	M	C290817	0.001	3.87	<0.00002	9.01	0.145	17.0	0.000011	<0.005	<0.005	0.00086	<0.005	<0.005	<0.0001	0.0033	<0.0005	0.0002	0.13	<0.0001	<0.001	<0.05	0.000012	73.0	<0.001	<0.0002
RSEM-R6E-EOP	11/15/2022 11:00	BHD950	D	C290817	0.00102	3.85	<0.00002	9.20	0.15	17.7	0.00001	<0.005	<0.005	0.00088	<0.005	<0.005	<0.0001	0.0038	<0.0005	0.00019	0.132	<0.0001	<0.001	<0.05	0.000013	74.0	<0.001	<0.0002
RSEM-R6E-EOP	11/16/2022 12:10	BHF925	M	C291159	0.00108	3.85	<0.00002	8.32	0.142	17.9	<0.00001	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	0.0033	<0.0005	0.0002	0.132	<0.0001	<0.001	<0.05	0.000014	74.7	<0.001	<0.0002
RSEM-R6E-EOP	11/17/2022 12:00	BHH895	M	C291494	0.00099	3.9	<0.00002	9.27	0.135	18.1	<0.00001	<0.005	<0.005	0.00087	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00021	0.128	<0.0001	<0.001	<0.05	0.000013	66.9	<0.001	<0.0002
RSEM-R6E-EOP	11/18/2022 11:00	BHI799	M	C291574	0.00094	3.88	<0.00002	9.16	0.139	19.1	<0.00001	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.0002	0.126	<0.0001	<0.001	<0.05	0.00001	69.6	<0.001	<0.0002
RSEM-R6E-EOP	11/19/2022 12:00	BHL409	M	C291899	0.00094	3.56	<0.00002	8.12	0.141	17.2	<0.00001	<0.005	<0.005	0.00097	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00019	0.14	<0.0001	<0.001	<0.05	0.000011	69.0	<0.001	<0.0002
RSEM-R6E-EOP	11/19/2022 12:10	BHL410	D	C291899	0.00095	3.53	<0.00002	7.79	0.133	16.4	<0.00001	<0.005	<0.005	0.00092	<0.005	<0.005	0.0001	<0.003	<0.0005	0.00017	0.13	<0.0001	<0.001	<0.05	0.00001	70.0	<0.001	<0.0002
RSEM-R6E-EOP	11/20/2022 11:30	BHL416	M	C291901	0.00095	3.56	<0.00002	8.25	0.137	16.1	<0.00001	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00018	0.137	<0.0001	<0.001	<0.05	0.000011	70.7	<0.001	<0.0002
RSEM-R6E-EOP	11/21/2022 11:15	BHL420	M	C291903	0.00095	3.49	<0.00002	8.56	0.138	15.9	0.000014	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00019	0.137	<0.0001	<0.001	<0.05	0.000012	69.9	<0.001	<0.0002
RSEM-R6E-EOP	11/22/2022 12:15	BHR288	M	C292931	0.00103	4.12	<0.00002	9.41	0.147	18.8	0.000011	<0.005	<0.005	0.0009	<0.005	<0.005	<0.0001	0.003	<0.0005	0.00018	0.139	<0.0001	<0.001	<0.05	0.000012	72.5	<0.001	<0.0002
RSEM-R6E-EOP	11/23/2022 15:15	BHR239	M	C292918	0.00101	3.96	<0.00002	9.51	0.147	17.7	<0.00001	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	0.0036	<0.0005	0.00018	0.135	<0.0001	<0.001	<0.05	0.000014	71.7	<0.001	<0.0002
RSEM-R6E-EOP	11/24/2022 13:30	BHS968	M	C293245	0.00101	3.96	<0.00002	9.31	0.145	18.6	<0.00001	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	0.0037	<0.0005	0.00018	0.135	<0.0001	<0.001	<0.05	0.000012	70.9	<0.001	<0.0002
RSEM-R6E-EOP	11/24/2022 13:45	BHS970	D	C293245	0.00095	3.71	<0.00002	9.42	0.148	18.9	<0.00001	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	0.0032	<0.0005	0.00018	0.141	<0.0001	<0.001	<0.05	0.000011	71.6	<0.001	<0.0002
RSEM-R6E-EOP	11/25/2022 10:30	BHS972	M	C293246	0.00094	3.77	<0.00002	9.25	0.144	18.4	0.00001	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	0.0035	<0.0005	0.00019	0.135	<0.0001	<0.001	<0.05	<0.00001	71.0	<0.001	<0.0002
RSEM-R6E-EOP	11/26/2022 12:00	BHX191	M	C293769	0.00126	3.56	<0.00002	10.5	0.164	20.5	0.000013	<0.005	<0.005	0.00098	<0.005	<0.005	<0.0001	0.0039	<0.0005	0.00023	0.141	<0.0001	<0.001	<0.05	0.000011	68.5	<0.001	<0.0002
RSEM-R6E-EOP	11/27/2022 13:30	BHX163	M	C293759	0.0012	3.64	<0.00002	11.2	0.17	22.1	0.000011	<0.005	<0.005	0.00101	<0.005	0.0109	<0.0001	0.0041	<0.0005	0.00024	0.138	<0.0001	<0.001	<0.05	<0.00001	70.5	<0.001	<0.0002
RSEM-R6E-EOP	11/28/2022 10:00	BHX165	M	C293760	0.00119	3.57	<0.00002	11.6	0.173	21.4	0.000015	<0.005	<0.005	0.00102	<0.005	<0.005	<0.0001	0.0033	<0.0005	0.00024	0.139	<0.0001	<0.001	<0.05	<0.00001	70.9	<0.001	<0.0002
RSEM-R6-EP-US-SD	2/9/2022 13:55	AOK262	M	C208577	0.0018	45.8	0.000576	17.2	0.457	13.3	0.000382	<0.005	0.25	0.00456	0.0997	0.384	0.00058	0.0309	<0.0005	0.00038	0.069	<0.0001	<0.001	<0.05	<0.00001	30.6	<0.001	<0.0002
RSEM-R6-EP-US-SD	4/22/2022 12:15	ARX723	M	C226550	0.00159	8.31	0.000093	57.7	0.543	79.0	0.000117	<0.005	0.0648	0.00235	0.013	0.0923	0.00045	0.025	<0.0005	0.0003	0.054	<0.0001	<0.001	0.081	0.00009	94.4	<0.001	0.00301
RSEM-R6-EP-US-SD	4/27/2022 16:30	ASH199	M	C228648	0.00784	175	0.00476	48.6	3.39	95	0.00321	<0.025	0.501	0.029	0.498	2.76	0.00354	0.0149	0.00063	0.00047	0.072	<0.0001	<0.001	0.105	0.000045	118	<0.001	0.00054
RSEM-R6-EP-US-SD	5/10/2022 11:55	ASX006	M	C231638	0.00182	5.12	0.00002	69.1	0.641	129	0.000049	<0.005	0.0295	0.00846	<0.005	0.838	0.00039	0.114	<0.0005	0.00012	0.042	<0.0001	<0.001	0.124	0.000547	116	<0.001	0.0391
RSEM-R6E-SP	1/1/2022 13:00	FJ2200029-001	M	FJ2200029	0.00190	5.56	<0.000010	82.1	0.727	95.5	<0.000010	0.0002	0.00071	0.00370	<0.00050	0.0127	<0.00020	0.0050	0.00041	0.00062	0.153	<0.000100	<0.000050	0.114	0.0000176	132	<0.00050	0.00057
RSEM-R6E-SP	1/7/2022 12:30	FJ2200035-001	M	FJ2200035	0.00156	5.47	<0.000010	84.3	0.713	87.5	0.000012	0.0001	<0.00120	0.00395	<0.00050	0.0150	<0.00020	0.0051	0.00042	0.00066	0.151	<0.000100	<0.000050	0.118	0.0000231	162	<0.00050	0.00190
RSEM-R6E-SP	1/7/2022 12:40	FJ2200035-002	D	FJ2200035	0.00169	5.79	<0.000010	83.9	0.708	92.4	0.000013	0.0002	0.00032	0.00382	<0.00050	0.0138	<0.00020	0.0045	0.00045	0.00063	0.157	<0.000100	<0.000050	0.120	0.0000302	168	<0.00050	0.00160
RSEM-R6E-SP	1/11/2022 16:00	FJ2200088-002	M	FJ2200088	0.000582	5.95	<0.000010	87.5	0.787	96.1	<0.000010	0.00010	0.00048	0.00379	<0.00050	0.0152	<0.00020	0.0068	0.00045	0.00087	0.163	<0.000100	<0.000050	0.126	0.0000226	141	<0.00050	0.00496
RSEM-R6E-SP	1/16/2022 12:00	FJ2200109-001	M	FJ2200109	0.00166	6.13	<0.000010	87.4	0.710	86.4	<0.000010	0.0001	<0.00120	0.00368	<0.00050	0.0063	0.00021	0.0052	0.00054	0.00054	0.154	<0.000100	<0.000050	0.135	<0.0000100	136	<0.00050	0.00286
RSEM-R6E-SP	1/20/2022 12:00	FJ2200187-002	M	FJ2200187	0.00129	5.96	<0.000010	88.7	0.729	86.9	<0.000010	0.0002	0.00074	0.00376	0.00051	0.0113	<0.00020	0.0065	0.00057	0.00083	0.164	<0.000100	<0.000050	0.126	0.0000147	138	<0.00050	0.00617
RSEM-R6E-SP	1/22/2022 16:20	FJ2200193-004	M	FJ2200193	0.00112	6.57	0.000011	55.2	0.425	54.4	0.000025	0.0006	0.0306	0.00208	0.00343	0.0185	0.00077	0.0132	0.00040	0.00076	0.0810	<0.000100	<0.000050	0.072	0.0000107	84.6	<0.00050	0.00263
RSEM-R6E-SP	1/24/2022 13:05	FJ2200237-002	M	FJ2200237	0.000553	2.73	<0.000010	17.3	0.174	18.6	0.000018	0.0005	0.0125	0.000701	0.00242	0.0104	0.00032	0.0190	0.00026	0.00047	0.057	<0.000100	<0.000050	0.024	0.0000174	35.5	0.00055	0.00099
RSEM-R6E-SP	1/25/2022 15:50	ANP163	M	C204905	0.00057	3.14	<0.00002	14.0	0.164	10.5	0.000016	<0.005	0.0251	0.00077	<0.005	0.0068	0.00064	0.0174	<0.0005	0.00031	0.056	<0.0001	<0.001	<0.05	0.000021	38.2	<0.001	0.00132
RSEM-R6E-SP	2/3/2022 11:00	AOC176	M	C207302	0.00111	3.46	<0.00002	34.6	0.301	28.4	<0.00001	<0.005	<0.005	0.0013	<0.005	0.0051	<0.0001	0.0071	<0.0005	0.00041	0.083	<0.0001	<0.001	0.055	<0.00001	74.2	<0.001	0.0014
RSEM-R6E-SP	2/7/2022 5:30	AOE527	M	C207636	0.00126	3.61	<0.00002	39.9	0.318	39.2	<0.00001	<0.005	<0.005	0.00137	<0.005	0.0087	<0.0001	0.0081	<0.0005	0.00054	0.085	0.00013	<0.001	0.064	0.000015	80.9	<0.001	0.00138
RSEM-R6E-SP	2/9/2022 13:35	AOK258	M	C208577	0.00092	3.88	<0.00002	32.5	0.279	26.9	0.000021	<0.005	0.0108	0.00103	<0.005	0.0076	0.00031	0.0055	<0.0005	0.00038	0.075	<0.0001	<0.001	0.058	<0.00001	62.1	<0.001	0.00182
RSEM-R6E-SP	2/10/2022 18:00	AOM661	M	C208923	0.00043	2.5	<0.00002	18.1	0.185	13.3	0.000018	<0.005	0.0108	0.00082	<0.005	<0.005	0.00018	0.0275	<0.0005	0.00025	0.052	<0.0001	<0.001	<0.05	<0.00001	39.3	<0.001	0.00037
RSEM-R6E-SP	2/17/2022 15:45	AOW645	M	C210704	0.00045	2.26	<0.00002	23.1	0.359	24.5	<0.00001	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	0.0213	<0.0005	0.00037	0.077	<0.0001	<0.001	<0.05	0.00001	45.5	<0.001	0.00051
RSEM-R6E-SP	2/19/2022 11:55	AOX370	M	C210838	0.00054	2.51	<0.00002	25.4	0.31	27.1	0.000013	<0.005	<0.005	0.00099	<0.005	0.0051	<0.0001	0.0193	<0.0005	0.00036	0.08	<0.0001	<0.001	<0.05	0.000014	53.1	<0.001	0.00054
RSEM-R6E-SP	2/26/2022 11:00	API826	M	C212869	0.00058	2.4	<0.00002	28.5	0.348	34.2	<0.00001	<0.005	<0.005	0.00102	<0.005	<0.005	<0.0001	0.0154	<0.0005	0.00032	0.091	<0.0001	<0.001	<0.05	<0.00001	92.3	<0.001	0.00067
RSEM-R6E-SP	3/3/2022 15:15	APQ572	M	C214168	0.0005	2.17	<0.00002	31.0	0.372	41.4	<0.00001	<0.005	<0.005	0.00113	<0.005	<0.005	0.00012	0.008	<0.0005	0.00033	0.087	<0.0001	<0.001	<0.05	<0.00001	78.5	<0.001	0.00098
RSEM-R6E-SP	3/5/2022 14:45	APS819	M	C214509	0.0006	2.55	<0.00002	30.2	0.347	25.0	<0.00001	<0.005	<0.005	0.00097	<0.005	<0.005	<0.0001	0.0074	<0.0005	0.00036	0.09	<0.0001	<0.001	<0.05	<0.00001	78.4	<0.001	0.00107
RSEM-R6E-SP	3/7/2022 12:05	APU817	M	C214856	0.00065	2.57	<0.00002	31.2	0.355	27.9	<0.00001	<0.005	<0.005	0.00099	<0.005	<0.005	<0.0001	0.0062	<0.0005	0.00027	0.088	<0.0001	<0.001	0.052	<0.00001	74.6	<0.001	0.00089
RSEM-R6E-SP	3/11/2022 11:45	APZ041	M	C215890	0.00059	2.77	<0.00002	33.4	0.427	35.4	<0.00001	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	0.005	<0.0005	0.00045	0.107	<0.0001	<0.001	<0.05	<0.00001	81.8	<0.001	0.00118
RSEM-R6E-SP	3/14/2022 11:40	AQB611	M	C216399	0.00078	2.55	<0.00002	33.5	0.431	35.8	<0.00001	<0.005	<0.005	0.00129	<0.005	0.005	<0.0001	0.0034	<0.0005	0.00051	0.108	<0.0001	<0.001	<0.05	<0.00001	72.6	<0.001	0.0015
RSEM-R6E-SP	3/19/2022 13:50	AQJ970	M	C218236	0.00078	7.99	0.000021	22.2	0.358	29.8	0.000048	<0.005	0.0245	0.00148	<0.005	0.0148	0.00043	0.0122	<0.0005	0.00034	0.074	<0.0001	<0.001	<0.05	0.000036	58.0	<0.001	0.00127
RSEM-R6E-SP	3/28/2022 11:10	AQU417	M	C220399	0.00089	2.74	<0.00002	14.9	0.188	21.7	0.000017	<0.005	0.0069	0.0011	<0.005	0.0081	0.00015	0.0146	<0.0005	0.00043	0.085	<0.0001	<0.001	<0.05	0.000017	40.1	<0.001	0.00092
RSEM-R6E-SP	11/29/2022 10:50	BIA657	M	C294441	0.00121	3.56	<0.00002	12.4	0.182	22.5	0.000017	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	0.0039	<0.0005	0.00023	0.14	<0.0001	<0.001	<0.05	<0.00001	74.8	<0.001	<0.0002
RSEM-R6E-SP	12/3/2022 11:50	BII771	M	C295634	0.00096	3.45	<0.00002	13.8	0.202	22.7	0.000013	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	0.0035	<0.0005	0.00032	0.163	<0.0001	<0.001	<0.05	0.000011	77.7	<0.001	<0.0002
RSEM-R6E-SP	12/7/2022 12:30	BIR867	M	C297052	0.00144	3.78	<0.00002	14.3	0.209	24.9	0.000015	<0.005	<0.005	0.00113	<0.005	0.006	<0.0001	<0.003	<0.0005	0.00035	0.17	<0.0001	<0.001	<0.05	<0.00001	87.4	<0.001	<0.0002
RSEM-R6E-SP	12/9/2022 11:45	BIT657	M	C297341	0.00154	3.79	<0.00002	14.3	0.201	23.5	0.000014	<0.005	<0.005	0.00109	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00036	0.167	<0.0001	<0.001	<0.05	<0.00001	85.9	<0.001	<0.0002
RSEM-R6E-SP	12/15/2022 12:45	BJJ046	M	C299557	0.00135	4.36	<0.00002	15.7	0.23	26.1	0.000017	<0.005	<0.005	0.00124	<0.005	0.0068	<0.0001	<0.003	<0.0005	0.00048	0.184	<0.0001	<0.001	<0.05	<0.00001	86.7	<0.001	<0.0002

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
RSEM-R6E-SP	12/18/2022 12:45	BJL803	M	C299943	0.00175	4.49	<0.00002	16.7	0.244	27.7	0.000019	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00046	0.181	<0.0001	<0.001	<0.05	0.000011	96.9	<0.001	<0.0002
RSEM-R6E-SP	12/20/2022 10:30	BJP133	M	C2A0603	0.00173	4.39	<0.00002	16.8	0.213	27.4	0.000017	<0.005	<0.005	0.00121	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00046	0.192	<0.0001	<0.001	<0.05	<0.00001	92.0	<0.001	<0.0002
RSEM-R6E-SP	12/23/2022 12:15	BJQ105	M	C2A0819	0.00213	4.64	<0.00002	18.1	0.27	27.6	0.000019	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00055	0.206	<0.0001	<0.001	<0.05	<0.00001	92.0	<0.001	<0.0002
RSEM-R6E-SP	12/27/2022 12:30	BJS996	M	C2A1469	0.00093	5.06	<0.00002	21.1	0.238	30.0	0.000017	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	0.0047	<0.0005	0.00067	0.224	<0.0001	<0.001	<0.05	<0.00001	101	<0.001	<0.0002
RSEM-R6E-SP	12/31/2022 12:45	BJU300	M	C300112	0.00056	6.09	<0.00002	23.6	0.323	28.7	0.000016	<0.005	<0.005	0.00138	<0.005	0.0209	<0.0001	<0.003	<0.0005	0.0008	0.216	<0.0001	<0.001	<0.05	<0.00001	105	<0.001	0.00027
RSEM-R6E-SP-US	4/10/2022 13:00	ARK080	M	C223661	0.00175	3.66	<0.00002	52.0	0.591	92.5	0.000028	<0.005	0.0056	0.00228	<0.005	0.139	0.00018	0.0697	<0.0005	0.00012	0.039	<0.0001	<0.001	0.095	0.00048	129	<0.001	0.0155
RSEM-R6W-EOP	1/4/2022 12:00	FJ2200037-001	M	FJ2200037	0.00210	6.05	<0.000010	116	0.183	64.6	<0.000010	0.0005	0.00286	0.00274	0.00316	0.0842	<0.00020	0.0264	0.00174	0.00122	0.037	<0.000100	<0.000050	0.116	0.0000304	34.7	0.00298	0.00028
RSEM-R6W-EOP	1/20/2022 10:45	FJ2200187-001	M	FJ2200187	0.00164	6.54	<0.000010	100	0.132	65.6	<0.000010	0.001	<0.00540	0.00283	0.00226	<0.0030	<0.00020	0.0160	0.00149	0.00125	0.037	<0.000100	<0.000050	0.118	<0.0000100	21.2	0.00078	0.00022
RSEM-R6W-EOP	1/21/2022 10:20	FJ2200183-001	M	FJ2200183	0.00166	6.75	<0.000010	106	0.138	69.6	<0.000010	0.0009	0.00613	0.00286	0.00232	<0.0030	<0.00020	0.0144	0.00147	0.00126	0.042	<0.000100	<0.000050	0.124	<0.0000100	21.2	0.00089	0.00022
RSEM-R6W-EOP	1/22/2022 14:50	FJ2200193-001	M	FJ2200193	0.00164	6.87	<0.000010	111	0.145	69.8	<0.000010	0.0009	0.00320	0.00319	0.00206	<0.0030	<0.00020	0.0148	0.00156	0.00127	0.051	<0.000100	<0.000050	0.113	0.0000060	20.4	0.00084	0.00021
RSEM-R6W-EOP	1/23/2022 10:55	FJ2200194-001	M	FJ2200194	0.00159	6.37	<0.000010	102	0.138	62.0	<0.000010	0.0009	0.00378	0.00297	0.00198	0.0044	0.00032	0.0157	0.00149	0.00128	0.051	<0.000100	<0.000050	0.117	<0.0000100	20.1	0.00084	<0.00010
RSEM-R6W-EOP	1/24/2022 12:00	FJ2200237-001	M	FJ2200237	0.00132	5.16	<0.000010	80.4	0.158	53.1	<0.000010	0.0009	0.00161	0.00232	0.00143	0.0035	<0.00020	0.0120	0.00109	0.00100	0.052	<0.000100	<0.000050	0.083	0.0000103	28.0	0.00085	0.00046
RSEM-R6W-EOP	1/25/2022 16:00	ANP164	M	C204905	0.00129	3.96	<0.00002	58.9	0.161	30.3	<0.00001	<0.005	<0.005	0.0021	<0.005	<0.005	<0.0001	0.0098	0.00081	0.00063	0.05	<0.0001	<0.001	0.073	0.000012	31.3	<0.001	0.00057
RSEM-R6W-EOP	1/26/2022 13:55	ANQ893	M	C205279	0.00138	4.54	<0.00002	67.4	0.171	35.0	<0.00001	<0.005	<0.005	0.00211	<0.005	<0.005	<0.0001	0.0088	0.00093	0.00078	0.048	<0.0001	<0.001	0.079	0.00001	32.4	<0.001	0.00056
RSEM-R6W-EOP	1/26/2022 14:05	ANQ894	D	C205279	0.0014	4.63	<0.00002	67.8	0.172	34.5	<0.00001	<0.005	<0.005	0.00212	<0.005	<0.005	<0.0001	0.009	0.00091	0.00082	0.048	<0.0001	<0.001	0.081	<0.00001	32.7	<0.001	0.00056
RSEM-R6W-EOP	1/27/2022 15:50	ANS643	M	C205612	0.00151	4.66	<0.00002	71.4	0.156	39.3	<0.00001	<0.005	<0.005	0.00221	<0.005	<0.005	<0.0001	0.0101	0.00102	0.00073	0.043	<0.0001	<0.001	0.084	0.000011	30.1	<0.001	0.00049
RSEM-R6W-EOP	1/27/2022 16:00	ANS644	D	C205612	0.00154	4.86	<0.00002	73.5	0.16	45.4	<0.00001	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	0.0096	0.00103	0.00075	0.043	<0.0001	<0.001	0.083	0.000014	30.7	<0.001	0.00049
RSEM-R6W-EOP	1/29/2022 10:55	ANV925	M	C206078	0.00162	5.13	<0.00002	77.8	0.159	61.8	<0.00001	<0.005	<0.005	0.00231	<0.005	<0.005	<0.0001	0.0083	0.00099	0.00084	0.045	<0.0001	<0.001	0.081	0.000013	29.7	<0.001	0.00048
RSEM-R6W-EOP	1/30/2022 11:20	ANV924	M	C206077	0.00159	4.99	<0.00002	83.5	0.149	69.1	<0.00001	<0.005	<0.005	0.00238	<0.005	<0.005	<0.0001	0.0113	0.00106	0.00086	0.035	<0.0001	<0.001	0.087	0.000021	27.7	0.001	0.00043
RSEM-R6W-EOP	1/31/2022 10:35	ANV920	M	C206074	0.00161	5.05	<0.00002	84.8	0.157	68.3	<0.00001	<0.005	<0.005	0.00238	<0.005	<0.005	<0.0001	0.0119	0.00112	0.00086	0.037	<0.0001	<0.001	0.092	0.00002	29.3	0.0011	0.00044
RSEM-R6W-EOP	2/7/2022 5:00	AOE528	M	C207636	0.0018	5.31	<0.00002	89.0	0.152	71.7	<0.00001	<0.005	<0.005	0.00227	<0.005	0.0058	<0.0001	0.02	0.00121	0.00085	0.028	<0.0001	<0.001	0.112	<0.00001	32.2	0.0016	0.00024
RSEM-R6W-EOP	2/8/2022 11:45	AOI290	M	C208265	0.00231	5.03	<0.00002	74.7	0.156	66.2	<0.00001	<0.005	<0.005	0.00219	<0.005	0.005	<0.0001	0.0163	0.00117	0.00067	0.025	<0.0001	<0.001	0.088	<0.00001	32.6	0.0024	0.00046
RSEM-R6W-EOP	2/9/2022 11:10	AOK259	M	C208577	0.00178	4.41	<0.00002	55.2	0.298	56.2	0.000014	<0.005	<0.005	0.00185	<0.005	<0.005	0.00014	0.0214	0.00069	0.0005	0.069	<0.0001	<0.001	0.089	0.000012	65.5	<0.001	0.00128
RSEM-R6W-EOP	2/10/2022 10:30	AOM663	D	C208923	0.00137	3.41	<0.00002	31.3	0.223	36.0	0.000031	<0.005	0.007	0.00103	<0.005	<0.005	<0.0001	0.0166	0.00077	0.00038	0.09	<0.0001	<0.001	<0.05	0.000034	60.0	<0.001	0.00106
RSEM-R6W-EOP	2/10/2022 22:20	AOM662	M	C208923	0.00148	3.58	<0.00002	34.4	0.242	36.7	0.00004	<0.005	0.009	0.00114	<0.005	0.007	0.00013	0.0188	0.00078	0.00039	0.092	<0.0001	<0.001	<0.05	0.000046	60.3	<0.001	0.00105
RSEM-R6W-EOP	2/11/2022 11:25	AOM648	M	C208915	0.00215	3.03	<0.00002	31.9	0.222	45.1	0.000018	<0.005	<0.005	0.00074	<0.005	<0.005	<0.0001	0.0133	0.00062	0.0003	0.062	<0.0001	<0.001	0.05	0.000033	53.2	<0.001	0.00076
RSEM-R6W-EOP	2/12/2022 13:30	AOP214	M	C209346	0.00305	2.77	<0.00002	32.2	0.192	53.3	<0.00001	<0.005	<0.005	0.00065	<0.005	<0.005	<0.0001	0.0122	0.00084	0.00034	0.054	<0.0001	<0.001	0.051	0.000016	52.9	0.0013	0.0007
RSEM-R6W-EOP	2/12/2022 13:40	AOP215	D	C209346	0.003	2.8	<0.00002	33.7	0.199	54.5	<0.00001	<0.005	<0.005	0.00066	<0.005	<0.005	<0.0001	0.0146	0.00073	0.00038	0.053	<0.0001	<0.001	<0.05	0.000036	52.8	0.0013	0.00066
RSEM-R6W-EOP	2/13/2022 10:45	AOP246	M	C209355	0.00318	2.68	<0.00002	31.5	0.19	57.4	<0.00001	<0.005	<0.005	0.00073	<0.005	<0.005	<0.0001	0.0125	0.00075	0.00037	0.046	<0.0001	<0.001	<0.05	0.000034	49.2	0.0013	0.00056
RSEM-R6W-EOP	2/14/2022 12:50	AOQ979	M	C209670	0.00319	2.47	<0.00002	28.3	0.172	50.0	<0.00001	<0.005	<0.005	0.00098	<0.005	<0.005	<0.0001	0.0196	0.00068	0.00034	0.038	<0.0001	<0.001	<0.05	0.00001	44.6	0.0013	0.00048
RSEM-R6W-EOP	2/15/2022 15:35	AOS724	M	C210043	0.0031	2.59	<0.00002	33.3	0.263	65.1	<0.00001	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	0.0183	0.00099	0.00054	0.054	<0.0001	<0.001	<0.05	0.000022	48.0	0.0016	0.00064
RSEM-R6W-EOP	2/16/2022 10:40	AOU840	M	C210450	0.00328	2.61	<0.00002	32.8	0.258	61.5	<0.00001	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	0.0706	0.00094	0.0006	0.054	<0.0001	<0.001	<0.05	0.000023	44.8	0.0016	0.00074
RSEM-R6W-EOP	2/17/2022 14:15	AOW646	M	C210704	0.00341	2.74	<0.00002	34.2	0.279	65.6	<0.00001	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	0.0253	0.00079	0.00058	0.048	<0.0001	<0.001	<0.05	0.000024	44.3	0.0014	0.00065
RSEM-R6W-EOP	2/17/2022 14:25	AOW647	D	C210704	0.00346	2.82	<0.00002	34.4	0.283	67.2	<0.00001	<0.005	<0.005	0.00139	<0.005	<0.005	0.00025	0.0257	0.00095	0.00053	0.051	<0.0001	<0.001	<0.05	0.000033	43.1	0.0013	0.00066
RSEM-R6W-EOP	2/18/2022 13:20	AOW653	M	C210707	0.00384	2.96	<0.00002	35.4	0.288	69.5	<0.00001	<0.005	<0.005	0.00152	<0.005	<0.005	<0.0001	0.0267	0.00085	0.00057	0.043	<0.0001	<0.001	0.052	0.000024	45.3	<0.001	0.00089
RSEM-R6W-EOP	2/19/2022 10:30	AOX371	M	C210838	0.00381	2.76	<0.00002	35.4	0.222	64.0	<0.00001	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	0.025	0.00076	0.00067	0.041	<0.0001	<0.001	<0.05	0.000016	44.4	0.0012	0.0008
RSEM-R6W-EOP	2/20/2022 15:20	AOY870	M	C211049	0.00367	3.02	<0.00002	37.4	0.216	64.2	0.000015	<0.005	<0.005	0.0015	<0.005	<0.005	<0.0001	0.0242	0.0007	0.00068	0.039	<0.0001	<0.001	<0.05	0.000014	46.4	0.0011	0.00091
RSEM-R6W-EOP	2/20/2022 15:30	AOY871	D	C211049	0.00374	3.05	<0.00002	37.9	0.213	65.4	0.000012	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	0.0242	0.0007	0.00068	0.039	<0.0001	<0.001	<0.05	0.000016	46.4	0.0011	0.00092
RSEM-R6W-EOP	2/21/2022 11:00	AOY875	M	C211051	0.00377	3.2	<0.00002	39.7	0.214	66.1	0.000011	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	0.0117	0.00073	0.00069	0.039	<0.0001	<0.001	<0.05	0.00002	43.4	0.0011	0.00093
RSEM-R6W-EOP	2/22/2022 10:30	APE539	M	C211930	0.00336	3.17	<0.00002	40.3	0.206	61.7	<0.00001	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	0.0265	0.00073	0.00077	0.038	<0.0001	<0.001	<0.05	0.000016	40.8	0.0013	0.00088
RSEM-R6W-EOP	2/23/2022 14:00	APE585	M	C211939	0.0033	3.38	<0.00002	43.6	0.201	62.8	<0.00001	<0.005	<0.005	0.0016	<0.005	<0.005	<0.0001	0.0311	0.00073	0.00081	0.033	<0.0001	<0.001	<0.05	0.000015	37.5	0.0012	0.00083
RSEM-R6W-EOP	2/24/2022 13:10	APF947	M	C212235	0.00291	3.42	<0.00002	42.9	0.187	57.2	<0.00001	<0.005	<0.005	0.00148	<0.005	<0.005	<0.0001	0.0151	0.00069	0.0008	0.03	<0.0001	<0.001	<0.05	0.000012	34.4	0.0011	0.00076
RSEM-R6W-EOP	2/25/2022 10:00	APF955	M	C212240	0.00276	3.3	<0.00002	44.7	0.172	55.0	<0.00001	<0.005	<0.005	0.00127	<0.005	<0.005	<0.0001	0.011	0.00067	0.00076	0.025	<0.0001	<0.001	<0.05	0.000011	31.8	0.0011	0.00061
RSEM-R6W-EOP	2/26/2022 13:00	API827	M	C212869	0.00276	2.82	<0.00002	44.4	0.167	61.3	0.000011	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	0.0113	0.00063	0.00062	0.027	<0.0001	<0.001	0.057	0.000012	45.1	<0.001	0.00044
RSEM-R6W-EOP	2/27/2022 11:00	API844	M	C212877	0.00269	2.78	<0.00002	43.9	0.159	60.5	<0.00001	<0.005	<0.005	0.00076	<0.005	<0.005	<0.0001	0.0098	0.00063	0.00054	0.027	<0.0001	<0.001	0.056	0.000011	45.7	<0.001	0.00038
RSEM-R6W-EOP	2/28/2022 10:00	API841	M	C212874	0.00265	2.77	<0.00002	42.8	0.158	60.2	<0.00001	<0.005	<0.005	0.00069	<0.005	<0.005	<0.0001	0.0088	0.00059	0.00049	0.026	<0.0001	<0.001	0.054	0.00001	45.9	<0.001	0.00035
RSEM-R6W-EOP	3/1/2022 11:45	APN031	M	C213536	0.0029	2.6	<0.00002	44.4	0.158	69.2	<0.00001	<0.005	<0.005	0.0006	<0.005	<0.005	0.00012	0.0077	0.0006	0.0004	0.025	<0.0001	<0.001	0.054	<0.00001	45.2	0.001	0.00034
RSEM-R6W-EOP	3/1/2022 11:55	APN032	D	C213536	0.00298	2.72	<0.00002	45.6	0.163	71.3	<0.00001	<0.005	<0.005	0.00061	<0.005	<0.005	0.00011	0.0103	0.00059	0.0004	0.026	<0.0001	<0.001	0.052	0.000023	44.1	0.001	0.00034
RSEM-R6W-EOP	3/4/2022 11:15	APQ571	M	C214167	0.00296	2.56	<0.00002	44.4	0.16	70.6	<0.00001	<0.005	<0.005	0.00062	<0.005	<0.005	<0.0001	0.0063	0.00055	0.00049	0.022	<0.0001	<0.001	0.062	<0.00001	39.9	0.0012	0.0004
RSEM-R6W-EOP	3/5/2022 13:20	APS820	M	C214509	0.00285	3.29	<0.00002	49.2	0.162	46.4	<0.00001	<0.005	<0.005	0.00068	<0.005	<0.005	<0.0001	0.0082	0.00058	0.00046	0.021	<0.0001	<0.001	0.058	<0.00001	36.6	0.0014	0.0004
RSEM-R6W-EOP	3/5/2022 13:30	APS821	D	C214509	0.00295	3.37	<0.00002	50.0	0.163	47.2	<0.00001	<0.005	<0.005	0.0007	<0.005	<0.005	<0.0001	0.008	0.00057	0.00047	0.021	<0.0001	<0.001	0.058	<0.00001	36.0	0.0013	0.00039
RSEM-R6W-EOP	3/6/2022 10:30	APS817	M	C214508	0.00264	3.57	<0.00002	53.0	0.156	44.8	<0.00001	<0.005	<0.005	0.00078	<0.005	<0.005	<0.0001	0.0091	0.00061	0.0005	0.02	<0.0001	<0.001	0.062	<0.00001	33.6	0.0017	0.00034
RSEM-R6W-EOP	3/7/2022 10:55	APU818	M	C214856	0.00261	3.81	<0.00002	54.4	0.157	45.5	<0.00001	<0.005	<0.005	0.00085	<0.005	<0.005	<0.0001	0.0087	0.00068	0.00047	0.021	<0.0001	<0.001	0.064	<0.00001	32.4	0.0018	0.00032
RSEM-R6W-EOP	3/8/2022 18:30	APV994	M	C215206	0.00244	4.8	<0.00002	63.1	0.142	51.2	<0.00001	<0.005	<0.005	0.00146	<0.005	<0.005	<0.0001	0.0097	0.00105	0.00075	0.026	<0.0001	<0.001	0.083	<0.00001	28.9	0.003	0.00024
RSEM-R6W-EOP	3/9/2022 11:00	APZ007	M	C215885	0.00229	5.1	<0.00002	67.1	0.137	51.1	<0.00001	<0.005	<0.005	0.00166	<0.005	<0.005	<0.0001	0.0081	0.00109	0.00083	0.021	<0.0001	<0.001	0.07	<0.00001	24.0	0.0031	<0.0002
RSEM-R6W-EOP	3/10/2022 10:00	APZ000	M	C215884	0.00207	5.22	<0.00002	67.7	0.131	48.6	<0.00001	<0.005	<0.005	0.00173	<0.005	<0.005	<0.0001	0.0092	0.00112	0.00078	0.02	<0.0001	<0.001	0.067	<0.00001	21.9	0.0031	<0.0002
RSEM-R6W-EOP	3/11/2022 10:50	APZ042	M	C215890	0.0021	5.83	<0.00002	73.0	0.114	44.2	<0.00001	<0.005	<0.005	0.00195	<0.005	<0.005	<0.0001	0.0101	0.00128	0.00095	0.019	<0.0001	<0.001	0.077	<0.00001	19.3	0.0035	<0.0002
RSEM-R6W-EOP	3/12/2022 14:30	AQB294	M	C216354	0.00214	4.34	<0.00002	66.0	0.132	47.7	<0.00001	<0.005	<0.005	0.00168	<0.005	<0.005	<0.0001	0.008	0.00114	0.00081	0.021	<0.0001	<0.001	0.067	<0.00001	20.6	0.0028	0.00021
RSEM-R6W-EOP	3/12/2022 14:40	AQB295	D	C216354	0.00215	4.28	<0.00002	65.6	0.13	47.2	<0.00001	<0.005	<0.005	0.00163	<0.005	<0.005	<0.0001	0.0089	0.00117	0.00086	0.021	<0.0001	<0.001	0.066	<0.00001	20.9	0.0029	0.00022
RSEM-R6W-EOP	3/13/2022 11:15	AQB251	M	C216350	0.00184	4.81	<0.00002	71.6	0.11	41.9	<0.00001	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	0.0093	0.00127	0.00089	0.018	<0.0001	<0.001	0.069	<0.00001	16.2	0.0033	<0.0002
RSEM-R6W-EOP	3/14/2022 10:55	AQB612	M	C216399	0.00182	4.82	<0.00002	71.1	0.115	42.6	<0.00001	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	0.0095	0.00128	0.00091	0.019	<0.0001	<0.001	0.073	<0.00001	17.6	0.0031	<0.0002
RSEM-R6W-EOP	3/15/2022 7:00	AQE813	M	C217150	0.00205	4.58	<0.00002	69.8	0.121	44.0	<0.00001	<0.005	<0.005	0.00185	<0.005	<0.005	<0.0001	0.0085	0.00119	0.00076	0.019	<0.0001	<0.001	0.068	<0.00001	17.8	0.0031	<0.0002
RSEM-R6W-EOP	3/17/2022 11:00	AQH797	M	C217776	0.00191	4.17	<0.00002	62.7	0.13	44.0	<0.00001	<0.005	<0.005	0.00178	<0.005	<0.005	<0.0001	0.0083	0.00107	0.00079	0.028	<0.0001	<0.001	0.069	0.000019	24.5	0.0029	0.00028
RSEM-R6W-EOP	3/18/2022 6:00	AQH794	M	C217775	0.00159	4.58	<0.00002	56.0	0.214	43.7	0.000014	<0.005	0.006	0.00177	<0.005	<0.005	0.00014	0.014	0.00082	0.00069	0.055	<0.0001	<0.001	0.061	0.000039	38.2	0.0025	0.00056
RSEM-R6W-EOP	3/19/2022 14:05	AQJ971	M	C218236	0.00147	4.23	<0.00002	47.1	0.271	43.1	0.000015	<0.005	0.0093	0.00176	<0.005	0.0059	0.00021	0.0102	0.00075	0.0006	0.067	<0.0001	<0.001	0.055	0.000054	47.3	0.0019	0.00126
RSEM-R6W-EOP	3/20/2022 14:35	AQJ912	M	C218219	0.00137	3.16	<0.00002	36.4	0.286	37.5	<0.00001	<0.005	<0.005	0.00115	<0.005	0.0052	<0.0001	0.0085	0.00065	0.00053	0.072	<0.0001	<0.001	<0.05	0.00005	46.0	0.0016	0.00117
RSEM-R6W-EOP	3/21/2022 12:40	AQL265	M	C218465	0.00137	5.23	<0.00002	33.1	0.28	36.7	0.000028	<0.005	0.03	0.00143	<0.005	0.0218	0.00109	0.0071	0.00072	0.00046	0.072	<0.0001	<0.001	<0.05	0.000047	44.0	0.0017	0.00107
RSEM-R6W-EOP	3/22/2022 14:15	AQN715	M	C218958	0.00166	4.18	<0.00002	34.5	0.275	40.1	0.000017	<0.005	0.0154	0.00118	<0.005	0.0087	0.00048	0.0105	0.00075	0.00047	0.073	<0.0001	<0.001	0.052	0.00004	44.9	0.0018	0.00093

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
RSEM-R6W-EOP	3/23/2022 12:00	AQP257	M	C219363	0.00167	3.81	<0.00002	35.2	0.264	41.4	0.000014	<0.005	0.0131	0.00109	<0.005	0.0071	0.00028	0.0085	0.00078	0.00049	0.067	<0.0001	<0.001	<0.05	0.000038	40.9	0.002	0.00091
RSEM-R6W-EOP	3/24/2022 10:30	AQP981	M	C219524	0.00184	3.34	<0.00002	38.4	0.255	56.1	0.000011	<0.005	<0.005	0.00133	<0.005	0.0059	0.00011	0.008	0.00082	0.00056	0.062	<0.0001	<0.001	<0.05	0.000032	39.0	0.0023	0.0008
RSEM-R6W-EOP	3/25/2022 11:30	AQP914	M	C219519	0.00194	3.28	<0.00002	41.1	0.251	51.3	<0.00001	<0.005	<0.005	0.00141	<0.005	0.0053	0.0001	0.0109	0.00087	0.0006	0.06	<0.0001	<0.001	<0.05	0.000032	41.0	0.0022	0.00097
RSEM-R6W-EOP	3/25/2022 11:40	AQP915	D	C219519	0.00203	3.15	<0.00002	40.9	0.25	51.0	<0.00001	<0.005	<0.005	0.00139	<0.005	0.006	<0.0001	0.0111	0.00085	0.00066	0.059	<0.0001	<0.001	<0.05	0.000029	40.5	0.0021	0.00097
RSEM-R6W-EOP	3/26/2022 10:50	AQS235	M	C219944	0.00218	3.03	<0.00002	38.0	0.213	48.7	<0.00001	<0.005	<0.005	0.00101	<0.005	<0.005	<0.0001	0.0137	0.00075	0.00047	0.06	<0.0001	<0.001	0.066	0.000028	46.4	0.0017	0.00132
RSEM-R6W-EOP	3/26/2022 11:05	AQS236	D	C219944	0.00225	2.92	<0.00002	35.8	0.197	44.8	<0.00001	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	0.0145	0.00075	0.00042	0.06	<0.0001	<0.001	0.064	0.000037	46.0	0.0017	0.00127
RSEM-R6W-EOP	3/27/2022 11:50	AQS345	M	C219976	0.00245	2.88	<0.00002	39.8	0.207	50.4	<0.00001	<0.005	<0.005	0.00075	<0.005	<0.005	<0.0001	0.0171	0.00078	0.00043	0.062	<0.0001	<0.001	0.063	0.000033	50.7	0.0015	0.00158
RSEM-R6W-EOP	3/28/2022 10:40	AQU418	M	C220399	0.00286	3.13	<0.00002	47.1	0.206	56.3	<0.00001	<0.005	<0.005	0.00067	<0.005	0.0057	<0.0001	0.0221	0.00083	0.00042	0.054	<0.0001	<0.001	0.067	0.000023	46.7	0.0018	0.00119
RSEM-R6W-EOP	3/29/2022 10:20	AQV263	M	C220606	0.00334	3.54	<0.00002	52.5	0.182	57.9	<0.00001	<0.005	<0.005	0.0009	<0.005	0.0072	<0.0001	0.0128	0.00099	0.0005	0.045	<0.0001	<0.001	0.071	0.00002	40.6	0.0022	0.00093
RSEM-R6W-EOP	3/30/2022 11:10	AQX832	M	C221206	0.00323	3.29	<0.00002	50.6	0.14	51.2	<0.00001	<0.005	<0.005	0.00111	<0.005	0.0118	<0.0001	0.01	0.00097	0.0004	0.038	<0.0001	<0.001	0.065	0.000011	34.5	0.0018	0.00074
RSEM-R6W-EOP	3/31/2022 9:25	AQY795	M	C221428	0.00279	3.15	<0.00002	47.6	0.164	55.8	0.000011	<0.005	<0.005	0.001	<0.005	0.0076	<0.0001	0.0138	0.00078	0.00047	0.044	<0.0001	<0.001	0.071	0.000013	37.8	0.0014	0.00084
RSEM-R6W-EOP	4/1/2022 11:20	AQY727	M	C221415	0.00251	2.79	<0.00002	40.4	0.165	45.1	<0.00001	<0.005	<0.005	0.00078	<0.005	<0.005	<0.0001	0.0259	0.00071	0.00046	0.06	<0.0001	<0.001	0.057	0.000021	43.0	0.0011	0.0011
RSEM-R6W-EOP	4/2/2022 16:55	ARB520	M	C222000	0.00198	2.35	<0.00002	37.4	0.162	43.3	<0.00001	<0.005	<0.005	0.00068	<0.005	<0.005	0.0001	0.0106	0.00055	0.00034	0.053	<0.0001	<0.001	<0.05	0.000018	41.0	<0.001	0.00092
RSEM-R6W-EOP	4/3/2022 12:00	ARB459	M	C221989	0.00214	2.53	0.000038	36.8	0.153	47.2	0.000053	<0.005	<0.005	0.00066	<0.005	0.0058	0.00133	0.0106	0.00055	0.00036	0.049	<0.0001	<0.001	0.06	0.000014	39.6	<0.001	0.00088
RSEM-R6W-EOP	4/4/2022 11:45	ARB188	M	C221904	0.00212	2.54	<0.00002	38.0	0.143	43.4	<0.00001	<0.005	<0.005	0.00076	<0.005	0.008	0.00013	0.0103	0.00062	0.00039	0.048	<0.0001	<0.001	<0.05	0.000017	35.7	<0.001	0.0009
RSEM-R6W-EOP	4/5/2022 11:00	ARE598	M	C222522	0.00183	2.49	<0.00002	35.0	0.135	42.0	0.00001	<0.005	<0.005	0.00077	<0.005	0.0102	0.00073	0.0098	0.00052	0.00033	0.047	<0.0001	<0.001	<0.05	0.000017	32.9	<0.001	0.00074
RSEM-R6W-EOP	4/6/2022 12:00	ARI188	M	C223269	0.00238	3	<0.00002	44.9	0.157	50.3	<0.00001	<0.005	<0.005	0.00108	<0.005	0.017	<0.0001	0.0106	0.00053	0.00033	0.043	<0.0001	<0.001	<0.05	0.00002	31.9	<0.001	0.00078
RSEM-R6W-EOP	4/7/2022 16:40	ARI195	M	C223271	0.00214	2.77	<0.00002	41.1	0.14	46.3	<0.00001	<0.005	<0.005	0.00107	<0.005	0.0191	<0.0001	0.0085	<0.0005	0.00032	0.044	<0.0001	<0.001	<0.05	0.000019	30.0	<0.001	0.00065
RSEM-R6W-EOP	4/8/2022 12:00	ARI199	M	C223273	0.00125	1.82	<0.00002	24.2	0.084	25.2	<0.00001	<0.005	<0.005	0.00065	<0.005	0.0099	<0.0001	0.0057	<0.0005	0.00025	0.038	<0.0001	<0.001	<0.05	0.000019	18.9	<0.001	0.00039
RSEM-R6W-EOP	4/9/2022 12:30	ARK006	M	C223638	0.00176	2.38	<0.00002	37.4	0.137	42.0	0.000011	<0.005	<0.005	0.00105	<0.005	0.0144	<0.0001	0.0074	0.0005	0.00034	0.042	<0.0001	<0.001	<0.05	0.00002	32.0	<0.001	0.00061
RSEM-R6W-EOP	4/10/2022 12:00	ARK077	M	C223661	0.00197	2.43	<0.00002	39.9	0.168	45.7	<0.00001	<0.005	<0.005	0.00114	<0.005	0.0201	<0.0001	0.0071	<0.0005	0.00036	0.05	<0.0001	<0.001	<0.05	0.000023	38.0	<0.001	0.00076
RSEM-R6W-EOP	4/11/2022 10:00	ARK112	M	C223675	0.00207	2.58	<0.00002	40.2	0.179	46.4	<0.00001	<0.005	<0.005	0.00108	<0.005	0.0121	<0.0001	0.008	0.00052	0.00036	0.055	<0.0001	<0.001	<0.05	0.000022	41.7	<0.001	0.00078
RSEM-R6W-EOP	4/12/2022 10:30	ARN334	M	C224402	0.00185	2.57	<0.00002	39.7	0.182	48.2	<0.00001	<0.005	<0.005	0.00102	<0.005	0.0104	<0.0001	0.0103	0.0005	0.00035	0.055	<0.0001	<0.001	0.056	0.000021	42.4	<0.001	0.00071
RSEM-R6W-EOP	4/13/2022 12:10	ARP726	M	C224775	0.00181	2.49	<0.00002	37.5	0.176	45.0	<0.00001	<0.005	<0.005	0.00093	<0.005	0.0064	<0.0001	0.0104	0.00052	0.00035	0.056	<0.0001	<0.001	0.058	0.00002	44.2	<0.001	0.00076
RSEM-R6W-EOP	4/14/2022 9:35	ARQ065	M	C224815	0.00201	2.58	<0.00002	40.8	0.192	49.0	0.000011	<0.005	<0.005	0.001	<0.005	0.0073	<0.0001	0.0089	0.00054	0.00037	0.06	<0.0001	<0.001	0.056	0.000021	45.8	<0.001	0.00079
RSEM-R6W-EOP	4/15/2022 13:55	ARQ200	M	C224832	0.00167	2.35	<0.00002	41.9	0.196	46.0	<0.00001	<0.005	<0.005	0.00109	<0.005	0.0091	<0.0001	0.0072	0.00059	0.00046	0.064	<0.0001	<0.001	0.051	0.000031	41.4	<0.001	0.00064
RSEM-R6W-EOP	4/16/2022 13:45	ARR879	M	C225206	0.00185	2.59	<0.00002	47.3	0.219	52.9	<0.00001	<0.005	<0.005	0.00126	<0.005	0.0117	<0.0001	0.0076	0.00059	0.00033	0.062	<0.0001	<0.001	<0.05	0.000027	38.1	<0.001	0.00062
RSEM-R6W-EOP	4/18/2022 13:55	ARU248	M	C225693	0.00271	2.66	<0.00002	43.8	0.174	48.0	<0.00001	<0.005	<0.005	0.00123	<0.005	0.0149	<0.0001	0.0055	0.00055	0.00033	0.056	<0.0001	<0.001	<0.05	0.000023	36.5	<0.001	0.00041
RSEM-R6W-EOP	4/19/2022 13:40	ARV035	M	C225905	0.00245	2.79	<0.00002	43.7	0.179	48.0	<0.00001	<0.005	<0.005	0.00118	<0.005	0.0105	<0.0001	0.0065	0.00057	0.00033	0.058	<0.0001	<0.001	<0.05	0.000015	36.5	<0.001	0.00049
RSEM-R6W-EOP	4/20/2022 12:35	ARW668	M	C226267	0.00172	2.38	<0.00002	47.4	0.194	50.4	<0.00001	<0.005	<0.005	0.0013	<0.005	0.012	<0.0001	0.0068	0.0006	0.00034	0.061	<0.0001	<0.001	<0.05	0.000021	35.4	<0.001	0.0005
RSEM-R6W-EOP	4/21/2022 13:25	ARX707	M	C226546	0.00209	2.8	<0.00002	54.0	0.219	59.2	<0.00001	<0.005	<0.005	0.00139	<0.005	0.0091	<0.0001	0.0059	0.00078	0.00047	0.073	<0.0001	<0.001	<0.05	0.000032	42.8	<0.001	0.00083
RSEM-R6W-EOP	4/22/2022 11:45	ARX721	M	C226550	0.00239	3.06	<0.00002	63.0	0.219	65.7	<0.00001	<0.005	<0.005	0.00177	<0.005	0.0116	0.00019	0.0068	0.00093	0.00054	0.069	<0.0001	<0.001	0.057	0.000015	42.8	0.001	0.00081
RSEM-R6W-EOP	4/23/2022 15:30	ARZ186	M	C226855	0.00284	2.89	<0.00002	63.0	0.178	62.1	<0.00001	<0.005	<0.005	0.00186	<0.005	0.015	<0.0001	0.0069	0.00082	0.00058	0.053	<0.0001	<0.001	0.065	0.000019	35.9	<0.001	0.00056
RSEM-R6W-EOP	4/24/2022 11:30	ASA417	M	C227083	0.00327	3.31	<0.00002	68.7	0.164	65.2	<0.00001	<0.005	<0.005	0.0022	<0.005	0.0183	<0.0001	0.0063	0.00097	0.00062	0.046	<0.0001	<0.001	0.069	0.000011	30.9	0.0011	0.00039
RSEM-R6W-EOP	4/25/2022 11:20	ASA413	M	C227083	0.00295	3.04	<0.00002	58.9	0.14	54.9	<0.00001	<0.005	<0.005	0.002	<0.005	0.0154	<0.0001	0.0071	0.0009	0.00062	0.043	<0.0001	<0.001	0.061	0.000013	27.1	0.0011	0.00028
RSEM-R6W-EOP	4/26/2022 11:00	ASD457	M	C227799	0.00269	3.21	<0.00002	61.5	0.136	57.8	<0.00001	<0.005	<0.005	0.002	<0.005	0.0165	<0.0001	0.0075	0.00087	0.00059	0.04	<0.0001	<0.001	0.069	0.000012	25.4	0.0013	0.00026
RSEM-R6W-EOP	4/27/2022 12:00	ASH197	M	C228648	0.00315	3.35	<0.00002	61.6	0.142	57.5	<0.00001	<0.005	<0.005	0.00205	<0.005	0.016	<0.0001	0.0076	0.00097	0.00069	0.041	<0.0001	<0.001	0.071	0.000013	26.6	0.0013	0.00025
RSEM-R6W-EOP	4/28/2022 12:30	ASH217	M	C228650	0.00336	3.5	<0.00002	64.8	0.149	60.3	<0.00001	<0.005	<0.005	0.00212	<0.005	0.0148	<0.0001	0.0072	0.00092	0.00069	0.042	<0.0001	<0.001	0.071	0.000011	26.9	0.0013	0.00026
RSEM-R6W-EOP	4/29/2022 10:00	ASH017	M	C228622	0.00315	3.72	<0.00002	59.3	0.137	54.7	<0.00001	<0.005	<0.005	0.0022	<0.005	0.0123	0.00014	0.0062	0.00091	0.00052	0.044	<0.0001	<0.001	0.066	0.000018	26.4	0.0013	<0.0002
RSEM-R6W-EOP	4/30/2022 12:00	ASL380	M	C229488	0.00303	3.74	<0.00002	55.7	0.136	50.6	<0.00001	<0.005	<0.005	0.0021	<0.005	0.0077	<0.0001	0.0044	0.00099	0.00064	0.046	<0.0001	<0.001	0.06	0.000022	27.4	0.0014	0.00023
RSEM-R6W-EOP	5/1/2022 11:00	ASL427	M	C229493	0.00319	3.92	<0.00002	58.0	0.139	52.6	<0.00001	<0.005	<0.005	0.00217	<0.005	0.0057	<0.0001	0.0056	0.00111	0.0006	0.051	<0.0001	<0.001	0.058	0.000027	29.3	0.0014	0.00024
RSEM-R6W-EOP	5/2/2022 11:00	ASL340	M	C229475	0.0033	3.8	<0.00002	61.6	0.15	60.3	<0.00001	<0.005	<0.005	0.00237	<0.005	0.007	<0.0001	0.0066	0.00112	0.0006	0.049	<0.0001	<0.001	0.067	0.000027	31.2	0.0015	0.00035
RSEM-R6W-EOP	5/3/2022 14:25	ASO448	M	C230063	0.0044	3.82	<0.00002	74.8	0.182	80.2	0.000012	<0.005	<0.005	0.00235	<0.005	0.0074	<0.0001	0.0093	0.00112	0.00057	0.05	<0.0001	<0.001	0.076	0.000031	34.0	0.0014	0.00066
RSEM-R6W-EOP	5/4/2022 12:20	ASP676	M	C230320	0.00495	3.59	<0.00002	77.8	0.19	86.0	0.000013	<0.005	<0.005	0.00233	<0.005	0.007	0.00014	0.0105	0.00113	0.00051	0.051	<0.0001	<0.001	0.08	0.000027	36.1	0.0013	0.00072
RSEM-R6W-EOP	5/5/2022 11:25	ASR005	M	C230531	0.00457	2.98	<0.00002	73.1	0.175	79.0	0.000013	<0.005	<0.005	0.00209	<0.005	0.0074	<0.0001	0.0123	0.00121	0.00069	0.051	<0.0001	<0.001	0.085	0.000028	37.6	0.0013	0.00066
RSEM-R6W-EOP	5/6/2022 10:30	ASR072	M	C230545	0.00521	3.25	<0.00002	85.2	0.197	93.3	0.000014	<0.005	<0.005	0.00226	<0.005	0.0085	<0.0001	0.0125	0.00124	0.00066	0.052	<0.0001	<0.001	0.069	0.000037	40.3	0.0014	0.00052
RSEM-R6W-EOP	5/7/2022 11:25	ASS943	M	C230886	0.005	3.17	<0.00002	89.4	0.202	97.3	0.000013	<0.005	<0.005	0.00241	<0.005	0.0119	<0.0001	0.0127	0.00132	0.00044	0.055	<0.0001	<0.001	0.073	0.000058	41.5	0.0016	0.00052
RSEM-R6W-EOP	5/8/2022 14:15	ASS885	M	C230861	0.00521	3.03	<0.00002	88.1	0.203	95.3	0.000014	<0.005	<0.005	0.00223	<0.005	0.0058	<0.0001	0.0125	0.00137	0.00053	0.058	<0.0001	<0.001	0.075	0.000017	41.7	0.0012	0.00047
RSEM-R6W-EOP	5/8/2022 14:25	ASS884	D	C230861	0.00536	3.14	<0.00002	92.2	0.208	99.0	0.000017	<0.005	<0.005	0.00237	<0.005	0.0065	0.00012	0.0124	0.00137	0.00043	0.057	<0.0001	<0.001	0.073	0.000016	41.1	0.0016	0.00048
RSEM-R6W-EOP	5/9/2022 13:50	ASV292	M	C231306	0.0081	3.17	<0.00002	81.0	0.196	103	<0.00001	<0.005	<0.005	0.00198	<0.005	0.0085	<0.0001	0.0577	0.00135	0.00052	0.06	<0.0001	<0.001	0.079	0.000044	42.9	0.0014	0.00069
RSEM-R6W-EOP	5/10/2022 11:00	ASX004	M	C231638	0.0067	3.01	<0.00002	98.4	0.232	108	0.000011	<0.005	<0.005	0.00225	<0.005	0.0067	0.00015	0.0132	0.0012	0.00048	0.053	<0.0001	<0.001	0.1	0.000028	44.7	<0.001	0.00042
RSEM-R6W-EOP	5/11/2022 12:25	ASZ424	M	C232133	0.00836	3.41	<0.00002	108	0.264	123	0.000014	<0.005	<0.005	0.00224	<0.005	0.0065	0.00018	0.0096	0.00142	0.00073	0.058	<0.0001	<0.001	0.098	0.000019	46.7	0.0012	0.00055
RSEM-R6W-EOP	5/12/2022 14:05	ATA814	M	C232369	0.00832	3.13	<0.00002	117	0.262	130	0.000019	<0.005	<0.005	0.00235	<0.005	0.0061	<0.0001	0.0105	0.00148	0.00069	0.054	<0.0001	<0.001	0.098	0.000024	41.5	0.0011	0.00041
RSEM-R6W-EOP	5/13/2022 11:10	ATB012	M	C232410	0.00891	3.24	<0.00002	124	0.269	133	0.000016	<0.005	<0.005	0.00224	<0.005	0.0052	0.00151	0.0109	0.00153	0.00071	0.052	<0.0001	<0.001	0.105	0.000016	41.8	0.001	0.0004
RSEM-R6W-EOP	5/13/2022 11:20	ATB013	D	C232410	0.00798	3.14	<0.00002	119	0.259	130	0.00002	<0.005	<0.005	0.00225	<0.005	0.0057	<0.0001	0.0089	0.00154	0.00074	0.054	<0.0001	<0.001	0.102	0.000017	47.8	0.001	0.00032
RSEM-R6W-EOP	5/14/2022 14:35	ATD059	M	C232817	0.00955	3.26	<0.00002	127	0.274	143	0.000019	<0.005	<0.005	0.00234	<0.005	0.0055	<0.0001	0.0098	0.00148	0.00101	0.049	<0.0001	<0.001	0.113	0.000012	44.2	<0.001	0.00041
RSEM-R6W-EOP	5/15/2022 11:40	ATD051	M	C232812	0.00939	3.09	<0.00002	130	0.272	142	0.000018	<0.005	<0.005	0.00232	<0.005	0.0065	0.00013	0.0105	0.00152	0.00074	0.047	<0.0001	<0.001	0.119	0.00001	43.8	<0.001	0.00057
RSEM-R6W-EOP	5/16/2022 10:10	ATC672	M	C232726	0.00853	2.96	<0.00002	130	0.256	138	0.000016	<0.005	<0.005	0.00204	<0.005	0.0059	<0.0001	0.0115	0.00161	0.00079	0.05	<0.0001	<0.001	0.131	0.000014	44.6	<0.001	0.00057
RSEM-R6W-EOP	5/17/2022 12:00	ATH851	M	C233625	0.00914	3.52	<0.00002	173	0.27	156	0.000021	<0.005	<0.005	0.00258	<0.005	0.0088	<0.0001	0.0115	0.00144	0.00071	0.046	<0.0001	<0.001	0.128	0.000013	43.4	<0.001	0.00042
RSEM-R6W-EOP	5/18/2022 12:00	ATJ925	M	C234012	0.0122	3.01	<0.00002	152	0.293	138	0.000018	<0.005	<0.005	0.00194	<0.005	0.0097	<0.0001	0.0198	0.00195	0.00061	0.052	<0.0001	<0.001	0.117	<0.00001	47.5	<0.001	0.00047
RSEM-R6W-EOP	5/19/2022 13:00	ATL911	M	C234314	0.00767	3.1	<0.00002	164	0.266	141	0.000017	<0.005	<0.005	0.00209	<0.005	0.0101	<0.0001	0.0117	0.00179	0.00063	0.047	<0.0001	<0.001	0.105	0.000012	43.2	<0.001	0.00033
RSEM-R6W-EOP	5/20/2022 10:30	ATL359	M	C234241	0.0125	3.13	<0.00002	185	0.328	148	0.000017	<0.005	<0.005	0.00209	<0.005	0.0106	0.0001	0.0117	0.00189	0.00099	0.049	<0.0001	<0.001	0.112	0.000011	43.3	0.0011	0.00029
RSEM-R6W-EOP	5/21/2022 10:30	ATN138	M	C234510	0.0104	3.44	<0.00002	173	0.309	166	0.000017	<0.005	<0.005	0.00212	<0.005	0.0119	<0.0001	0.0122	0.00143	0.00078	0.042	<0.0001	<0.001	0.136	0.000014	41.4	<0.001	0.00031
RSEM-R6W-EOP	5/22/2022 15:00	ATO535	M	C234788	0.00748	3.31	<0.00002	177	0.274	144	0.000018	<0.005	<0.005	0.00221	<0.005	0.0122	<0.0001	0.0138	0.00181	0.00094	0.045	<0.0001	<0.001	0.097	<0.00001	38.9	0.0012	0.00024
RSEM-R6W-EOP	5/23/2022 11:00	ATO584	M	C234797	0.00666	3.2	<0.00002	171	0.248	138	0.000017	<0.005	<0.005	0.00221	<0.005	0.0119	<0.0001	0.0137	0.00187	0.0007	0.044	<0.0001	<0.001	0.106	<0.00001	39.2	0.0013	0.00024
RSEM-R6W-EOP	5/24/2022 10:40	ATR510	M	C235358	0.00868	3.62	<0.00002	187	0.3	165	0.000018	<0.005	<0.005	0.00232	<0.005	0.0142	0.00016	0.0117	0.00154	0.00082	0.04	<0.0001	<0.001	0.132	<0.00001	38.9	0.0011	<0.0002
RSEM-R6W-EOP	5/25/2022 15:25	ATT369	M	C235730	0.00942	3.68	<0.00002	201	0.287	172	0.000019	<0.005	<0.005	0.00231	<0.005	0.0141	<0.0001	0.0136	0.002	0.00066	0.043	<0.0001	<0.001	0.125	<0.00001	41.0	0.0016	<0.0002
RSEM-R6W-EOP	5/26/2022 15:30	ATV285	M	C236083	0.0092	3.07	<0.00002	188	0.262	157	0.000016	<0.005	<0.005	0.00201	<0.005	0.0101	<0.0001	0.0115	0.00213	0.00092	0.04	<0.0001	<0.001	0.123	<0.00001	38.3	0.0014	<0.0002

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
RSEM-R6W-EOP	5/27/2022 13:35	ATV301	M	C236089	0.00936	3.13	<0.00002	192	0.263	159	0.000017	<0.005	<0.005	0.00191	<0.005	0.0096	<0.0001	0.0119	0.00218	0.00075	0.04	<0.0001	<0.001	0.128	<0.00001	38.2	0.0015	<0.0002
RSEM-R6W-EOP	5/28/2022 16:30	ATX747	M	C236620	0.00856	3.29	<0.00002	179	0.355	156	0.00002	<0.005	<0.005	0.00194	<0.005	0.0111	<0.0001	0.0127	0.00167	0.00081	0.045	<0.0001	<0.001	0.14	0.000013	41.7	<0.001	<0.0002
RSEM-R6W-EOP	5/29/2022 17:40	ATW969	M	C236421	0.00841	3.76	<0.00002	179	0.456	149	0.000022	<0.005	0.0153	0.00204	<0.005	0.0072	0.00015	0.0099	0.00151	0.00081	0.054	<0.0001	<0.001	0.139	0.000011	51.5	0.0012	0.0003
RSEM-R6W-EOP	5/30/2022 16:25	ATZ466	M	C236894	0.00882	3.67	<0.00002	182	0.497	167	0.00002	<0.005	<0.005	0.00209	<0.005	0.0089	0.00011	0.0152	0.00175	0.00096	0.071	<0.0001	<0.001	0.151	0.000034	52.3	<0.001	0.00116
RSEM-R6W-EOP	5/31/2022 11:30	AUC336	M	C237377	0.00906	3.39	<0.00002	180	0.47	142	0.000021	<0.005	<0.005	0.00213	<0.005	0.0077	0.00012	0.0127	0.00171	0.00089	0.07	<0.0001	<0.001	0.142	0.000045	51.7	0.0011	0.00149
RSEM-R6W-EOP	6/1/2022 11:30	AUE681	M	C237797	0.00918	3.32	<0.00002	183	0.458	147	0.000021	<0.005	<0.005	0.00207	<0.005	0.0076	<0.0001	0.0159	0.00164	0.00117	0.064	<0.0001	<0.001	0.174	0.000034	50.2	0.0019	0.00115
RSEM-R6W-EOP	6/2/2022 10:40	AUH701	M	C238258	0.0093	3.45	<0.00002	164	0.432	131	0.000023	<0.005	<0.005	0.00192	<0.005	0.0088	<0.0001	0.0101	0.00165	0.00082	0.056	<0.0001	<0.001	0.149	0.00003	53.2	0.0012	0.00051
RSEM-R6W-EOP	6/3/2022 13:10	AUH662	M	C238247	0.00978	3.31	<0.00002	197	0.5	155	0.000025	<0.005	<0.005	0.00212	<0.005	0.0103	<0.0001	0.0138	0.00163	0.00081	0.054	<0.0001	<0.001	0.151	0.000028	53.1	0.0013	0.00064
RSEM-R6W-EOP	6/4/2022 10:25	AUL721	M	C238905	0.00928	2.97	<0.00002	169	0.424	132	0.000019	<0.005	<0.005	0.00168	<0.005	0.0087	<0.0001	0.0162	0.00171	0.00086	0.057	<0.0001	<0.001	0.16	0.000019	55.1	0.0013	0.00051
RSEM-R6W-EOP	6/5/2022 11:55	AUM441	M	C238986	0.00934	2.81	<0.00002	198	0.472	152	0.000024	<0.005	<0.005	0.00184	<0.005	0.0102	<0.0001	0.0169	0.00174	0.00084	0.056	<0.0001	<0.001	0.168	0.000018	55.6	0.0014	0.0004
RSEM-R6W-EOP	6/6/2022 10:50	AUO790	M	C239365	0.00993	2.61	<0.00002	186	0.39	168	0.000021	<0.005	<0.005	0.00146	<0.005	0.0088	<0.0001	0.0164	0.00174	0.00081	0.054	<0.0001	<0.001	0.18	0.000016	57.0	0.0015	0.00042
RSEM-R6W-EOP	6/7/2022 12:00	AUT413	M	C240162	0.00871	2.58	<0.00002	218	0.435	195	0.000024	<0.005	<0.005	0.0017	<0.005	0.0098	<0.0001	0.0146	0.00196	0.00075	0.054	<0.0001	<0.001	0.185	0.000014	53.8	0.0015	0.00048
RSEM-R6W-EOP	6/8/2022 13:00	AUT295	M	C240147	0.00858	2.43	<0.00002	223	0.43	193	0.000028	<0.005	<0.005	0.00167	<0.005	0.0087	<0.0001	0.0154	0.00197	0.00077	0.053	<0.0001	<0.001	0.181	0.000017	53.1	0.0016	0.00041
RSEM-R6W-EOP	6/9/2022 13:30	AUV206	M	C240504	0.00839	2.12	<0.00002	219	0.413	189	0.000026	<0.005	<0.005	0.00161	<0.005	0.0068	<0.0001	0.0181	0.00208	0.00089	0.056	<0.0001	<0.001	0.192	0.000021	51.9	0.0018	0.00036
RSEM-R6W-EOP	6/10/2022 11:00	AUV211	M	C240508	0.00837	1.96	<0.00002	226	0.422	194	0.000023	<0.005	<0.005	0.00165	<0.005	0.0064	0.00012	0.0169	0.00207	0.00079	0.054	<0.0001	<0.001	0.203	0.000014	53.5	0.0017	0.00034
RSEM-R6W-EOP	6/11/2022 10:00	AUY735	M	C241062	0.00853	1.87	<0.00002	225	0.405	210	0.000027	<0.005	<0.005	0.00157	<0.005	<0.005	<0.0001	0.0185	0.00173	0.00084	0.05	<0.0001	<0.001	0.19	<0.00001	53.8	0.0015	0.00024
RSEM-R6W-EOP	6/12/2022 10:30	AUY703	M	C241043	0.00867	1.74	<0.00002	223	0.404	203	0.000024	<0.005	<0.005	0.00154	<0.005	<0.005	0.0001	0.0186	0.0022	0.00084	0.057	<0.0001	<0.001	0.24	<0.00001	50.8	0.002	0.00031
RSEM-R6W-EOP	6/13/2022 12:00	AVD504	M	C241814	0.00844	1.66	<0.00002	214	0.363	177	0.000022	<0.005	<0.005	0.00147	<0.005	0.0052	<0.0001	0.0196	0.00216	0.00097	0.053	<0.0001	<0.001	0.242	<0.00001	47.3	0.0019	0.00027
RSEM-R6W-EOP	6/14/2022 10:30	AVD543	M	C241829	0.00805	1.54	<0.00002	210	0.346	172	0.000022	<0.005	<0.005	0.00145	<0.005	0.0088	<0.0001	0.0186	0.0022	0.00094	0.054	<0.0001	<0.001	0.25	<0.00001	46.1	0.002	0.00026
RSEM-R6W-EOP	6/15/2022 11:55	AVG248	M	C242252	0.00816	1.47	<0.00002	224	0.354	177	0.000024	<0.005	<0.005	0.00153	<0.005	0.0054	<0.0001	0.0198	0.00216	0.00097	0.051	<0.0001	<0.001	0.263	<0.00001	45.6	0.002	0.00024
RSEM-R6W-EOP	6/16/2022 12:45	AVK123	M	C242788	0.00778	1.21	<0.00002	216	0.348	177	0.000022	<0.005	<0.005	0.00156	<0.005	<0.005	<0.0001	0.0217	0.00191	0.00091	0.048	<0.0001	<0.001	0.222	<0.00001	53.8	0.0017	<0.0002
RSEM-R6W-EOP	6/17/2022 11:35	AVK724	M	C242942	0.00714	1.07	<0.00002	225	0.385	192	0.000022	<0.005	<0.005	0.0017	<0.005	0.0053	<0.0001	0.015	0.00192	0.00101	0.05	<0.0001	<0.001	0.22	0.000025	43.7	0.0019	0.00023
RSEM-R6W-EOP	6/18/2022 12:45	AVL989	M	C243162	0.00826	1.07	<0.00002	221	0.356	194	0.000022	<0.005	<0.005	0.00166	<0.005	<0.005	0.00011	0.0203	0.00175	0.00085	0.044	<0.0001	<0.001	0.193	<0.00001	56.1	0.002	<0.0002
RSEM-R6W-EOP	6/19/2022 11:50	AVM019	M	C243177	0.00795	1.1	<0.00002	209	0.341	185	0.000023	<0.005	<0.005	0.00157	<0.005	<0.005	<0.0001	0.0194	0.0017	0.00083	0.045	<0.0001	<0.001	0.203	<0.00001	52.8	0.0015	<0.0002
RSEM-R6W-EOP	6/20/2022 10:50	AVO965	M	C243664	0.00718	1.22	<0.00002	196	0.321	170	0.00002	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	0.0168	0.00178	0.0008	0.048	<0.0001	<0.001	0.255	<0.00001	43.4	0.0018	<0.0002
RSEM-R6W-EOP	6/21/2022 11:35	AVQ611	M	C244010	0.00795	1.32	<0.00002	219	0.341	190	0.000024	<0.005	<0.005	0.00176	<0.005	0.0067	<0.0001	0.0173	0.0018	0.00083	0.052	<0.0001	<0.001	0.261	<0.00001	48.1	0.0019	<0.0002
RSEM-R6W-EOP	6/22/2022 11:05	AVT153	M	C244412	0.00749	1.18	<0.00002	208	0.337	192	0.00002	<0.005	<0.005	0.00178	<0.005	0.0052	<0.0001	0.0191	0.00156	0.00082	0.049	<0.0001	<0.001	0.25	<0.00001	52.0	0.0016	<0.0002
RSEM-R6W-EOP	6/23/2022 11:15	AVV597	M	C244839	0.00727	1.01	<0.00002	190	0.336	181	0.000021	<0.005	<0.005	0.00182	<0.005	0.0053	<0.0001	0.0152	0.00134	0.00075	0.049	<0.0001	<0.001	0.244	<0.00001	57.5	0.0016	<0.0002
RSEM-R6W-EOP	6/24/2022 11:10	AVV588	M	C244835	0.00738	1.06	<0.00002	177	0.327	177	0.000022	<0.005	<0.005	0.00179	<0.005	0.0052	<0.0001	0.0163	0.00135	0.00077	0.052	<0.0001	<0.001	0.254	<0.00001	59.7	0.0015	0.00023
RSEM-R6W-EOP	6/25/2022 10:40	AVZ707	M	C245512	0.0072	1.15	<0.00002	168	0.335	191	0.000019	<0.005	<0.005	0.00181	<0.005	0.005	<0.0001	0.0167	0.00133	0.00076	0.051	<0.0001	<0.001	0.232	<0.00001	59.3	0.0015	<0.0002
RSEM-R6W-EOP	6/26/2022 10:15	AVZ580	M	C245500	0.00716	1.25	<0.00002	172	0.351	192	0.000022	<0.005	<0.005	0.0019	<0.005	0.0058	<0.0001	0.0162	0.00137	0.00081	0.055	<0.0001	<0.001	0.233	<0.00001	60.9	0.0015	<0.0002
RSEM-R6W-EOP	6/27/2022 10:25	AVY533	M	C245274	0.00722	1.21	<0.00002	151	0.31	171	0.000019	<0.005	<0.005	0.00163	<0.005	0.0066	<0.0001	0.0143	0.00131	0.00084	0.053	<0.0001	<0.001	0.214	<0.00001	60.3	0.0014	<0.0002
RSEM-R6W-EOP	6/28/2022 13:00	AWH753	M	C246896	0.00628	1.21	<0.00002	167	0.331	179	0.00002	<0.005	<0.005	0.00179	<0.005	0.007	0.00011	0.0123	0.00127	0.00081	0.052	<0.0001	<0.001	0.214	<0.00001	60.7	0.0013	<0.0002
RSEM-R6W-EOP	6/29/2022 15:00	AWH758	M	C246898	0.00624	1.18	<0.00002	165	0.34	190	0.000021	<0.005	<0.005	0.00155	<0.005	0.0212	<0.0001	0.0272	0.00127	0.0008	0.056	<0.0001	<0.001	0.21	<0.00001	61.5	0.0013	<0.0002
RSEM-R6W-EOP	6/30/2022 13:00	AWH756	M	C246897	0.00635	1.02	<0.00002	154	0.32	181	0.000018	<0.005	<0.005	0.00162	<0.005	0.0065	<0.0001	0.0137	0.00126	0.00078	0.051	<0.0001	<0.001	0.21	<0.00001	60.1	0.0013	<0.0002
RSEM-R6W-EOP	7/1/2022 13:00	AWJ894	M	C247203	0.00575	0.82	<0.00002	167	0.323	164	0.000017	<0.005	<0.005	0.00177	<0.005	0.0056	<0.0001	0.0116	0.00145	0.00097	0.052	<0.0001	<0.001	0.213	0.000014	58.0	0.0015	0.0002
RSEM-R6W-EOP	7/2/2022 12:30	AWJ849	M	C247196	0.00593	0.727	<0.00002	163	0.358	172	0.000016	<0.005	<0.005	0.00174	<0.005	<0.005	0.0001	0.0117	0.00147	0.00096	0.051	<0.0001	<0.001	0.21	0.000013	57.0	0.0015	<0.0002
RSEM-R6W-EOP	7/3/2022 11:30	AWM046	M	C247492	0.00572	0.83	<0.00002	153	0.306	175	0.00002	<0.005	<0.005	0.00162	<0.005	<0.005	<0.0001	0.0135	0.0012	0.00077	0.046	<0.0001	<0.001	0.189	<0.00001	57.5	0.0012	<0.0002
RSEM-R6W-EOP	7/4/2022 10:30	AWM516	M	C247552	0.00574	0.743	<0.00002	153	0.308	178	0.000018	<0.005	<0.005	0.00162	<0.005	<0.005	<0.0001	0.0151	0.00132	0.00103	0.052	<0.0001	<0.001	0.212	<0.00001	60.6	0.0014	<0.0002
RSEM-R6W-EOP	7/5/2022 10:10	AWR507	M	C248315	0.00579	0.623	<0.00002	151	0.289	160	0.000018	<0.005	<0.005	0.0016	<0.005	<0.005	0.00011	0.0134	0.00124	0.00081	0.046	<0.0001	<0.001	0.216	<0.00001	61.8	<0.001	<0.0002
RSEM-R6W-EOP	7/6/2022 14:25	AWV910	M	C249077	0.0054	0.73	<0.00002	168	0.328	173	0.000018	<0.005	<0.005	0.00177	<0.005	<0.005	<0.0001	0.0188	0.00125	0.00091	0.041	<0.0001	<0.001	0.185	<0.00001	57.0	0.0014	<0.0002
RSEM-R6W-EOP	7/7/2022 11:55	AWW343	M	C249139	0.00533	0.774	<0.00002	174	0.336	178	0.000019	<0.005	<0.005	0.00173	<0.005	<0.005	<0.0001	0.0149	0.00119	0.00088	0.04	<0.0001	<0.001	0.189	<0.00001	55.7	0.0013	<0.0002
RSEM-R6W-EOP	7/8/2022 11:45	AWW522	M	C249170	0.00528	0.743	<0.00002	174	0.332	178	0.000017	<0.005	<0.005	0.00184	<0.005	<0.005	<0.0001	0.0199	0.00149	0.00115	0.046	<0.0001	<0.001	0.205	0.00002	53.1	0.0019	0.0002
RSEM-R6W-EOP	7/9/2022 10:50	AWZ517	M	C249625	0.00508	0.699	<0.00002	169	0.327	171	0.000016	<0.005	<0.005	0.00171	<0.005	<0.005	<0.0001	0.0589	0.00156	0.00118	0.048	<0.0001	<0.001	0.232	0.000022	56.1	0.0017	0.00025
RSEM-R6W-EOP	7/10/2022 14:20	AWZ487	M	C249617	0.00503	0.662	<0.00002	169	0.309	168	0.000015	<0.005	<0.005	0.0017	<0.005	<0.005	<0.0001	0.0215	0.00146	0.00114	0.04	<0.0001	<0.001	0.212	0.000019	49.4	0.0016	0.0002
RSEM-R6W-EOP	7/11/2022 12:45	AXC658	M	C250105	0.00489	0.737	<0.00002	174	0.317	171	0.000014	<0.005	<0.005	0.00181	<0.005	<0.005	<0.0001	0.0202	0.00139	0.00113	0.039	<0.0001	<0.001	0.207	<0.00001	51.9	0.0016	<0.0002
RSEM-R6W-EOP	7/12/2022 12:25	AXE618	M	C250400	0.00441	0.871	<0.00002	169	0.307	165	0.000015	<0.005	<0.005	0.00173	<0.005	<0.005	<0.0001	0.0199	0.00132	0.00113	0.043	<0.0001	<0.001	0.203	<0.00001	49.1	0.0016	<0.0002
RSEM-R6W-EOP	7/13/2022 11:35	AXH415	M	C250934	0.00434	1.09	<0.00002	167	0.302	165	0.000014	<0.005	<0.005	0.00176	<0.005	<0.005	<0.0001	0.0176	0.00141	0.00113	0.048	<0.0001	<0.001	0.21	<0.00001	48.8	0.0016	0.0002
RSEM-R6W-EOP	7/14/2022 12:30	AXJ119	M	C251290	0.00412	1.37	<0.00002	169	0.31	168	0.000015	<0.005	<0.005	0.00186	<0.005	0.0077	<0.0001	0.0172	0.00143	0.00115	0.054	<0.0001	<0.001	0.212	0.000012	49.9	0.0017	0.00021
RSEM-R6W-EOP	7/15/2022 13:20	AXJ365	M	C251330	0.00396	1.63	<0.00002	165	0.302	166	0.000015	<0.005	<0.005	0.00189	<0.005	<0.005	<0.0001	0.0098	0.00129	0.00107	0.056	<0.0001	<0.001	0.2	<0.00001	50.5	0.0017	<0.0002
RSEM-R6W-EOP	7/16/2022 11:40	AXN331	M	C251927	0.00434	1.84	<0.00002	170	0.294	159	0.000014	<0.005	<0.005	0.00196	<0.005	<0.005	0.0004	0.0105	0.00133	0.00111	0.06	<0.0001	<0.001	0.225	<0.00001	51.4	0.0018	<0.0002
RSEM-R6W-EOP	7/17/2022 10:50	AXN589	M	C251966	0.00468	1.96	<0.00002	186	0.303	169	0.000013	<0.005	<0.005	0.00205	<0.005	<0.005	<0.0001	0.0107	0.00126	0.00105	0.061	<0.0001	<0.001	0.207	<0.00001	51.6	0.0018	<0.0002
RSEM-R6W-EOP	7/18/2022 14:30	AXQ724	M	C252515	0.00397	2.4	<0.00002	165	0.256	144	0.000013	<0.005	<0.005	0.0021	<0.005	<0.005	<0.0001	0.013	0.00127	0.00106	0.062	<0.0001	<0.001	0.189	<0.00001	47.5	0.0019	<0.0002
RSEM-R6W-EOP	7/19/2022 12:30	AXQ709	M	C252510	0.00422	2.4	<0.00002	190	0.275	163	0.000013	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	0.0138	0.0013	0.00109	0.063	<0.0001	<0.001	0.195	<0.00001	48.1	0.002	<0.0002
RSEM-R6W-EOP	7/20/2022 14:30	AXX166	M	C253451	0.00399	3.06	<0.00002	181	0.271	158	0.000015	<0.005	<0.005	0.00255	<0.005	<0.005	<0.0001	0.0187	0.00133	0.00111	0.064	<0.0001	<0.001	0.201	<0.00001	46.2	0.0022	<0.0002
RSEM-R6W-EOP	7/21/2022 13:30	AXX155	M	C253447	0.00381	3.13	<0.00002	180	0.264	149	0.000014	<0.005	<0.005	0.00258	<0.005	<0.005	<0.0001	0.0167	0.00131	0.00113	0.063	<0.0001	<0.001	0.198	<0.00001	45.2	0.0023	<0.0002
RSEM-R6W-EOP	7/22/2022 10:30	AXX134	M	C253442	0.00374	3	<0.00002	181	0.264	159	0.000013	<0.005	<0.005	0.00278	<0.005	<0.005	<0.0001	0.0253	0.00137	0.0012	0.064	<0.0001	<0.001	0.199	<0.00001	45.3	0.0023	<0.0002
RSEM-R6W-EOP	7/23/2022 10:00	AYB214	M	C254120	0.00381	2.62	<0.00002	178	0.249	150	0.000011	<0.005	<0.005	0.00268	<0.005	<0.005	<0.0001	0.0222	0.00124	0.00111	0.058	<0.0001	<0.001	0.207	<0.00001	41.8	0.002	<0.0002
RSEM-R6W-EOP	7/24/2022 13:30	AYC677	M	C254290	0.00368	2.62	<0.00002	176	0.232	139	0.000011	<0.005	<0.005	0.00263	<0.005	<0.005	0.0001	0.0211	0.00121	0.00116	0.057	<0.0001	<0.001	0.199	<0.00001	39.6	0.002	<0.0002
RSEM-R6W-EOP	7/25/2022 9:30	AYC675	M	C254289	0.0038	2.61	<0.00002	177	0.243	145	0.00001	<0.005	<0.005	0.00277	<0.005	<0.005	<0.0001	0.0176	0.00122	0.00116	0.059	<0.0001	<0.001	0.208	<0.00001	40.3	0.002	<0.0002
RSEM-R6W-EOP	7/26/2022 11:25	AYG702	M	C254966	0.00386	2.48	<0.00002	183	0.25	142	0.000021	<0.005	<0.005	0.00258	<0.005	<0.005	<0.0001	0.0169	0.00123	0.00116	0.063	<0.0001	<0.001	0.193	<0.00001	43.1	0.0019	<0.0002
RSEM-R6W-EOP	7/28/2022 12:50	AYM153	M	C255903	0.00324	2.68	<0.00002	172	0.243	135	0.000015	<0.005	<0.005	0.00272	<0.005	<0.005	0.00024	0.022	0.00115	0.00113	0.061	<0.0001	<0.001	0.185	<0.00001	41.6	0.0017	<0.0002
RSEM-R6W-EOP	7/29/2022 12:30	AYM048	M	C255900	0.00322	2.62	<0.00002	170	0.241	134	0.000015	<0.005	<0.005	0.00272	<0.005	<0.005	<0.0001	0.0235	0.00115	0.00122	0.064	<0.0001	<0.001	0.195	<0.00001	42.9	0.0017	<0.0002
RSEM-R6W-EOP	7/30/2022 12:15	AYP672	M	C256352	0.00298	2.64	<0.00002	162	0.229	120	0.000015	<0.005	<0.005	0.00263	<0.005	<0.005	0.00011	0.0203	0.00109	0.00112	0.066	<0.0001	<0.001	0.18	<0.00001	41.1	0.0015	<0.0002
RSEM-R6W-EOP	7/31/2022 12:05	AYO874	M	C256301	0.00304	2.39	<0.00002	160	0.226	115	0.000014	<0.005	<0.005	0.00258	<0.005	<0.005	<0.0001	0.0185	0.00109	0.00107	0.071	<0.0001	<0.001	0.16	<0.00001	39.0	0.0013	<0.0002
RSEM-R6W-EOP	8/1/2022 12:05	AYR822	M	C256691	0.00307	2.47	<0.00002	159	0.18	108	0.000011	<0.005	<0.005	0.00225	<0.005	<0.005	<0.0001	0.0491	0.00108	0.00107	0.072	<0.0001	<0.001	0.159	<0.00001	40.4	0.0013	<0.0002
RSEM-R6W-EOP	8/2/2022 11:55	AYU378	M	C257067	0.00278	2.66	<0.00002	156	0.24	109	0.000014	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	0.0201	0.00103	0.00096	0.073	<0.0001	<0.001	0.166	<0.00001	40.9	0.0012	<0.0002
RSEM-R6W-EOP	8/3/2022 12:00	AYX381	M	C257672	0.00279	2.73	<0.00002	156	0.253	97.1	0.000013	<0.005	<0.005	0.0024	<0.005	<0.005	<0.0001	0.0208	0.00108	0.00101	0.077	<0.0001	<0.001	0.172	<0.00001	40.8	0.0012	<0.0002

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
RSEM-R6W-EOP	8/4/2022 11:20	AYY904	M	C257848	0.00262	2.7	<0.00002	150	0.247	93.0	0.000013	<0.005	<0.005	0.00237	<0.005	<0.005	<0.0001	0.0228	0.00113	0.00098	0.069	<0.0001	<0.001	0.174	<0.00001	36.1	0.0012	<0.0002
RSEM-R6W-EOP	8/5/2022 10:20	AYY784	M	C257846	0.00262	2.73	<0.00002	157	0.239	96.9	0.000013	<0.005	<0.005	0.00253	<0.005	<0.005	<0.0001	0.0218	0.00111	0.001	0.072	<0.0001	<0.001	0.175	<0.00001	37.9	0.0012	<0.0002
RSEM-R6W-EOP	8/6/2022 11:30	AZA356	M	C258076	0.00247	2.82	<0.00002	152	0.255	92.4	0.000013	<0.005	<0.005	0.00221	<0.005	<0.005	<0.0001	0.0235	0.00108	0.00092	0.061	<0.0001	<0.001	0.169	<0.00001	33.2	0.0013	<0.0002
RSEM-R6W-EOP	8/7/2022 12:20	AZC301	M	C258444	0.00267	2.98	<0.00002	138	0.239	86.7	0.000014	<0.005	<0.005	0.00234	<0.005	<0.005	<0.0001	0.025	0.00109	0.00092	0.06	<0.0001	<0.001	0.158	<0.00001	32.3	0.0014	<0.0002
RSEM-R6W-EOP	8/8/2022 16:30	AZK278	M	C259762	0.00238	2.9	<0.00002	133	0.213	79.1	0.000013	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	0.021	0.00104	0.00098	0.068	<0.0001	<0.001	0.178	<0.00001	32.6	0.0012	0.00036
RSEM-R6W-EOP	8/9/2022 13:30	AZK374	M	C259776	0.00241	2.51	<0.00002	126	0.214	77.6	0.000012	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	0.0207	0.00102	0.00109	0.07	<0.0001	<0.001	0.16	<0.00001	33.2	0.0012	<0.0002
RSEM-R6W-EOP	8/10/2022 15:30	AZL948	M	C259983	0.00227	2.05	<0.00002	119	0.206	73.8	0.000012	<0.005	<0.005	0.00221	<0.005	<0.005	<0.0001	0.0211	0.00099	0.00086	0.07	<0.0001	<0.001	0.139	<0.00001	35.3	0.0011	<0.0002
RSEM-R6W-EOP	8/11/2022 14:00	AZL944	M	C259981	0.00237	1.84	<0.00002	124	0.216	77.0	0.000012	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	0.0189	0.00097	0.00089	0.074	<0.0001	<0.001	0.14	<0.00001	35.9	0.0011	<0.0002
RSEM-R6W-EOP	8/12/2022 12:30	AZL946	M	C259982	0.00225	1.68	<0.00002	123	0.21	77.7	0.00001	<0.005	<0.005	0.00231	<0.005	<0.005	<0.0001	0.0154	0.00095	0.00085	0.073	<0.0001	<0.001	0.123	<0.00001	34.7	0.001	<0.0002
RSEM-R6W-EOP	8/13/2022 10:30	AZR091	M	C260796	0.00234	1.39	<0.00002	124	0.24	77.9	0.00001	<0.005	<0.005	0.00238	<0.005	<0.005	<0.0001	0.0149	0.001	0.00087	0.078	<0.0001	<0.001	0.144	<0.00001	36.8	<0.001	0.00051
RSEM-R6W-EOP	8/14/2022 15:00	AZR293	M	C260829	0.00258	1.51	<0.00002	113	0.217	77.3	0.000014	<0.005	<0.005	0.00225	<0.005	<0.005	<0.0001	0.0121	0.00087	0.00084	0.073	<0.0001	<0.001	0.124	<0.00001	37.8	<0.001	0.00043
RSEM-R6W-EOP	8/15/2022 15:00	AZW325	M	C261663	0.00246	1.32	<0.00002	114	0.2	75.9	0.000012	<0.005	<0.005	0.00243	<0.005	<0.005	<0.0001	0.0166	0.00096	0.0009	0.078	<0.0001	<0.001	0.128	<0.00001	37.0	<0.001	<0.0002
RSEM-R6W-EOP	8/16/2022 13:30	AZW501	M	C261690	0.00259	1.22	<0.00002	115	0.225	72.3	0.000011	<0.005	<0.005	0.00298	<0.005	<0.005	<0.0001	0.0193	0.00095	0.00092	0.078	<0.0001	<0.001	0.126	<0.00001	37.2	<0.001	0.00091
RSEM-R6W-EOP	8/17/2022 14:00	BAA264	M	C262437	0.00243	1.02	<0.00002	117	0.23	76.3	0.000012	<0.005	<0.005	0.00265	<0.005	<0.005	<0.0001	0.0204	0.00095	0.00095	0.082	<0.0001	<0.001	0.131	<0.00001	37.4	<0.001	<0.0002
RSEM-R6W-EOP	8/18/2022 13:30	BAA275	M	C262439	0.00228	1.16	<0.00002	109	0.214	71.3	0.000011	<0.005	<0.005	0.00253	<0.005	<0.005	<0.0001	0.0181	0.00092	0.0009	0.084	<0.0001	<0.001	0.136	<0.00001	37.3	<0.001	<0.0002
RSEM-R6W-EOP	8/19/2022 10:30	BAA261	M	C262436	0.00237	0.979	<0.00002	118	0.226	77.8	0.000014	<0.005	<0.005	0.00247	<0.005	<0.005	<0.0001	0.0144	0.00091	0.00083	0.083	<0.0001	<0.001	0.13	<0.00001	35.8	<0.001	<0.0002
RSEM-R6W-EOP	8/20/2022 12:00	BAD641	M	C262969	0.00233	1.04	<0.00002	111	0.236	74.1	0.000015	<0.005	<0.005	0.00238	<0.005	<0.005	<0.0001	0.0161	0.00097	0.00086	0.085	<0.0001	<0.001	0.13	<0.00001	36.2	<0.001	<0.0002
RSEM-R6W-EOP	8/21/2022 11:30	BAD602	M	C262959	0.00226	0.928	<0.00002	110	0.219	72.6	0.000012	<0.005	<0.005	0.00233	<0.005	<0.005	<0.0001	0.0175	0.00097	0.00087	0.08	<0.0001	<0.001	0.133	<0.00001	34.5	<0.001	<0.0002
RSEM-R6W-EOP	8/22/2022 14:00	BAG919	M	C263407	0.002	0.983	<0.00002	118	0.198	72.8	0.000011	<0.005	<0.005	0.00227	<0.005	<0.005	<0.0001	0.0194	0.00103	0.00094	0.071	<0.0001	<0.001	0.146	<0.00001	31.4	0.001	<0.0002
RSEM-R6W-EOP	8/23/2022 14:30	BAM965	M	C264451	0.00229	1.3	<0.00002	129	0.177	79.5	0.000012	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	0.026	<0.0025	0.00086	0.064	<0.0005	<0.005	<0.25	<0.00005	29.4	<0.005	<0.001
RSEM-R6W-EOP	8/24/2022 14:00	BAM916	M	C264441	0.0023	1.52	<0.00002	133	0.17	79.0	0.000012	<0.005	<0.005	0.00234	<0.005	<0.005	<0.0001	0.0071	0.00109	0.00097	0.053	<0.0001	<0.001	0.178	<0.00001	25.1	<0.001	<0.0002
RSEM-R6W-EOP	8/25/2022 15:20	BAO145	M	C264632	0.00253	1.79	<0.00002	148	0.165	84.0	0.000013	<0.005	<0.005	0.00231	<0.005	<0.005	<0.0001	0.022	0.0011	0.00098	0.059	<0.0001	<0.001	0.165	<0.00001	26.3	0.0011	<0.0002
RSEM-R6W-EOP	8/26/2022 7:00	BAO138	M	C264629	0.00217	1.7	<0.00002	150	0.166	83.0	0.000011	<0.005	<0.005	0.00231	<0.005	<0.005	<0.0001	0.0219	0.0011	0.001	0.059	<0.0001	<0.001	0.168	<0.00001	25.8	0.0011	<0.0002
RSEM-R6W-EOP	8/27/2022 13:00	BAR926	M	C265307	0.0023	1.61	<0.00002	158	0.163	85.8	0.00001	<0.005	<0.005	0.00223	<0.005	<0.005	<0.0001	0.0152	0.00113	0.00106	0.058	<0.0001	<0.001	0.146	<0.00001	25.1	0.0011	<0.0002
RSEM-R6W-EOP	8/28/2022 14:30	BAR947	M	C265316	0.00252	2.04	<0.00002	155	0.15	84.3	0.000012	<0.005	<0.005	0.00234	<0.005	<0.005	<0.0001	0.0203	0.00118	0.00107	0.056	<0.0001	<0.001	0.155	<0.00001	23.5	0.0011	<0.0002
RSEM-R6W-EOP	8/29/2022 14:00	BAU334	M	C265774	0.00215	1.96	<0.00002	136	0.161	78.9	0.000013	<0.005	<0.005	0.00225	<0.005	0.0475	<0.0001	0.0132	0.0011	0.00102	0.058	<0.0001	<0.001	0.154	<0.00001	24.4	<0.001	<0.0002
RSEM-R6W-EOP	8/30/2022 14:00	BBA810	M	C266812	0.00208	1.8	<0.00002	129	0.162	75.4	0.000012	<0.005	<0.005	0.00225	<0.005	<0.005	<0.0001	0.0139	0.00105	0.00102	0.058	<0.0001	<0.001	0.163	<0.00001	25.9	<0.001	<0.0002
RSEM-R6W-EOP	8/31/2022 14:00	BBA807	M	C266810	0.00201	1.61	<0.00002	124	0.162	72.1	<0.00001	<0.005	<0.005	0.00225	<0.005	<0.005	<0.0001	0.0139	0.00109	0.00105	0.062	<0.0001	<0.001	0.16	<0.00001	27.0	0.0011	<0.0002
RSEM-R6W-EOP	9/1/2022 13:30	BBC913	M	C267169	0.00215	1.5	<0.00002	132	0.166	74.8	0.000014	<0.005	<0.005	0.00212	<0.005	<0.005	<0.0001	0.0139	0.00102	0.00102	0.061	<0.0001	<0.001	0.16	<0.00001	27.1	<0.001	<0.0002
RSEM-R6W-EOP	9/2/2022 9:30	BBC921	M	C267172	0.00208	1.45	<0.00002	127	0.164	71.6	0.000012	<0.005	<0.005	0.00223	<0.005	<0.005	<0.0001	0.0133	0.00095	0.00105	0.061	<0.0001	<0.001	0.143	<0.00001	27.1	<0.001	<0.0002
RSEM-R6W-EOP	9/3/2022 15:00	BBE155	M	C267383	0.00197	1.44	<0.00002	132	0.176	77.4	0.000011	<0.005	<0.005	0.0022	<0.005	<0.005	<0.0001	0.0162	0.00098	0.00101	0.06	<0.0001	<0.001	0.153	<0.00001	25.9	<0.001	<0.0002
RSEM-R6W-EOP	9/4/2022 14:30	BBI405	M	C268301	0.00201	1.49	<0.00002	131	0.164	71.4	0.000011	<0.005	<0.005	0.00216	<0.005	<0.005	<0.0001	0.0157	0.001	0.00103	0.058	<0.0001	<0.001	0.173	<0.00001	24.5	<0.001	<0.0002
RSEM-R6W-EOP	9/5/2022 13:30	BBI328	M	C268286	0.00206	1.74	<0.00002	136	0.147	74.5	0.000011	<0.005	<0.005	0.00216	<0.005	<0.005	<0.0001	0.016	0.00108	0.00111	0.056	<0.0001	<0.001	0.162	<0.00001	23.2	<0.001	<0.0002
RSEM-R6W-EOP	9/6/2022 15:25	BBI319	M	C268280	0.00206	2.07	<0.00002	144	0.135	75.1	0.000011	<0.005	<0.005	0.00214	<0.005	<0.005	<0.0001	0.0175	0.00118	0.00118	0.051	<0.0001	<0.001	0.164	<0.00001	20.9	0.001	<0.0002
RSEM-R6W-EOP	9/7/2022 12:10	BBM324	M	C268788	0.00213	2.37	<0.00002	152	0.135	79.1	0.000011	<0.005	<0.005	0.00225	<0.005	<0.005	<0.0001	0.0164	0.00123	0.00123	0.049	<0.0001	<0.001	0.178	<0.00001	21.0	0.0013	<0.0002
RSEM-R6W-EOP	9/8/2022 13:40	BBO446	M	C269143	0.00204	2.47	<0.00002	144	0.12	74.4	<0.00001	<0.005	<0.005	0.00212	<0.005	<0.005	0.00014	0.0187	0.00131	0.00132	0.047	<0.0001	<0.001	0.173	<0.00001	19.2	<0.001	<0.0002
RSEM-R6W-EOP	9/9/2022 10:40	BBS002	M	C269764	0.00203	2.77	<0.00002	146	0.116	75.3	<0.00001	<0.005	<0.005	0.00212	<0.005	<0.005	<0.0001	0.0182	0.00144	0.00132	0.045	<0.0001	<0.001	0.177	<0.00001	16.4	0.0013	<0.0002
RSEM-R6W-EOP	9/10/2022 12:40	BBR903	M	C269730	0.00203	3.41	<0.00002	150	0.102	75.8	<0.00001	<0.005	<0.005	0.00233	<0.005	<0.005	<0.0001	0.0249	0.0016	0.00143	0.042	<0.0001	<0.001	0.172	<0.00001	16.6	0.0013	<0.0002
RSEM-R6W-EOP	9/11/2022 14:40	BBR960	M	C269754	0.00192	3.55	<0.00002	148	0.0957	75.7	<0.00001	<0.005	<0.005	0.00227	<0.005	<0.005	<0.0001	0.0266	0.00162	0.00142	0.04	<0.0001	<0.001	0.185	<0.00001	14.8	0.0014	<0.0002
RSEM-R6W-EOP	9/12/2022 12:00	BBU606	M	C270263	0.00194	3.79	<0.00002	163	0.1	88.3	<0.00001	<0.005	<0.005	0.00236	<0.005	<0.005	<0.0001	0.0259	0.00163	0.00144	0.038	<0.0001	<0.001	0.181	<0.00001	14.1	0.0015	<0.0002
RSEM-R6W-EOP	9/13/2022 14:20	BBX515	M	C270776	0.00199	3.43	<0.00002	181	0.102	97.0	0.00001	<0.005	<0.005	0.0023	<0.005	<0.005	<0.0001	0.026	0.00162	0.00145	0.038	<0.0001	<0.001	0.192	<0.00001	16.5	0.0015	<0.0002
RSEM-R6W-EOP	9/14/2022 10:25	BBZ916	M	C271275	0.00216	3.62	<0.00002	176	0.107	105	0.000011	<0.005	<0.005	0.00247	<0.005	<0.005	<0.0001	0.0211	0.00162	0.00141	0.039	<0.0001	<0.001	0.199	<0.00001	17.0	0.0015	<0.0002
RSEM-R6W-EOP	9/15/2022 9:40	BCC125	M	C271667	0.00202	3.37	<0.00002	178	0.108	104	0.000012	<0.005	<0.005	0.00253	<0.005	<0.005	<0.0001	0.0177	0.00161	0.00143	0.04	<0.0001	<0.001	0.181	<0.00001	17.5	0.0015	<0.0002
RSEM-R6W-EOP	9/16/2022 13:00	BCF680	M	C272242	0.00203	3.16	<0.00002	193	0.113	110	<0.00001	<0.005	<0.005	0.00249	<0.005	<0.005	<0.0001	0.0208	0.00161	0.00135	0.04	<0.0001	<0.001	0.193	<0.00001	18.1	0.0014	<0.0002
RSEM-R6W-EOP	9/17/2022 11:30	BCF751	M	C272259	0.00197	3.02	<0.00002	190	0.112	108	<0.00001	<0.005	<0.005	0.00252	<0.005	<0.005	<0.0001	0.022	0.00161	0.00137	0.039	<0.0001	<0.001	0.185	<0.00001	17.5	0.0015	<0.0002
RSEM-R6W-EOP	9/18/2022 11:20	BCF723	M	C272251	0.00195	3.14	<0.00002	201	0.222	116	0.000011	<0.005	<0.005	0.00258	<0.005	<0.005	<0.0001	0.0222	0.00154	0.0013	0.043	<0.0001	<0.001	0.199	<0.00001	23.6	0.0014	<0.0002
RSEM-R6W-EOP	9/19/2022 9:30	BCI769	M	C272683	0.00197	2.91	<0.00002	189	0.213	119	0.000011	<0.005	<0.005	0.00251	<0.005	<0.005	<0.0001	0.0206	0.00159	0.00132	0.044	<0.0001	<0.001	0.191	<0.00001	24.5	0.0014	<0.0002
RSEM-R6W-EOP	9/20/2022 15:10	BCL544	M	C273070	0.0019	2.99	<0.00002	195	0.199	123	0.000011	<0.005	<0.005	0.00252	<0.005	<0.005	<0.0001	0.0189	0.00145	0.00119	0.043	<0.0001	<0.001	0.208	<0.00001	25.2	0.0013	<0.0002
RSEM-R6W-EOP	9/21/2022 13:30	BCR698	M	C273972	0.00195	3.14	<0.00002	209	0.205	133	0.000011	<0.005	<0.005	0.00267	<0.005	<0.005	<0.0001	0.0164	0.00139	0.0012	0.046	<0.0001	<0.001	0.198	<0.00001	26.4	0.0012	<0.0002
RSEM-R6W-EOP	9/22/2022 15:00	BCR615	M	C273969	0.00177	3.08	<0.00002	203	0.193	134	0.00001	<0.005	<0.005	0.00258	<0.005	0.0056	<0.0001	0.0175	0.00136	0.00122	0.046	<0.0001	<0.001	0.197	<0.00001	27.6	0.0013	<0.0002
RSEM-R6W-EOP	9/23/2022 11:30	BCR892	M	C273985	0.00197	3.13	<0.00002	201	0.2	136	<0.00001	<0.005	<0.005	0.00258	<0.005	0.0068	<0.0001	0.0162	0.00133	0.00115	0.05	<0.0001	<0.001	0.193	<0.00001	29.3	0.0015	<0.0002
RSEM-R6W-EOP	9/24/2022 10:15	BCV561	M	C274577	0.00195	3.44	<0.00002	187	0.225	138	<0.00001	<0.005	<0.005	0.00263	<0.005	0.0069	<0.0001	0.0137	0.00127	0.00114	0.052	<0.0001	<0.001	0.185	<0.00001	32.9	0.0019	<0.0002
RSEM-R6W-EOP	9/25/2022 14:30	BCV620	M	C274593	0.00194	3.31	<0.00002	175	0.221	136	<0.00001	<0.005	<0.005	0.00265	<0.005	0.0073	<0.0001	0.0146	0.00125	0.00111	0.054	<0.0001	<0.001	0.183	<0.00001	34.8	0.002	<0.0002
RSEM-R6W-EOP	9/25/2022 14:45	BCV621	D	C274593	0.00193	3.43	<0.00002	177	0.223	140	<0.00001	<0.005	<0.005	0.00257	<0.005	0.0076	<0.0001	0.0144	0.00128	0.0011	0.054	<0.0001	<0.001	0.185	<0.00001	35.0	0.0021	<0.0002
RSEM-R6W-EOP	9/26/2022 9:30	BCV505	M	C274562	0.00198	3.15	<0.00002	178	0.234	142	<0.00001	<0.005	<0.005	0.00257	<0.005	0.0082	<0.0001	0.0125	0.0013	0.00115	0.055	<0.0001	<0.001	0.164	<0.00001	36.5	0.002	<0.0002
RSEM-R6W-EOP	9/27/2022 10:30	BDB610	M	C275584	0.002	2.67	<0.00002	175	0.209	135	<0.00001	<0.005	<0.005	0.00261	<0.005	0.0075	<0.0001	0.0146	0.00126	0.00113	0.056	<0.0001	<0.001	0.183	<0.00001	36.2	0.0022	<0.0002
RSEM-R6W-EOP	9/28/2022 10:40	BDE181	M	C276033	0.00186	2.77	<0.00002	183	0.238	145	0.000011	<0.005	<0.005	0.00273	<0.005	0.0079	<0.0001	0.0103	0.00125	0.00108	0.058	<0.0001	<0.001	0.178	<0.00001	38.3	0.0022	<0.0002
RSEM-R6W-EOP	9/29/2022 10:40	BDH541	M	C276348	0.00192	2.67	<0.00002	177	0.217	139	0.000012	<0.005	<0.005	0.00265	<0.005	0.0081	<0.0001	0.0109	0.00123	0.00104	0.056	<0.0001	<0.001	0.182	<0.00001	38.9	0.0021	<0.0002
RSEM-R6W-EOP	9/30/2022 10:55	BDH544	M	C276348	0.00201	2.62	<0.00002	180	0.22	143	0.000011	<0.005	<0.005	0.00274	<0.005	0.0075	<0.0001	0.0129	0.00122	0.00103	0.055	<0.0001	<0.001	0.19	<0.00001	38.6	0.0021	<0.0002
RSEM-R6W-EOP	10/1/2022 9:50	BDL249	M	C276877	0.00203	2.6	<0.00002	174	0.212	139	0.000011	<0.005	<0.005	0.00272	<0.005	0.0077	<0.0001	0.0126	0.00124	0.00103	0.054	<0.0001	<0.001	0.187	<0.00001	38.1	0.0021	<0.0002
RSEM-R6W-EOP	10/2/2022 10:25	BDL181	M	C276859	0.00211	2.86	<0.00002	171	0.214	140	0.000012	<0.005	<0.005	0.00268	<0.005	0.0089	<0.0001	0.0123	0.00124	0.00103	0.052	<0.0001	<0.001	0.182	<0.00001	37.8	0.0023	<0.0002
RSEM-R6W-EOP	10/3/2022 10:30	BDP150	M	C277443	0.00206	2.65	<0.00002	158	0.2	126	<0.00001	<0.005	<0.005	0.00242	<0.005	0.0089	<0.0001	0.0108	0.00124	0.00102	0.051	<0.0001	<0.001	0.151	<0.00001	37.1	0.0024	<0.0002
RSEM-R6W-EOP	10/4/2022 10:05	BDR436	M	C277814	0.00196	2.65	<0.00002	160	0.216	133	0.000013	<0.005	<0.005	0.00263	<0.005	0.0076	<0.0001	0.0089	0.00125	0.001	0.049	<0.0001	<0.001	0.154	<0.00001	37.0	0.0024	<0.0002
RSEM-R6W-EOP	10/4/2022 10:15	BDR437	D	C277814	0.00197	2.78	<0.00002	163	0.214	136	0.000013	<0.005	<0.005	0.00264	<0.005	0.008	<0.0001	0.009	0.00124	0.001	0.048	<0.0001	<0.001	0.161	<0.00001	36.9	0.0024	<0.0002
RSEM-R6W-EOP	10/5/2022 10:55	BDV021	M	C278393	0.00221	2.58	<0.00002	160	0.188	128	<0.00001	<0.005	<0.005	0.00247	<0.005	0.0062	<0.0001	0.0101	0.00125	0.00101	0.048	<0.0001	<0.001	0.157	<0.00001	36.4	0.0025	<0.0002
RSEM-R6W-EOP	10/6/2022 10:50	BDZ971	M	C278888	0.00233	3.52	<0.00002	155	0.182	120	0.000013	<0.005	<0.005	0.00237	<0.005	0.0051	<0.0001	0.0141	0.00128	0.00107	0.047	<0.0001	<0.001	0.161	<0.00001	38.2	0.0028	<0.0002
RSEM-R6W-EOP	10/6/2022 11:00	BDZ973	D	C278888	0.00245	3.75	<0.00002	165	0.195	125	0.000011	<0.005	<0.005	0.00251	<0.005	0.0052	<0.0001	0.0143	0.00126	0.00108	0.047	<0.0001	<0.001	0.169	<0.00001	38.6	0.0029	<0.0002
RSEM-R6W-EOP	10/7/2022 12:10	BEA026	M	C278893	0.00255	4.13	<0.00002	157	0.184	117	0.000011	<0.005	<0.005	0.00243	<0.005	<0.005	<0.0001	0.0156	0.00125	0.00108	0.047	<0.0001	<0.001	0.157	<0.00001	40.3	0.0031	<0.0002
RSEM-R6W-EOP	10/8/2022 10:25	BED964	M	C279402	0.0027	4.48	<0.00002	146	0.2	119	<0.00001	<0.005	<0.005	0.00268	<0.005	<0.005	<0.0001	0.0162	0.00126	0.00109	0.048	<0.0001	<0.001	0.139	<0.00001	41.1	0.0031	<0.0002

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
RSEM-R6W-EOP	10/9/2022 9:45	BED926	M	C279394	0.00277	4.58	<0.00002	138	0.201	114	<0.00001	<0.005	<0.005	0.00266	<0.005	<0.005	<0.0001	0.0171	0.00118	0.00104	0.051	<0.0001	<0.001	0.133	<0.00001	45.8	0.003	<0.0002
RSEM-R6W-EOP	10/10/2022 10:05	BED793	M	C279368	0.00283	4.77	<0.00002	137	0.203	113	<0.00001	<0.005	<0.005	0.0027	<0.005	<0.005	<0.0001	0.0188	0.00116	0.00099	0.053	<0.0001	<0.001	0.128	<0.00001	51.4	0.0029	<0.0002
RSEM-R6W-EOP	10/11/2022 12:30	BEK436	M	C280406	0.00276	4.64	<0.00002	134	0.203	109	0.00001	<0.005	<0.005	0.00266	<0.005	<0.005	<0.0001	0.0165	0.00114	0.00096	0.056	<0.0001	<0.001	0.13	<0.00001	54.5	0.0025	<0.0002
RSEM-R6W-EOP	10/12/2022 14:45	BEK646	M	C280448	0.00272	4.98	<0.00002	137	0.21	110	0.000011	<0.005	<0.005	0.00274	<0.005	<0.005	<0.0001	0.0175	0.00117	0.00098	0.054	<0.0001	<0.001	0.132	<0.00001	53.2	0.0027	<0.0002
RSEM-R6W-EOP	10/13/2022 13:15	BEN618	M	C280837	0.00287	4.59	<0.00002	142	0.219	114	<0.00001	<0.005	<0.005	0.00273	<0.005	<0.005	<0.0001	0.0169	0.00112	0.00097	0.057	<0.0001	<0.001	0.129	<0.00001	57.2	0.0023	<0.0002
RSEM-R6W-EOP	10/14/2022 11:45	BEN600	M	C280833	0.00282	4.58	<0.00002	146	0.23	116	0.000011	<0.005	<0.005	0.00283	<0.005	<0.005	<0.0001	0.016	0.00112	0.00095	0.058	<0.0001	<0.001	0.135	<0.00001	58.2	0.0022	<0.0002
RSEM-R6W-EOP	10/15/2022 13:45	BER008	M	C281389	0.00301	4.3	<0.00002	139	0.211	111	<0.00001	<0.005	<0.005	0.0027	<0.005	<0.005	<0.0001	0.0149	0.00113	0.00097	0.059	<0.0001	<0.001	0.13	<0.00001	62.4	0.0022	<0.0002
RSEM-R6W-EOP	10/16/2022 15:45	BER095	M	C281399	0.0036	4.79	<0.00002	164	0.26	131	0.000013	<0.005	<0.005	0.00324	<0.005	<0.005	<0.0001	0.013	0.0011	0.00093	0.059	<0.0001	<0.001	0.131	<0.00001	63.9	0.0021	<0.0002
RSEM-R6W-EOP	10/16/2022 16:00	BER097	D	C281399	0.00316	4.04	<0.00002	148	0.21	116	0.000014	<0.005	<0.005	0.00295	<0.005	<0.005	<0.0001	0.0128	0.00114	0.00093	0.06	<0.0001	<0.001	0.133	<0.00001	64.2	0.0021	<0.0002
RSEM-R6W-EOP	10/17/2022 11:30	BER151	M	C281421	0.00324	4.02	<0.00002	145	0.22	124	0.000011	<0.005	<0.005	0.00283	<0.005	<0.005	<0.0001	0.0101	0.00112	0.00089	0.061	<0.0001	<0.001	0.132	<0.00001	66.1	0.0019	<0.0002
RSEM-R6W-EOP	10/18/2022 9:40	BEX620	M	C282315	0.00314	3.93	<0.00002	137	0.226	113	<0.00001	<0.005	<0.005	0.00276	<0.005	<0.005	<0.0001	0.0085	0.00115	0.00089	0.064	<0.0001	<0.001	0.142	<0.00001	65.4	0.0021	<0.0002
RSEM-R6W-EOP	10/19/2022 12:50	BFA348	M	C282741	0.00317	3.85	<0.00002	140	0.241	119	0.000011	<0.005	<0.005	0.00295	<0.005	<0.005	<0.0001	0.0086	0.00104	0.00101	0.059	<0.0001	<0.001	0.115	<0.00001	65.7	0.0018	<0.0002
RSEM-R6W-EOP	10/20/2022 10:10	BFD237	M	C283174	0.00308	4.05	<0.00002	136	0.241	115	0.000013	<0.005	<0.005	0.00316	<0.005	0.0088	<0.0001	0.0105	0.00105	0.00081	0.062	<0.0001	<0.001	0.133	<0.00001	68.8	0.0018	<0.0002
RSEM-R6W-EOP	10/21/2022 10:20	BFD224	M	C283172	0.00288	3.88	<0.00002	128	0.23	110	0.000012	<0.005	<0.005	0.00296	<0.005	<0.005	<0.0001	0.0127	0.00097	0.00081	0.063	<0.0001	<0.001	0.129	<0.00001	69.7	0.0018	<0.0002
RSEM-R6W-EOP	10/22/2022 11:40	BFI044	M	C283756	0.00382	4.1	<0.00002	140	0.25	118	0.000012	<0.005	<0.005	0.00306	<0.005	<0.005	<0.0001	0.0115	0.00102	0.00082	0.064	<0.0001	<0.001	0.119	<0.00001	67.7	0.0018	<0.0002
RSEM-R6W-EOP	10/23/2022 10:25	BFI229	M	C283774	0.00346	4.22	<0.00002	118	0.254	105	0.000013	<0.005	<0.005	0.003	<0.005	<0.005	<0.0001	0.0158	0.001	0.00081	0.068	<0.0001	<0.001	0.112	<0.00001	71.6	0.0022	<0.0002
RSEM-R6W-EOP	10/24/2022 9:55	BFL670	M	C284145	0.00363	4.34	<0.00002	113	0.242	102	0.000012	<0.005	<0.005	0.00283	<0.005	<0.005	<0.0001	0.017	0.00099	0.00078	0.069	<0.0001	<0.001	0.109	<0.00001	72.1	0.0022	<0.0002
RSEM-R6W-EOP	10/25/2022 10:55	BFP708	M	C284665	0.00389	4.9	<0.00002	107	0.247	96.5	0.000012	<0.005	<0.005	0.00279	<0.005	<0.005	<0.0001	0.02	0.00097	0.00075	0.071	<0.0001	<0.001	0.105	<0.00001	72.3	0.0022	<0.0002
RSEM-R6W-EOP	10/26/2022 12:40	BFS035	M	C285038	0.00382	4.6	<0.00002	94.1	0.242	85.1	<0.00001	<0.005	<0.005	0.0026	<0.005	<0.005	<0.0001	0.023	0.00092	0.00072	0.072	<0.0001	<0.001	0.1	0.000013	72.8	0.0021	<0.0002
RSEM-R6W-EOP	10/27/2022 10:25	BFU907	M	C285466	0.00402	4.79	<0.00002	92.9	0.261	85.2	<0.00001	<0.005	<0.005	0.00263	<0.005	<0.005	<0.0001	0.0228	0.00089	0.00068	0.071	<0.0001	<0.001	0.096	<0.00001	73.4	0.002	<0.0002
RSEM-R6W-EOP	10/28/2022 11:40	BFU722	M	C285458	0.00388	4.8	<0.00002	79.1	0.242	74.1	<0.00001	<0.005	<0.005	0.00245	<0.005	<0.005	<0.0001	0.0265	0.00088	0.00077	0.072	<0.0001	<0.001	0.092	<0.00001	78.9	0.002	<0.0002
RSEM-R6W-EOP	10/29/2022 9:55	BFZ654	M	C286199	0.0042	5.01	<0.00002	76.6	0.239	71.0	0.000011	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	0.0288	0.00085	0.00074	0.071	<0.0001	<0.001	0.091	<0.00001	71.5	0.0021	<0.0002
RSEM-R6W-EOP	10/30/2022 11:30	BFZ646	M	C286196	0.00414	5.35	<0.00002	73.4	0.243	71.9	<0.00001	<0.005	<0.005	0.00232	<0.005	<0.005	<0.0001	0.0294	0.00084	0.00072	0.069	<0.0001	<0.001	0.087	<0.00001	70.8	0.0022	<0.0002
RSEM-R6W-EOP	10/31/2022 11:10	BGA236	M	C286288	0.00405	5.19	<0.00002	63.0	0.221	60.0	<0.00001	<0.005	<0.005	0.0022	<0.005	<0.005	<0.0001	0.0296	0.0008	0.0007	0.07	<0.0001	<0.001	0.083	<0.00001	70.9	0.0021	<0.0002
RSEM-R6W-EOP	11/1/2022 15:35	BGE764	M	C286877	0.00415	5.7	<0.00002	61.8	0.243	62.6	0.000011	<0.005	<0.005	0.00223	<0.005	<0.005	<0.0001	0.0263	0.00076	0.00067	0.066	<0.0001	<0.001	0.08	<0.00001	74.5	0.002	<0.0002
RSEM-R6W-EOP	11/1/2022 15:55	BGE765	D	C286877	0.00412	5.67	<0.00002	61.2	0.236	62.2	0.000011	<0.005	<0.005	0.00226	<0.005	<0.005	<0.0001	0.0276	0.00075	0.00069	0.066	<0.0001	<0.001	0.078	<0.00001	72.8	0.0023	<0.0002
RSEM-R6W-EOP	11/2/2022 12:45	BGJ736	M	C287754	0.00381	5.27	<0.00002	57.4	0.235	58.0	<0.00001	<0.005	<0.005	0.00211	<0.005	<0.005	<0.0001	0.0268	0.00077	0.00068	0.07	<0.0001	<0.001	0.067	<0.00001	76.3	0.0019	<0.0002
RSEM-R6W-EOP	11/3/2022 14:15	BGJ744	M	C287759	0.00407	6.01	<0.00002	55.5	0.261	57.8	<0.00001	<0.005	<0.005	0.00218	<0.005	<0.005	<0.0001	0.0297	0.00076	0.0007	0.07	<0.0001	<0.001	0.07	0.000012	74.5	0.0019	<0.0002
RSEM-R6W-EOP	11/4/2022 11:15	BGJ739	M	C287756	0.00393	5.88	<0.00002	51.7	0.254	54.3	0.000011	<0.005	<0.005	0.00209	<0.005	<0.005	<0.0001	0.0291	0.00074	0.00069	0.071	<0.0001	<0.001	0.067	<0.00001	73.9	0.0018	<0.0002
RSEM-R6W-EOP	11/5/2022 13:45	BGO363	M	C288361	0.00327	5.14	<0.00002	41.2	0.208	43.8	<0.00001	<0.005	<0.005	0.00183	<0.005	0.0056	<0.0001	0.028	0.00068	0.00066	0.072	<0.0001	<0.001	0.062	<0.00001	70.2	0.0016	<0.0002
RSEM-R6W-EOP	11/6/2022 14:45	BGO252	M	C288323	0.00307	5.23	<0.00002	37.8	0.202	40.4	<0.00001	<0.005	<0.005	0.00174	<0.005	0.006	<0.0001	0.0251	0.00064	0.00064	0.072	<0.0001	<0.001	0.057	<0.00001	67.3	0.0013	<0.0002
RSEM-R6W-EOP	11/7/2022 10:15	BGO320	M	C288345	0.00298	5.1	<0.00002	35.5	0.208	38.2	<0.00001	<0.005	<0.005	0.00172	<0.005	0.0058	<0.0001	0.0228	0.00061	0.00062	0.07	<0.0001	<0.001	0.055	0.000012	67.6	0.0012	<0.0002
RSEM-R6W-EOP	11/8/2022 10:40	BGT301	M	C289111	0.00275	4.57	<0.00002	29.2	0.175	37.9	<0.00001	<0.005	<0.005	0.00164	<0.005	0.0051	<0.0001	0.0235	0.00056	0.00049	0.066	<0.0001	<0.001	0.052	<0.00001	67.9	0.001	<0.0002
RSEM-R6W-EOP	11/9/2022 11:00	BGW284	M	C289508	0.00277	4.8	<0.00002	28.3	0.163	36.6	<0.00001	<0.005	<0.005	0.00163	<0.005	0.0054	0.00011	0.0233	0.00053	0.00054	0.067	<0.0001	<0.001	<0.05	0.000011	65.2	<0.001	<0.0002
RSEM-R6W-EOP	11/10/2022 11:00	BGV716	M	C289423	0.00266	4.78	<0.00002	26.9	0.162	34.5	<0.00001	<0.005	<0.005	0.00158	<0.005	<0.005	0.00015	0.0245	0.00055	0.00047	0.064	<0.0001	<0.001	<0.05	<0.00001	65.4	0.001	<0.0002
RSEM-R6W-EOP	11/11/2022 11:10	BHA034	M	C290104	0.00249	4.81	<0.00002	26.5	0.177	32.5	0.00001	<0.005	0.0057	0.0015	<0.005	0.0155	0.0001	0.0226	0.00051	0.00042	0.063	<0.0001	<0.001	<0.05	<0.00001	65.2	<0.001	<0.0002
RSEM-R6W-EOP	11/12/2022 10:40	BHA062	M	C290112	0.00274	4.37	<0.00002	25.1	0.175	30.3	<0.00001	<0.005	<0.005	0.00142	<0.005	0.0057	<0.0001	0.0195	<0.0005	0.00038	0.06	<0.0001	<0.001	<0.05	<0.00001	63.9	<0.001	<0.0002
RSEM-R6W-EOP	11/13/2022 11:20	BHA078	M	C290117	0.00226	4.16	<0.00002	22.1	0.161	28.6	<0.00001	<0.005	<0.005	0.00132	<0.005	0.0052	<0.0001	0.019	<0.0005	0.00036	0.057	<0.0001	<0.001	<0.05	<0.00001	62.7	<0.001	<0.0002
RSEM-R6W-EOP	11/14/2022 11:00	BHC287	M	C290544	0.00259	4.47	<0.00002	22.7	0.166	26.2	0.000011	<0.005	<0.005	0.00128	<0.005	0.0052	<0.0001	0.0184	<0.0005	0.00033	0.056	<0.0001	<0.001	<0.05	<0.00001	66.1	<0.001	<0.0002
RSEM-R6W-EOP	11/15/2022 11:10	BHD952	M	C290817	0.00253	4.52	<0.00002	23.4	0.169	27.3	<0.00001	<0.005	<0.005	0.00128	<0.005	0.006	0.00017	0.0193	<0.0005	0.00033	0.057	<0.0001	<0.001	<0.05	<0.00001	68.6	<0.001	<0.0002
RSEM-R6W-EOP	11/16/2022 12:20	BHF926	M	C291159	0.00275	4.14	<0.00002	23.1	0.17	29.6	0.000011	<0.005	<0.005	0.00138	<0.005	0.0146	<0.0001	0.0222	<0.0005	0.00035	0.061	<0.0001	<0.001	<0.05	0.00001	71.3	<0.001	<0.0002
RSEM-R6W-EOP	11/17/2022 12:10	BHH896	M	C291494	0.00253	4.51	<0.00002	26.6	0.167	32.4	<0.00001	<0.005	<0.005	0.00127	<0.005	<0.005	0.00023	0.0192	<0.0005	0.00033	0.061	<0.0001	<0.001	<0.05	0.00001	62.6	<0.001	<0.0002
RSEM-R6W-EOP	11/18/2022 11:10	BHI800	M	C291574	0.00254	4.51	<0.00002	26.2	0.161	29.7	0.00001	<0.005	<0.005	0.00127	<0.005	<0.005	0.00015	0.022	<0.0005	0.00031	0.056	<0.0001	<0.001	<0.05	0.000012	63.9	<0.001	<0.0002
RSEM-R6W-EOP	11/19/2022 12:20	BHL412	M	C291899	0.00215	3.79	<0.00002	20.9	0.15	23.9	<0.00001	<0.005	<0.005	0.00123	<0.005	0.0053	<0.0001	0.0217	<0.0005	0.00032	0.057	<0.0001	<0.001	<0.05	<0.00001	62.4	<0.001	<0.0002
RSEM-R6W-EOP	11/20/2022 11:40	BHL417	M	C291901	0.00236	3.75	<0.00002	21.2	0.149	22.9	0.000012	<0.005	<0.005	0.00127	<0.005	0.0052	<0.0001	0.0203	<0.0005	0.00028	0.054	<0.0001	<0.001	<0.05	0.00001	62.3	<0.001	<0.0002
RSEM-R6W-EOP	11/21/2022 11:25	BHL421	M	C291903	0.00216	3.97	<0.00002	19.5	0.144	22.6	0.000011	<0.005	0.0066	0.00123	<0.005	<0.005	0.00033	0.0246	<0.0005	0.00028	0.053	<0.0001	<0.001	<0.05	<0.00001	61.8	<0.001	<0.0002
RSEM-R6W-EOP	11/22/2022 12:39	BHR289	M	C292931	0.00196	4.99	<0.00002	22.0	0.161	26.8	0.000011	<0.005	0.0069	0.00121	<0.005	0.0063	0.00023	0.0188	<0.0005	0.00028	0.053	<0.0001	<0.001	<0.05	0.000011	61.7	<0.001	<0.0002
RSEM-R6W-EOP	11/23/2022 15:30	BHR240	M	C292918	0.00205	4.57	<0.00002	20.3	0.15	24.2	<0.00001	<0.005	<0.005	0.00118	<0.005	0.0068	0.00021	0.0208	<0.0005	0.00029	0.054	<0.0001	<0.001	<0.05	<0.00001	61.6	0.0012	<0.0002
RSEM-R6W-EOP	11/24/2022 14:00	BHS969	M	C293245	0.00206	4.44	<0.00002	19.7	0.151	25.1	<0.00001	<0.005	<0.005	0.00116	<0.005	0.0058	0.00012	0.0221	<0.0005	0.00029	0.059	<0.0001	<0.001	<0.05	<0.00001	61.3	0.0011	<0.0002
RSEM-R6W-EOP	11/25/2022 10:45	BHS973	M	C293246	0.00199	4.35	<0.00002	18.7	0.146	24.2	<0.00001	<0.005	0.0054	0.00115	<0.005	<0.005	0.00029	0.021	<0.0005	0.0003	0.059	<0.0001	<0.001	<0.05	<0.00001	61.0	0.0011	<0.0002
RSEM-R6W-EOP	11/26/2022 12:15	BHX192	M	C293769	0.0024	4.23	<0.00002	19.8	0.165	25.2	0.000049	<0.005	<0.005	0.00128	<0.005	0.0056	0.00016	0.0201	<0.0005	0.00033	0.058	<0.0001	<0.001	<0.05	<0.00001	58.1	<0.001	<0.0002
RSEM-R6W-EOP	11/27/2022 13:45	BHX164	M	C293759	0.00195	4.31	<0.00002	20.1	0.167	25.9	<0.00001	<0.005	0.0076	0.00128	<0.005	0.0056	0.00014	0.0176	<0.0005	0.00035	0.06	<0.0001	<0.001	<0.05	<0.00001	58.8	<0.001	<0.0002
RSEM-R6W-EOP	11/28/2022 10:15	BHX166	M	C293760	0.00237	4.03	<0.00002	19.1	0.162	24.2	0.000111	<0.005	<0.005	0.00133	<0.005	<0.005	0.00011	0.016	<0.0005	0.00035	0.062	<0.0001	<0.001	<0.05	<0.00001	58.3	<0.001	<0.0002
RSEM-R6W-EOP	11/28/2022 10:30	BHX167	D	C293760	0.00248	4.06	<0.00002	19.2	0.164	25.1	0.000133	<0.005	<0.005	0.00136	<0.005	<0.005	0.00013	0.0154	<0.0005	0.00035	0.063	<0.0001	<0.001	<0.05	<0.00001	59.0	<0.001	<0.0002
RSEM-R6W-EOP	11/29/2022 10:05	BIA658	M	C294441	0.00231	4.17	<0.00002	18.9	0.163	26.6	0.000011	<0.005	0.0082	0.00125	<0.005	<0.005	0.00013	0.0154	<0.0005	0.00034	0.07	<0.0001	<0.001	<0.05	<0.00001	62.7	<0.001	<0.0002
RSEM-R6W-EOP	11/30/2022 10:50	BID442	M	C294835	0.00199	3.91	<0.00002	18.5	0.151	21.7	<0.00001	<0.005	<0.005	0.0011	<0.005	0.008	<0.0001	0.0189	<0.0005	0.00031	0.067	<0.0001	<0.001	<0.05	<0.00001	64.3	<0.001	<0.0002
RSEM-R6W-EOP	11/30/2022 11:00	BID443	D	C294835	0.00197	4.31	<0.00002	17.4	0.158	27.0	<0.00001	<0.005	0.0062	0.00119	<0.005	0.0052	0.00012	0.0184	<0.0005	0.0003	0.066	<0.0001	<0.001	<0.05	<0.00001	64.2	<0.001	<0.0002
RSEM-R6W-EOP	12/1/2022 11:20	BIF877	M	C295196	0.00197	4.29	<0.00002	17.4	0.162	25.8	<0.00001	<0.005	<0.005	0.00122	<0.005	0.0052	<0.0001	0.0171	<0.0005	0.00031	0.06	<0.0001	<0.001	<0.05	<0.00001	65.2	<0.001	<0.0002
RSEM-R6W-EOP	12/2/2022 10:50	BIF818	M	C295193	0.00208	4.26	<0.00002	18.1	0.153	21.7	<0.00001	<0.005	0.0061	0.00112	<0.005	0.0057	0.0001	0.0189	<0.0005	0.00029	0.061	<0.0001	<0.001	<0.05	0.000011	66.7	<0.001	<0.0002
RSEM-R6W-EOP	12/3/2022 10:45	BII772	M	C295634	0.00219	4	<0.00002	16.9	0.166	25.7	<0.00001	<0.005	<0.005	0.00128	<0.005	0.0051	<0.0001	0.021	<0.0005	0.00027	0.058	<0.0001	<0.001	<0.05	0.000011	63.5	<0.001	<0.0002
RSEM-R6W-EOP	12/3/2022 10:55	BII773	D	C295634	0.00205	4.11	<0.00002	17.6	0.169	24.9	<0.00001	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	0.0199	<0.0005	0.00025	0.057	<0.0001	<0.001	<0.05	0.000014	63.3	<0.001	<0.0002
RSEM-R6W-EOP	12/4/2022 10:45	BII770	M	C295633	0.00205	4.07	<0.00002	17.0	0.167	24.0	<0.00001	<0.005	<0.005	0.00128	<0.005	0.0073	0.00012	0.0222	<0.0005	0.00025	0.057	<0.0001	<0.001	<0.05	0.000014	62.9	<0.001	<0.0002
RSEM-R6W-EOP	12/5/2022 12:30	BIL940	M	C296047	0.0019	3.88	<0.00002	15.3	0.156	23.4	<0.00001	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	0.0238	<0.0005	0.00026	0.06	<0.0001	<0.001	<0.05	0.000013	64.1	<0.001	<0.0002
RSEM-R6W-EOP	12/6/2022 10:30	BIO857	M	C296487	0.00233	4.29	<0.00002	16.8	0.166	26.3	<0.00001	<0.005	<0.005	0.00135	<0.005	<0.005	<0.0001	0.0247	<0.0005	0.00025	0.062	<0.0001	<0.001	<0.05	0.000011	68.4	<0.001	<0.0002
RSEM-R6W-EOP	12/7/2022 11:35	BIR864	M	C297052	0.00252	4.27	<0.00002	15.8	0.156	25.8	<0.00001	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	0.0251	<0.0005	0.00025	0.062	<0.0001	<0.001	<0.05	0.000011	70.7	<0.001	<0.0002
RSEM-R6W-EOP	12/7/2022 11:45	BIR865	D	C297052	0.00257	4.42	<0.00002	16.3	0.163	26.5	<0.00001	<0.005	<0.005	0.00132	<0.005	0.0052	<0.0001	0.0249	<0.0005	0.00025	0.063	<0.0001	<0.001	<0.05	0.00001	70.2	<0.001	<0.0002
RSEM-R6W-EOP	12/8/2022 16:10	BIT646	M	C297337	0.00232	4.44	<0.00002	16.0	0.155	25.3	<0.00001	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	0.0271	<0.0005	0.00027	0.065	<0.0001	<0.001	<0.05	0.000013	71.1	<0.001	<0.0002
RSEM-R6W-EOP	12/9/2022 11:10	BIT658	M	C297341	0.00244	4.56	<0.00002	16.0	0.159	26.2	<0.00001	<0.005	<0.005	0.00133	<0.005	0.0062	<0.0001	0.0231	<0.0005	0.00026	0.066	<0.0001	<0.001	<0.05	0.000015	72.2	<0.001	<0.0002

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr	D-Co
					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
RSEM-R6W-EOP	12/10/2022 11:50	BIX265	M	C297760	0.00227	4.41	<0.00002	15.9	0.155	25.5	<0.00001	<0.005	<0.005	0.00132	<0.005	0.0067	<0.0001	0.0187	<0.0005	0.00029	0.065	<0.0001	<0.001	<0.05	0.000013	67.1	<0.001	<0.0002
RSEM-R6W-EOP	12/10/2022 12:00	BIX266	D	C297760	0.00236	4.38	<0.00002	16.2	0.162	26.4	<0.00001	<0.005	<0.005	0.00137	<0.005	0.0069	0.0001	0.0191	<0.0005	0.00028	0.067	<0.0001	<0.001	<0.05	0.000012	66.8	<0.001	<0.0002
RSEM-R6W-EOP	12/11/2022 15:30	BIX268	M	C297761	0.0024	4.62	<0.00002	16.5	0.161	26.3	<0.00001	<0.005	0.0051	0.00136	<0.005	0.0075	0.00011	0.0191	<0.0005	0.0003	0.071	<0.0001	<0.001	<0.05	0.000014	66.4	<0.001	<0.0002
RSEM-R6W-EOP	12/12/2022 10:15	BIX294	M	C297767	0.00229	4.57	<0.00002	16.1	0.16	25.5	<0.00001	<0.005	<0.005	0.00135	<0.005	0.0075	<0.0001	0.0203	<0.0005	0.00029	0.069	<0.0001	<0.001	<0.05	0.000016	66.6	<0.001	<0.0002
RSEM-R6W-EOP	12/13/2022 12:30	BJH803	M	C299400	0.00216	4.64	<0.00002	15.0	0.165	26.2	0.00001	<0.005	<0.005	0.0014	<0.005	0.0082	0.00011	0.0148	<0.0005	0.00027	0.063	<0.0001	<0.001	<0.05	0.000013	66.3	<0.001	<0.0002
RSEM-R6W-EOP	12/14/2022 13:15	BJH809	M	C299405	0.00215	4.48	<0.00002	13.5	0.155	23.2	<0.00001	<0.005	<0.005	0.00121	<0.005	0.0064	0.00017	0.0174	<0.0005	0.00027	0.064	<0.0001	<0.001	<0.05	0.000019	64.8	<0.001	<0.0002
RSEM-R6W-EOP	12/14/2022 13:30	BJH810	D	C299405	0.00199	4.53	<0.00002	13.9	0.159	23.7	0.000011	<0.005	0.0058	0.00125	<0.005	0.0066	0.00022	0.0156	<0.0005	0.00026	0.064	<0.0001	<0.001	<0.05	0.000015	65.6	<0.001	<0.0002
RSEM-R6W-EOP	12/15/2022 13:00	BJJ047	M	C299557	0.00246	4.52	<0.00002	14.8	0.154	25.3	<0.00001	<0.005	<0.005	0.00131	<0.005	0.0065	<0.0001	0.0167	<0.0005	0.00025	0.062	<0.0001	<0.001	<0.05	0.000011	64.4	<0.001	<0.0002
RSEM-R6W-EOP	12/16/2022 10:30	BJJ051	M	C299559	0.00232	4.49	<0.00002	15.2	0.153	24.9	<0.00001	<0.005	<0.005	0.0013	<0.005	0.0082	<0.0001	0.0164	<0.0005	0.00025	0.061	<0.0001	<0.001	<0.05	0.00001	63.2	<0.001	<0.0002
RSEM-R6W-EOP	12/17/2022 13:00	BJL794	M	C299939	0.00186	4.48	<0.00002	14.4	0.158	24.9	<0.00001	<0.005	<0.005	0.00143	<0.005	0.0087	<0.0001	0.0177	<0.0005	0.00027	0.061	<0.0001	<0.001	<0.05	0.000015	67.2	<0.001	<0.0002
RSEM-R6W-EOP	12/18/2022 13:15	BJL804	M	C299943	0.00215	4.61	<0.00002	14.9	0.163	25.9	0.00001	<0.005	<0.005	0.00142	<0.005	0.0079	<0.0001	0.0188	<0.0005	0.00028	0.062	<0.0001	<0.001	<0.05	0.000027	68.4	<0.001	<0.0002
RSEM-R6W-EOP	12/19/2022 11:00	BJL813	M	C299950	0.00193	4.74	<0.00002	16.1	0.173	27.5	<0.00001	<0.005	<0.005	0.00152	<0.005	0.008	<0.0001	0.0179	<0.0005	0.00026	0.062	<0.0001	<0.001	<0.05	0.000012	68.4	<0.001	<0.0002
RSEM-R6W-EOP	12/20/2022 10:00	BJP134	M	C2A0603	0.00222	4.47	<0.00002	15.2	0.146	25.9	<0.00001	<0.005	<0.005	0.00139	<0.005	0.0063	0.00011	0.0188	<0.0005	0.00028	0.065	<0.0001	<0.001	<0.05	0.000011	66.8	<0.001	<0.0002
RSEM-R6W-EOP	12/21/2022 10:30	BJP447	M	C2A0675	0.00235	4.5	<0.00002	16.3	0.148	27.5	<0.00001	<0.005	<0.005	0.00135	<0.005	0.0096	<0.0001	0.0199	<0.0005	0.00027	0.067	<0.0001	<0.001	<0.05	0.000014	66.9	<0.001	<0.0002
RSEM-R6W-EOP	12/21/2022 10:40	BJP448	D	C2A0675	0.00221	4.32	<0.00002	15.4	0.139	25.0	<0.00001	<0.005	<0.005	0.0013	<0.005	0.0083	<0.0001	0.0206	<0.0005	0.00027	0.066	<0.0001	<0.001	0.068	<0.00001	66.6	<0.001	<0.0002
RSEM-R6W-EOP	12/22/2022 12:35	BJQ104	M	C2A0818	0.00272	4.63	<0.00002	15.9	0.153	25.9	0.00001	<0.005	<0.005	0.00133	<0.005	0.0072	<0.0001	0.0214	<0.0005	0.00028	0.067	<0.0001	<0.001	<0.05	0.000012	64.4	<0.001	<0.0002
RSEM-R6W-EOP	12/23/2022 11:25	BJQ106	M	C2A0819	0.00242	4.42	<0.00002	15.2	0.142	23.2	<0.00001	<0.005	<0.005	0.00129	<0.005	0.0057	<0.0001	0.0238	<0.0005	0.00026	0.065	<0.0001	<0.001	<0.05	0.000013	64.7	<0.001	<0.0002
RSEM-R6W-EOP	12/24/2022 12:30	BJR122	M	C2A1052	0.00142	5.58	<0.00002	21.6	0.168	27.1	<0.00001	<0.005	<0.005	0.00141	<0.005	0.007	0.00011	0.023	<0.0005	0.00035	0.064	<0.0001	<0.001	<0.05	0.000014	67.2	<0.001	<0.0002
RSEM-R6W-EOP	12/24/2022 12:40	BJR121	D	C2A1052	0.00147	5.72	<0.00002	20.3	0.172	23.7	<0.00001	<0.005	<0.005	0.00142	<0.005	0.0062	0.0001	0.0253	<0.0005	0.00033	0.065	<0.0001	<0.001	<0.05	0.000013	68.0	<0.001	<0.0002
RSEM-R6W-EOP	12/25/2022 10:55	BJR129	M	C2A1055	0.0015	5.6	<0.00002	19.8	0.169	23.5	<0.00001	<0.005	<0.005	0.00142	<0.005	0.0065	0.00016	0.0249	<0.0005	0.00033	0.064	<0.0001	<0.001	<0.05	0.000013	68.2	<0.001	<0.0002
RSEM-R6W-EOP	12/26/2022 8:05	BJR178	M	C2A1058	0.00156	5.55	<0.00002	20.3	0.17	23.6	<0.00001	<0.005	<0.005	0.00142	<0.005	0.0071	<0.0001	0.0238	<0.0005	0.00034	0.065	<0.0001	<0.001	<0.05	0.000013	68.0	<0.001	<0.0002
RSEM-R6W-EOP	12/27/2022 13:00	BJS997	M	C2A1469	0.0018	4.68	<0.00002	20.7	0.123	24.4	<0.00001	<0.005	<0.005	0.00131	<0.005	0.0063	<0.0001	0.0245	<0.0005	0.0003	0.063	<0.0001	<0.001	<0.05	<0.00001	66.3	<0.001	<0.0002
RSEM-R6W-EOP	12/28/2022 12:00	BJS998	M	C2A1470	0.00184	4.59	<0.00002	21.7	0.128	24.1	<0.00001	<0.005	<0.005	0.00142	<0.005	0.0065	<0.0001	0.0246	<0.0005	0.00035	0.065	<0.0001	<0.001	<0.05	<0.00001	65.7	<0.001	<0.0002
RSEM-R6W-EOP	12/29/2022 14:00	BJT907	M	C2A1753	0.00193	4.78	<0.00002	24.3	0.135	24.9	<0.00001	<0.005	<0.005	0.00149	<0.005	0.007	<0.0001	0.0205	<0.0005	0.0003	0.057	<0.0001	<0.001	<0.05	<0.00001	65.0	<0.001	<0.0002
RSEM-R6W-EOP	12/29/2022 14:15	BJT908	D	C2A1753	0.00197	4.77	<0.00002	23.3	0.13	24.8	<0.00001	<0.005	<0.005	0.0014	<0.005	0.0063	<0.0001	0.0212	<0.0005	0.00031	0.059	<0.0001	<0.001	<0.05	<0.00001	64.7	<0.001	<0.0002
RSEM-R6W-EOP	12/30/2022 10:30	BJT902	M	C2A1751	0.00204	5	<0.00002	25.1	0.137	26.2	<0.00001	<0.005	<0.005	0.00145	<0.005	0.0063	<0.0001	0.0242	<0.0005	0.00034	0.06	<0.0001	<0.001	<0.05	<0.00001	65.1	<0.001	<0.0002
RSEM-R6W-EOP	12/31/2022 13:00	BJU301	M	C300112	0.00141	5.69	<0.00002	28.3	0.173	23.7	<0.00001	<0.005	<0.005	0.00152	<0.005	0.0078	<0.0001	0.0267	<0.0005	0.00042	0.064	<0.0001	<0.001	0.055	0.000013	67.0	<0.001	<0.0002
RSEM-R6-WP-IN	1/10/2022 9:50	FJ2200044-002	M	FJ2200044	0.00210	6.70	<0.000010	91.0	0.175	65.1	<0.000010	0.00040	0.00398	0.00295	0.00350	0.412	0.00024	0.0494	0.00120	0.00113	0.021	<0.000100	<0.000050	0.088	0.0000115	22.1	0.00216	0.00013
RSEM-R6-WP-IN	5/13/2022 11:50	ATB015	M	C232410	0.00829	2.64	<0.00002	123	0.298	135	0.000014	<0.005	<0.005	0.00233	<0.005	0.0756	<0.0001	0.0117	0.00147	0.00059	0.06	<0.0001	<0.001	0.107	0.000015	51.3	<0.001	0.0003
RSEM-R6W-SP	1/7/2022 13:15	FJ2200035-003	M	FJ2200035	0.00214	6.21	<0.000010	106	0.182	64.0	<0.000010	0.0005	0.00533	0.00275	0.00338	0.104	<0.00020	0.0260	0.00167	0.00140	0.036	<0.000100	<0.000050	0.114	0.0000344	33.3	0.00264	0.00042
RSEM-R6W-SP	1/10/2022 10:30	FJ2200044-003	M	FJ2200044	0.00218	6.94	<0.000010	108	0.196	72.9	<0.000010	0.0004	0.00509	0.00279	0.00353	0.0801	<0.00020	0.0244	0.00160	0.00121	0.033	<0.000100	<0.000050	0.112	0.0000370	28.9	0.00256	0.00031
RSEM-R6W-SP	1/11/2022 17:00	FJ2200088-001	M	FJ2200088	0.00196	6.17	<0.000010	105	0.178	64.9	<0.000010	0.0004	0.00471	0.00276	0.00284	0.0922	0.00022	0.0419	0.00136	0.00108	0.034	<0.000100	<0.000050	0.107	0.0000331	28.6	0.00142	0.00044
RSEM-R6W-SP	1/18/2022 11:20	FJ2200122-001	M	FJ2200122	0.00168	6.38	<0.000010	103	0.138	66.0	<0.000010	0.001	0.00805	0.00249	0.00232	0.0044	0.00021	0.0134	0.00145	0.00130	0.027	<0.000100	<0.000050	0.117	<0.0000050	20.1	0.00066	0.00018
RSEM-R6W-SP	1/19/2022 12:00	FJ2200185-001	M	FJ2200185	0.00176	6.72	<0.000010	111	0.136	66.4	<0.000010	0.0009	0.00211	0.00263	0.00210	<0.0030	<0.00020	0.0138	0.00136	0.00128	0.029	<0.000100	<0.000050	0.108	0.0000066	20.2	0.00080	0.00019
RSEM-R6W-SP	2/1/2022 16:00	AOB116	M	C207120	0.00191	4.74	<0.00002	84.2	0.149	55.1	<0.00001	<0.005	<0.005	0.00223	<0.005	0.0078	<0.0001	0.0204	0.00102	0.00083	0.03	<0.0001	<0.001	0.093	0.000017	31.8	0.0011	0.00058
RSEM-R6W-SP	2/2/2022 12:00	AOB073	M	C207109	0.00207	4.74	<0.00002	84.8	0.157	59.2	<0.00001	<0.005	<0.005	0.00223	<0.005	0.0088	<0.0001	0.0193	0.00112	0.0008	0.03	<0.0001	<0.001	0.1	<0.00001	33.4	0.0011	0.00049
RSEM-R6W-SP	2/3/2022 12:00	AOC177	M	C207302	0.00207	4.83	<0.00002	84.2	0.167	52.6	<0.00001	<0.005	<0.005	0.0024	<0.005	0.0081	<0.0001	0.014	0.00099	0.00087	0.032	<0.0001	<0.001	0.094	0.00001	33.2	<0.001	0.00053
RSEM-R6W-SP	2/4/2022 11:00	AOC181	M	C207304	0.00209	5.23	<0.00002	91.0	0.162	66.0	<0.00001	<0.005	<0.005	0.00234	<0.005	0.0071	<0.0001	0.0184	0.00126	0.0009	0.038	<0.0001	<0.001	0.121	0.00002	38.0	0.001	0.00056
RSEM-R6W-SP	2/5/2022 10:00	AOE502	M	C207630	0.002	5.22	<0.00002	94.1	0.167	78.3	<0.00001	<0.005	<0.005	0.00243	<0.005	0.0071	<0.0001	0.0156	0.0011	0.0009	0.034	<0.0001	<0.001	0.11	0.000012	33.8	<0.001	0.00035
RSEM-R6W-SP	2/6/2022 13:00	AOE484	M	C207624	0.00212	5.36	<0.00002	94.5	0.168	74.2	<0.00001	<0.005	<0.005	0.00245	<0.005	0.0079	<0.0001	0.0158	0.00119	0.00088	0.035	<0.0001	<0.001	0.114	<0.00001	34.0	<0.001	0.00033
RSEM-R6W-SP	3/2/2022 13:30	APO714	M	C213881	0.00291	2.52	<0.00002	43.9	0.157	69.5	<0.00001	<0.005	<0.005	0.00057	<0.005	<0.005	<0.0001	0.0099	0.0006	0.00042	0.024	<0.0001	<0.001	0.055	<0.00001	43.1	0.001	0.00035
RSEM-R6W-SP	3/3/2022 15:40	APQ573	M	C214168	0.00295	2.6	<0.00002	44.5	0.161	71.6	<0.00001	<0.005	<0.005	0.00059	<0.005	0.0111	0.0001	0.0052	0.00056	0.00049	0.021	<0.0001	<0.001	0.059	<0.00001	38.4	0.0014	0.00042
RSEM-R6W-SP	4/17/2022 17:25	ARR904	M	C225213	0.00194	2.46	<0.00002	40.9	0.175	45.4	<0.00001	<0.005	<0.005	0.0011	<0.005	0.0066	<0.0001	0.0047	0.00057	0.00037	0.067	<0.0001	<0.001	<0.05	0.000022	35.5	<0.001	0.00068
RSEM-R6W-SP	7/27/2022 12:00	AYK062	M	C255556	0.00356	2.15	<0.00002	186	0.246	144	0.000013	<0.005	<0.005	0.00244	<0.005	<0.005	<0.0001	0.0151	0.00126	0.00121	0.062	<0.0001	<0.001	0.196	<0.00001	39.6	0.0019	<0.0002
SeptimusBeaverPond_1	4/2/2022 15:15	ARB522	M	C222000	0.00015	0.658	0.00004	1.00	0.181	9.2	0.000042	<0.005	<0.005	0.00026	<0.005	<0.005	0.00025	<0.003	<0.0005	0.00068	0.067	<0.0001	<0.001	<0.05	<0.00001	28.0	<0.001	0.00029
SeptimusBeaverPond_2	4/2/2022 15:25	ARB523	M	C222000	<0.0001	0.783	<0.00002	0.563	0.0999	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0075	0.00114	0.0038	<0.0005	0.00054	0.035	<0.0001	<0.001	<0.05	<0.00001	17.2	<0.001	<0.0002
SeptimusBeaverPond_3	4/2/2022 15:35	ARB524	M	C222000	0.00011	1.1	<0.00002	0.898	0.117	3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	0.00032	0.0136	<0.0005	0.00058	0.037	<0.0001	<0.001	<0.05	0.000012	18.5	<0.001	<0.0002
SeptimusBeaverPond_4	4/2/2022 15:50	ARB525	M	C222000	<0.0001	1.6	<0.00002	1.28	0.163	3.9	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	0.00152	0.0357	<0.0005	0.0007	0.052	<0.0001	<0.001	<0.05	<0.00001	26.1	<0.001	0.00023
SeptimusBeaverPond_5	4/2/2022 16:00	ARB526	M	C222000	0.00019	4.28	0.000021	3.85	0.397	7.7	0.000016	<0.005	<0.005	0.00021	<0.005	<0.005	0.00231	0.0086	<0.0005	0.00127	0.125	<0.0001	<0.001	<0.05	<0.00001	66.3	<0.001	0.00032
SeptimusBeaverPond_6	4/2/2022 16:15	ARB527	M	C222000	<0.0001	1.8	<0.00002	1.85	0.101	<3.0	<0.00001	<0.005	<0.005	0.00042	<0.005	<0.005	0.00012	<0.003	<0.0005	0.0008	0.18	<0.0001	<0.001	<0.05	<0.00001	41.7	<0.001	0.00067
SeptimusBeaverPond_7	4/2/2022 16:20	ARB528	M	C222000	0.00018	3.42	<0.00002	1.40	0.0987	<3.0	0.00002	<0.005	0.0129	0.00121	<0.005	0.0188	0.00025	0.0042	<0.0005	0.00075	0.071	<0.0001	<0.001	<0.05	<0.00001	28.6	<0.001	0.00078
SeptimusBeaverPond_8	4/2/2022 16:30	ARB529	M	C222000	0.00012	1.12	<0.00002	1.87	0.193	13.8	<0.00001	<0.005	<0.005	0.00114	<0.005	<0.005	0.00021	<0.003	<0.0005	0.00073	0.086	<0.0001	<0.001	<0.05	<0.00001	34.4	<0.001	0.00058
SeptimusBeaverPond_1	6/25/2022 14:35	AVZ710	M	C245512	0.00048	0.62	<0.00002	6.94	1.22	82.2	<0.00001	<0.005	<0.005	0.00208	<0.005	<0.005	0.00011	0.0057	<0.0005	0.00087	0.104	<0.0001	<0.001	<0.05	<0.00001	105	<0.001	<0.0002
SeptimusBeaverPond_2	6/25/2022 14:50	AVZ711	M	C245512	0.00022	1.48	<0.00002	4.09	0.719	46.0	<0.00001	<0.005	<0.005	0.00023	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00114	0.107	<0.0001	<0.001	<0.05	<0.00001	80.9	<0.001	<0.0002
SeptimusBeaverPond_3	6/25/2022 14:55	AVZ712	M	C245512	0.00014	0.343	<0.00002	3.64	0.522	28.9	<0.00001	<0.005	<0.005	0.00014	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00088	0.126	<0.0001	<0.001	<0.05	<0.00001	74.8	<0.001	<0.0002
SeptimusBeaverPond_4	6/25/2022 15:10	AVZ713	M	C245512	0.00015	0.768	<0.00002	3.95	0.595	31.9	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	0.0033	<0.0005	0.00105	0.087	<0.0001	<0.001	<0.05	<0.00001	73.4	<0.001	<0.0002
SeptimusBeaverPond_5	6/25/2022 15:25	AVZ714	M	C245512	0.00024	0.935	<0.00002	3.98	0.736	45.2	<0.00001	<0.005	<0.005	0.00012	<0.005	<0.005	<0.0001	0.0045	<0.0005	0.0012	0.099	<0.0001	<0.001	<0.05	<0.00001	79.3	<0.001	0.00021
SeptimusBeaverPond_6	6/25/2022 15:40	AVZ715	M	C245512	0.0003	0.718	<0.00002	4.27	0.949	51.6	<0.00001	<0.005	<0.005	0.00016	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00118	0.103	<0.0001	<0.001	<0.05	<0.00001	83.6	<0.001	<0.0002
SeptimusBeaverPond_7	6/25/2022 15:50	AVZ716	M	C245512	0.00029	0.732	<0.00002	4.41	0.944	54.3	<0.00001	<0.005	<0.005	0.00015	<0.005	<0.005	0.00012	<0.003	<0.0005	0.00117	0.106	<0.0001	<0.001	<0.05	<0.00001	84.7	<0.001	<0.0002
SeptimusBeaverPond_8	6/25/2022 15:55	AVZ717	M	C245512	0.00045	0.797	<0.00002	4.29	0.973	53.8	<0.00001	<0.005	<0.005	0.00025	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00118	0.101	<0.0001	<0.001	<0.05	<0.00001	85.5	<0.001	<0.0002
SeptimusBeaverPond_1	9/17/2022 15:00	BCF762	M	C272259	0.00017	3.39	<0.00002	5.43	0.82	37.9	<0.00001	<0.005	<0.005	0.00021	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00161	0.128	<0.0001	<0.001	<0.05	<0.00001	77.0	<0.001	<0.0002
SeptimusBeaverPond_2	9/17/2022 15:15	BCF755	M	C272259	0.00018	4.01	<0.00002	4.68	0.783	32.8	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0256	<0.0001	0.0048	<0.0005	0.00177	0.125	<0.0001	<0.001	<0.05	<0.00001	72.7	<0.001	0.00028
SeptimusBeaverPond_3	9/17/2022 15:25	BCF756	M	C272259	0.00017	4.19	<0.00002	4.77	0.794	35.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0094	<0.0001	0.0036	<0.0005	0.00196	0.144	<0.0001	<0.001	<0.05	<0.00001	76.0	<0.001	0.00026
SeptimusBeaverPond_4	9/17/2022 15:30	BCF757	M	C272259	0.00017	4.46	<0.00002	5.12	0.838	37.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	0.0047	<0.0005	0.00191	0.13	<0.0001	<0.001	<0.05	<0.00001	77.7	<0.001	0.00026
SeptimusBeaverPond_5	9/17/2022 15:45	BCF758	M	C272259	0.00015	4.6	<0.00002	4.92	0.814	35.5	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	0.0047	<0.0005	0.00191	0.134	<0.0001	<0.001	<0.05	<0.00001	80.1	<0.001	0.00024
SeptimusBeaverPond_6	9/17/2022 15:55	BCF759	M	C272259	0.00013	1.23	<0.00002	3.59	0.353	9.1	<0.00001	<0.005	<0.005	0.00011	<0.005	<0.005	0.00012	<0.003	<0.0005	0.00122	0.055	<0.0001	<0.001	<0.05	<0.00001	44.4	<0.001	<0.0002
SeptimusBeaverPond_7	9/17/2022 16:10	BCF760	M	C272259	<0.0001	3.46	<0.00002	1.96	0.202	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.00082	0.118	<0.0001	<0.001	<0.05	<0.00001	54.9	<0.001	<0.0002
SeptimusBeaverPond_8	9/17/2022 16:20	BCF761	M	C272259	0.00018	4.7	<0.00002	4.87	0.773	33.8	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0065	<0.0001	0.0046	<0.0005	0.00188	0.142	<0.0001	<0.001	<0.05	<0.00001	80.6	<0.001	0.00028
USCD-North-Well	2/9/2022 12:00	AOK260	M	C208577	0.0026	5.06	<0.00002	5.71	0.205	28.7	0.000024	<0.005	<0.005	0.00198	<0.005	0.169	<0.0001	<0.003	<0.0005	0.0002	0.272	<0.0001	<0.001	<0.05	0.00001	127	<0.001	<0.0002
USCD-North-Well	3/30/2022 12:20	AQX835	M	C221206	0.00288	5.57	<0.00002	7.63	0.173	32.7	0.00004	<0.005	0.0054	0.00237	<0.005	0.245	<0.0001	<0.003	<0.0005	0.00016	0.277	<0.0001	<0.001	<0.05	0.000015	109	<0.001	<0.0002
USCD-North-Well	5/18/2022 15:30	ATJ927	M	C234012	0.00584	4.16	<0.00002	8.78	0.165	10.1	<0.00001	<0.005	<0.005	0.00192	<0.005	0.024	0.00012	<0.003	<0.0005	0.00023	0.144	<0.0001	<0.001	<0.05	<0.00001	70.6	<0.001	<0.0002
USCD-South-Well	2/9/2022 12:10	AOK261	M	C208577	0.00308	4.97	<0.00002	5.50	0.21	31.5	0.000067	<0.005	<0.005	0.00192	<0.005	0.981	<0.0001	<0.003	<0.0005	0.00017	0.162	<0.0001	<0.001	<0.05	0.00002	126	<0.001	<0.0002
USCD-South-Well	3/30/2022 12:45	AQX836	M	C221206	0.00579	5.53	<0.00002	9.32	0.194	32.9	0.000026	<0.005	<0.005	0.00242	<0.005	0.289	<0.0001	<0.003	<0.0005	0.00016	0.283	<0.0001	<0.001	<0.05	0.000019	105	<0.001	<0.0002

Notes: Under Sample Class "M" denotes a monitoring sample and "D" denotes a field duplicate sample. "<" = Result not detected and is below the indicated detection limit. Values are absent from the table if a test result was not reported.

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
85-Background	5/19/2022 12:10	ATL918	M	C234314																								150
85-EOP	3/24/2022 15:30	AQP987	M	C219524																								210
85-EOP	3/30/2022 16:15	AQX839	M	C221206																								38
85-EOP	5/4/2022 18:10	ASP685	M	C230320																								60
85-EOP	5/7/2022 17:10	ASS950	M	C230886																								72
85-EOP	5/12/2022 16:45	ATA820	M	C232369																								8.2
85-EOP	5/19/2022 11:50	ATL916	M	C234314																								18
85-EOP	5/29/2022 11:45	ATW973	M	C236421																								28
85-EP	3/27/2022 10:40	AQS346	M	C219976																								26
85-EP	4/3/2022 17:05	ARB463	M	C221989																								30
85-IDZ	3/24/2022 16:35	AQP988	M	C219524																								260
85-IDZ	3/30/2022 16:50	AQX840	M	C221206																								230
85-IDZ	5/4/2022 18:35	ASP687	M	C230320																								44
85-IDZ	5/7/2022 18:00	ASS952	M	C230886																								56
85-IDZ	5/12/2022 17:15	ATA822	M	C232369																								11
85-IDZ	5/19/2022 12:00	ATL917	M	C234314																								73
85-IDZ	5/29/2022 12:15	ATW975	M	C236421																								300
85-US	3/24/2022 16:30	AQP989	M	C219524																								400
85-US	5/4/2022 18:30	ASP686	M	C230320																								8.2
85-US	5/7/2022 17:55	ASS951	M	C230886																								35
85-US	5/12/2022 17:00	ATA821	M	C232369																								2.8
85-US	5/29/2022 12:05	ATW974	M	C236421																								440
85-WP	4/3/2022 17:00	ARB462	M	C221989																								48
A25_EOP	2/10/2022 14:45	AOM668	M	C208923																								160
A25_EOP	2/12/2022 12:50	AOP218	M	C209346																								130
A25_EOP	3/20/2022 17:15	AQJ918	M	C218219																								240
A25_EOP	3/26/2022 19:00	AQS242	M	C219944																								64
A25-SP	4/2/2022 13:40	ARB530	M	C222000																								15
A25-SP	4/29/2022 14:00	ASL383	M	C229488																								45
A25-SP	5/3/2022 15:40	ASO451	M	C230063																								15
AC-S-Sump	3/6/2022 14:00	APS818	M	C214508	<0.0005	<0.01	<0.0002	0.0503	45.0	0.0034	<0.0000019	0.005	0.0115	<0.01	2.93	0.00298	4.68	<0.00002	105	0.524	58.3	0.000012	<0.005	<0.005	0.00636	<0.005	<0.005	<0.0001	94
Area_20_Sump	7/8/2022 12:15	AWW523	M	C249170	0.00056	<0.01	<0.0002	0.0083	28.2	0.03	<0.0000019	0.0055	0.0014	<0.01	3.32	0.00024	6.41	<0.00002	26.0	0.269	20.2	0.00002	<0.005	<0.005	0.00244	<0.005	<0.005	<0.0001	160
Area_23_BT	2/11/2022 12:55	AOM649	M	C208915	0.00053	<0.01	<0.0002	0.122	16.8	0.0496	<0.0000019	0.0059	0.0169	<0.01	2.39	0.00454	3.53	<0.00002	66.8	0.264	37.7	0.000016	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	15
Area_23_NCD	4/21/2022 16:00	ARX711	M	C226546																								49
Area_23_NCD	5/7/2022 13:15	ASS948	M	C230886																								120
Area_23_NCD-EOP	4/21/2022 17:05	ARX712	M	C226546																								200
Area_23_NCD-EOP	5/7/2022 13:50	ASS949	M	C230886																								43
Area_24_E_Sump	7/27/2022 15:35	AYK064	M	C255556																								0.47
Area_24_E_Sump	8/3/2022 16:35	AYX385	M	C257672																								0.50
Area_24_E_Sump	8/7/2022 14:25	AZC303	M	C258444																								0.27
Area_24_E_Sump	8/11/2022 15:30	AZR300	M	C260829																								1.1
Area_24_E_Sump	9/10/2022 12:50	BBR905	M	C269730																								1.6
Area_24_E_Sump	9/13/2022 11:40	BBX516	M	C270776	<0.0005	<0.01	<0.0002	0.0104	22.7	<0.001	<0.0000019	0.0023	<0.001	<0.01	4.16	0.00114	3.86	<0.00002	7.26	0.257	16.1	<0.00001	<0.005	<0.005	0.00223	<0.005	0.0072	<0.0001	0.67
Area_24_E_Sump	9/22/2022 16:00	BCR620	M	C273969																								
Area_24_E_Sump	9/28/2022 13:45	BDE183	M	C276033																								4.6
Area_24_E_Sump	10/4/2022 13:25	BDR439	M	C277814																								5.2
Area_24_E_Sump	10/13/2022 15:00	BEN620	M	C280837																								
Area_24_E_Sump	10/21/2022 12:00	BFD225	M	C283172																								15
Area_24_E_Sump	10/26/2022 14:25	BFS036	M	C285038																								7.7
Area_24_E_Sump	11/3/2022 15:20	BGJ746	M	C287759																								
Area_24_E_Sump	11/8/2022 12:30	BGT302	M	C289111																								7.5
Area_24_E_Sump	11/15/2022 12:25	BHD953	M	C290817																								2.0
Area_24_E_Sump	11/23/2022 14:20	BHR242	M	C292918																								
Area_24_E_Sump	11/30/2022 12:30	BID445	M	C294835																								0.84
Area_24_W_Sump	7/10/2022 14:55	AWZ489	M	C249617																								22
Area_24_W_Sump	7/13/2022 15:55	AXH418	M	C250934																								0.35
Area_24_W_Sump	7/24/2022 15:00	AYC681	M	C254290																								5.0
Area_24_W_Sump	7/27/2022 15:45	AYK065	M	C255556																								4.7
Area_25_Pond	3/17/2022 14:30	AQH806	M	C217776																								690
Area_30_EOP	2/10/2022 15:30	AOM665	M	C208923	0.00098	0.016	<0.0002	0.0027	11.6	0.0164	<0.0000019	0.0023	0.0015	<0.01	1.71	0.00098	0.613	<0.00002	2.10	0.527	30.3	<0.00001	<0.005	<0.005	0.00146	<0.005	<0.005	<0.0001	76
Area_30_EOP	3/20/2022 16:05	AQJ915	M	C218219	0.00113	<0.01	<0.0002	0.0073	31.5	0.0805	<0.0000019	0.0037	0.0022	<0.01	2.46	0.00189	1.31	<0.00002	4.19	1.55	138	<0.00001	<0.005	<0.005	0.00366	<0.005	<0.005	<0.0001	4.6
Area_30_EOP	4/2/2022 15:00	ARB521	M	C222000	<0.0005	0.022	<0.0002	0.0049	30.0	0.271	<0.0000019	0.0025	0.0035	<0.01	1.62	0.00153	0.771	<0.00002	4.24	1.66	113	<0.00001	<0.005	<0.005	0.00321	<0.005	0.0278	<0.0001	2.5
Area_30_EOP	4/23/2022 13:30	ARZ187	M	C226855	0.00082	0.016	<0.0002	0.0078	64.7	0.576	<0.0000019	0.0036	0.0049	<0.01	2.77	0.00506	0.873	<0.00002	8.30	2.53	213	<0.00001	<0.005	<0.005	0.00543	<0.005	0.102	<0.0001	3.2
Area_30_EOP	5/1/2022 13:00	ASL428	M	C229493	0.00056	<0.01	<0.0002	0.0062	31.0	0.0177	<0.0000019	0.0064	0.0026	0.011	2.97	0.0072	1.64	<0.00002	5.42	1.51	97.2	<0.00001	<0.005	<0.005	0.00345	<0.005	0.0087	<0.0001	16
Area_30_EOP	5/4/2022 14:15	ASP680	M	C230320	0.00174	0.023	<0.0002	0.0094	47.5	0.0238	0.000002	0.0065	0.0037	0.015	4.39	0.00687	1.68	<0.00002	7.72	2.03	134	<0.00001	<0.005	<0.005	0.00523	<0.005	0.0161	<0.0001	17
Area_30_EOP	5/7/2022 12:30	ASS944	M	C230886	0.00084	<0.01	<0.0002	0.007	38.4	0.0163	<0.0000019	0.0075	0.0033	<0.01	3.07	0.00845	1.6	<0.00002	5.74	2.08	128	<0.00001	<0.005	<0.005	0.00388	<0.005	0.0087	<0.0001	15
Area_30_EOP	5/10/2022 12:50	ASX005	M	C231638	0.00082	0.011	<0.0002	0.0068	35.3	0.0045	<0.0000019	0.008	0.0026	<0.01	3.26	0.0106	1.35	<0.00002	5.25	2.42	137	<0.00001	<0.005	<0.005	0.00396	<0.005	0.0076	<0.0001	5.7
Area_30_EOP	5/30/2022 13:45	ATZ470	M	C236894	0.00206	0.036	<0.0002	0.0103	50.8	0.0262	<0.0000019	0.015	0.0134	0.012	5.28	0.0128	2.13	<0.00002	6.60	4.03	197	0.000014	<0.005	<0.005	0.0061	<0.005	0.0341	0.00012	7.0
Area_30_EOP	6/20/2022 11:55	AVO967	M	C243664	0.00139	<0.01	<0.0002	0.0115	50.2	0.001	<0.0000019	0.0111	0.0046	<0.01	3.74	0.0101	0.835	<0.00002	6.14	4.22	198	<0.00001	<0.005	<0.005	0.00519	<0.005	0.0134	<0.0001	4.4

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
Area_30_EOP	8/5/2022 12:00	AYY785	M	C257846	0.001	<0.02	<0.0004	0.0145	101	<0.002	<0.0000019	0.0118	0.0045	<0.02	4.33	0.00529	1.27	<0.00004	9.83	7.58	419	<0.00002	<0.01	<0.01	0.00754	<0.01	0.028	<0.0002	1.6
Area_30_EOP	9/17/2022 14:45	BCF754	M	C272259	<0.0025	<0.05	<0.001	0.019	144	0.0091	<0.0000019	0.0103	<0.005	0.062	4.72	0.00344	<0.5	<0.0001	13.1	10	600	<0.00005	<0.025	<0.025	0.00904	<0.025	0.096	<0.0005	1.6
Area_30_SP	1/25/2022 14:05	ANP166	M	C204905	0.00079	0.02	<0.0002	<0.002	6.63	0.0401	<0.0000019	<0.001	<0.001	0.034	1.14	0.0002	0.282	<0.00002	0.776	0.22	9.8	<0.00001	<0.005	<0.005	0.00078	<0.005	0.033	0.0001	19
Area_30_SP	4/18/2022 15:35	ARU249	M	C225693	0.00075	0.042	<0.0002	0.0138	118	0.724	<0.0000019	0.0055	0.0147	0.015	3.93	0.00603	1.25	<0.00002	13.6	5.07	386	0.000023	<0.005	<0.005	0.00967	<0.005	0.152	<0.0001	8.1
Area_30_SP	4/27/2022 15:30	ASH198	M	C228648	0.00109	0.012	<0.0002	0.0109	71.4	0.173	<0.0000019	0.0044	0.0048	0.012	3.09	0.00274	1.29	<0.00002	9.76	2.46	220	<0.00001	<0.005	<0.005	0.00633	<0.005	0.0565	<0.0001	10
Area_30_SP	5/4/2022 14:25	ASP681	M	C230320	0.00172	0.024	<0.0002	0.0088	46.9	0.0573	<0.0000019	0.0067	0.0035	0.013	4.56	0.00843	1.62	<0.00002	7.53	1.96	130	<0.00001	<0.005	<0.005	0.00512	<0.005	<0.005	0.0001	23
Area_30_SP	5/4/2022 14:35	ASP682	M	C230320	0.00175	0.024	<0.0002	0.0093	47.2	0.0515	<0.0000019	0.0072	0.0036	0.015	4.63	0.00796	1.59	<0.00002	7.36	2.1	140	<0.00001	<0.005	<0.005	0.00531	<0.005	<0.005	<0.0001	24
Area_30_SP	5/24/2022 14:30	ATR511	M	C235358	0.00137	<0.01	<0.0002	0.0103	60.7	0.0021	0.0000023	0.0073	0.0037	0.016	4.52	0.0115	0.284	<0.00002	8.11	2.83	199	0.000015	<0.005	<0.005	0.00556	<0.005	0.0121	<0.0001	3.1
Area_30_SP	6/16/2022 13:40	AVK125	M	C242788	0.00073	<0.01	<0.0002	0.0147	73.8	0.0214	<0.0000019	0.0118	0.0039	<0.01	4.86	0.0171	0.729	<0.00002	6.76	6.12	285	0.000013	<0.005	<0.005	0.00656	<0.005	0.016	0.00017	6.6
Area_30_SP	6/25/2022 14:15	AVZ709	M	C245512	0.00084	0.013	<0.0002	0.0127	75.1	0.0015	<0.0000019	0.0113	0.0058	<0.01	4.48	0.0149	0.544	<0.00002	7.21	5.98	369	0.000015	<0.005	<0.005	0.00653	<0.005	0.0215	0.00011	1.9
Area_30_SP	7/3/2022 12:30	AWM047	M	C247492	0.00107	0.013	<0.0002	0.0159	91.0	0.0076	<0.0000019	0.0107	0.0037	<0.01	4.07	0.0105	0.59	<0.00002	9.03	6.79	387	0.000019	<0.005	<0.005	0.00584	<0.005	0.0202	<0.0001	2.1
Area_30_SP	7/11/2022 13:20	AXC660	M	C250105	0.002	<0.02	<0.0004	0.0171	141	0.0041	<0.0000019	0.0139	0.0048	<0.02	4.78	0.00731	0.588	<0.00004	12.2	9.05	545	0.000022	<0.01	<0.01	0.0079	<0.01	0.085	<0.0002	1.0
Area_30_SP	7/30/2022 15:00	AYP674	M	C256352	<0.0025	<0.05	<0.001	0.027	239	0.0086	<0.0000019	0.0175	0.006	<0.05	6.12	0.00752	0.867	<0.0001	18.8	15.2	841	<0.00005	<0.025	<0.025	0.0101	<0.025	0.137	<0.0005	0.99
Area_30_SP	9/9/2022 11:45	BBS004	M	C269764	<0.0025	<0.05	<0.001	0.019	155	0.0123	<0.0000019	0.0115	<0.005	<0.05	4.91	0.00382	0.734	<0.0001	12.3	10.2	601	<0.00005	<0.025	<0.025	0.00891	<0.025	0.086	<0.0005	0.57
Area_30_SP	10/1/2022 11:20	BDL253	M	C276877	<0.0025	<0.05	<0.001	0.015	144	0.0172	<0.0000019	0.0088	<0.005	<0.05	4.71	0.00371	<0.5	<0.0001	11.9	10	602	<0.00005	<0.025	<0.025	0.00962	<0.025	0.088	<0.0005	1.2
Area_30_SP	10/6/2022 13:35	BDZ975	M	C278888	<0.0025	<0.05	<0.001	0.016	151	0.0087	<0.0000019	0.0091	<0.005	<0.05	4.81	0.00297	<0.5	<0.0001	12.5	9.93	602	<0.00005	<0.025	<0.025	0.0106	<0.025	0.065	<0.0005	0.80
Area_30_SP	10/22/2022 13:20	BFI046	M	C283756	<0.0025	<0.05	<0.001	0.016	186	0.0224	<0.0000019	0.0086	<0.005	<0.05	5.53	0.00219	<0.5	<0.0001	15.0	10.9	702	<0.00005	<0.025	<0.025	0.0122	<0.025	0.056	<0.0005	1.4
Area_52_Sump	6/12/2022 9:30	AVD505	M	C241814	0.00302	<0.01	<0.0002	0.128	97.6	0.619	<0.0000019	0.0023	0.0986	<0.01	6.78	0.00988	1.04	<0.00002	147	0.639	358	0.000032	<0.005	<0.005	0.00693	<0.005	0.0187	0.00033	3.8
Area_A_N_Ditch	1/25/2022 14:40	ANP165	M	C204905	0.00085	0.032	<0.0002	<0.002	8.21	0.155	<0.0000019	0.005	<0.001	<0.01	1.40	0.00018	1.96	<0.00002	2.28	0.0895	<3.0	<0.00001	<0.005	<0.005	0.00052	<0.005	<0.005	<0.0001	29
Area_A_N_Ditch	3/21/2022 13:20	AQL270	M	C218465	0.00085	0.012	<0.0002	0.0024	11.0	0.0515	0.0000024	0.0018	0.0012	<0.01	1.43	0.00047	2.96	<0.00002	3.49	0.121	9.3	<0.00001	<0.005	<0.005	0.00086	<0.005	<0.005	<0.0001	92
Area_A_N_Ditch	5/3/2022 13:00	ASO449	M	C230063	0.00073	<0.01	<0.0002	0.0026	11.9	0.0052	<0.0000019	0.0013	<0.001	<0.01	0.859	0.00046	2.61	<0.00002	3.33	0.129	10.8	<0.00001	<0.005	<0.005	0.00082	<0.005	<0.005	<0.0001	3.4
Area_A_N_Ditch	5/30/2022 14:55	ATZ471	M	C236894	0.00055	<0.01	<0.0002	0.0034	11.5	0.0121	<0.0000019	0.0017	0.0013	<0.01	0.935	0.00048	2.9	<0.00002	5.40	0.123	12.8	<0.00001	<0.005	<0.005	0.00081	<0.005	<0.005	<0.0001	3.2
Area_A_N_Ditch	8/1/2022 13:55	AYR823	M	C256691																								3.3
Area_A_N_Ditch	12/7/2022 14:10	BIR868	M	C297052	0.00059	<0.005	<0.0002	0.0028	13.6	0.0013	<0.0000019	0.0016	<0.001	<0.01	1.24	0.00097	3.29	<0.00002	5.33	0.13	18.6	<0.00001	<0.005	<0.005	0.00115	<0.005	<0.005	<0.0001	0.86
Area_A_NE_Sump	3/9/2022 17:00	APZ006	M	C215885	<0.0005	<0.01	<0.0002	0.0222	29.6	0.0036	<0.0000019	0.0021	<0.001	<0.01	2.28	0.00119	5.74	<0.00002	87.2	0.308	49.5	<0.00001	<0.005	<0.005	0.00243	<0.005	0.0125	<0.0001	2.2
Area_A_NE_Sump	5/11/2022 11:00	ASZ427	M	C232133																								23
Area_A_NE_Sump	5/22/2022 13:10	ATO539	M	C234788																								11
Area_A_NE_Sump	5/26/2022 10:15	ATV286	M	C236083																								16
Area_A_NE_Sump	5/30/2022 14:20	ATZ472	M	C236894																								5.0
Area_A_NE_Sump	6/4/2022 11:40	AUL726	M	C238905																								32
Area_A_NE_Sump	6/11/2022 11:30	AUY739	M	C241062																								32
Area_A_NE_Sump	6/18/2022 13:15	AVL992	M	C243162																								6.1
Area_A_NE_Sump	6/24/2022 16:45	AVZ718	M	C245512																								32
Area_A_NE_Sump	7/3/2022 13:30	AWM051	M	C247492																								6.4
Area_A_NE_Sump	7/6/2022 11:05	AWV912	M	C249077																								12
Area_A_NE_Sump	7/12/2022 13:00	AXE622	M	C250400																								35
Area_A_NE_Sump	7/24/2022 14:40	AYC680	M	C254290																								4.5
Area_A_NE_Sump	8/7/2022 13:55	AZC302	M	C258444																								2.2
Area_A_NE_Sump	8/14/2022 16:00	AZR297	M	C260829																								6.3
Area_A_NE_Sump	8/15/2022 16:00	AZW326	M	C261663	<0.0005	<0.01	<0.0002	0.0128	25.6	0.03	<0.0000019	0.0016	0.0013	<0.01	3.60	0.0012	5.34	<0.00002	8.99	0.317	15.5	<0.00001	<0.005	<0.005	0.00218	<0.005	<0.005	<0.0001	98
Area_A_NE_Sump	8/27/2022 13:30	BAR930	M	C265307																								25
Area_A_NE_Sump	9/4/2022 16:00	BBI410	M	C268301																								4.2
Area_A_NE_Sump	9/8/2022 10:30	BBO450	M	C269143																								2.8
Area_A_NE_Sump	9/22/2022 16:20	BCR621	M	C273969																								
Dewatering_Pond	6/1/2022 14:30	AUE685	M	C237797	0.00412	0.058	<0.0002	0.0254	22.2	0.0418	0.0000028	0.0032	0.0207	0.02	5.86	0.00495	3.09	<0.00002	36.4	0.218	68.3	0.000012	<0.005	<0.005	0.00315	<0.005	0.0163	0.00026	74
Earthfill_Dam_DS_OUT	1/1/2022 13:45	FJ2200029-004	M	FJ2200029	0.00031	<0.010	<0.000050	0.0039	12.5	0.00638	<0.0000050	0.00175	<0.00050	<0.050	1.40	0.00142	3.93	<0.000010	7.49	0.135	16.7	<0.000010	<0.00010	<0.00030	0.00101	<0.00050	0.0028	<0.00020	0.32
Earthfill_Dam_DS_OUT	1/5/2022 12:10	FJ2200018-001	M	FJ2200018	0.00033	<0.010	<0.000050	0.0027	9.94	0.00395	<0.0000050	0.00151	<0.00050	<0.050	1.05	0.000880	2.97	<0.000010	5.44	0.131	11.0	<0.000010	<0.00010	<0.00030	0.000818	<0.00050	<0.0010	<0.00020	0.17
Earthfill_Dam_DS_OUT	1/13/2022 13:00	FJ2200098-001	M	FJ2200098	0.00037	<0.010	<0.000050	0.0031	10.4	0.00381	<0.0000050	0.00148	<0.00050	<0.050	1.02	0.00122	3.23	<0.000010	5.37	0.128	12.2	<0.000010	<0.00010	<0.00030	0.000843	<0.00050	0.0022	<0.00020	0.42
Earthfill_Dam_DS_OUT	1/19/2022 11:00	FJ2200185-002	M	FJ2200185	0.00032	<0.010	<0.000050	0.0034	12.1	0.00532	<0.0000050	0.00158	<0.00050	<0.050	1.24	0.00154	3.52	<0.000010	7.59	0.134	15.7	<0.000010	<0.00010	<0.00030	0.000984	<0.00050	0.0023	<0.00020	0.35
Earthfill_Dam_DS_OUT	1/26/2022 14:30	ANQ896	M	C205279	<0.0005	<0.01	<0.0002	0.0029	9.80	0.0026	<0.0000019	0.0015	<0.001	<0.01	0.965	0.00165	3.08	<0.00002	6.24	0.124	7.5	<0.00001	<0.005	<0.005	0.00084	<0.005	<0.005	<0.0001	0.42
Earthfill_Dam_DS_OUT	2/3/2022 15:00	AOC179	M	C207302	0.00055	<0.01	<0.0002	0.0034	9.49	0.0047	0.0000023	0.0014	<0.001	0.013	1.13	0.00184	3.24	<0.00002	7.30	0.116	11.9	<0.00001	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	0.93
Earthfill_Dam_DS_OUT	2/8/2022 12:00	AOI292	M	C208265	<0.0005	<0.01	<0.0002	0.0049	12.1	<0.001	0.0000028	0.0015	<0.001	<0.01	1.51	0.00321	4.14	<0.00002	10.7	0.124	21.2	<0.00001	<0.005	<0.005	0.00115	<0.005	<0.005	<0.0001	0.24
Earthfill_Dam_DS_OUT	2/16/2022 12:00	AOU843	M	C210450	0.00068	<0.01	<0.0002	0.0035	10.5	0.0046	<0.0000019	0.0019	<0.001	0.011	1.31	0.00239	3.53	<0.00002	8.94	0.15	19.7	<0.00001	<0.005	<0.005	0.00115	<0.005	<0.005	<0.0001	0.47
Earthfill_Dam_DS_OUT	2/24/2022	APF946	M	C212235	<0.0005	<0.01	<0.0002	0.0049	14.6	0.0054	<0.0000019	0.0016	<0.001	<0.01	1.69	0.00311	4.5	<0.00002	16.4	0.156	27.2	<0.00001	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	0.63
Earthfill_Dam_DS_OUT	3/2/2022 12:20	APO715	M	C213881	0.00055	<0.01	<0.0002	0.0056	14.1	0.0056	<0.0000019	0.0014	<0.001	<0.01	1.27	0.00322	4.15	<0.00002	16.5	0.14	20.9	<0.00001	0.0051	<0.005	0.00108	<0.005	<0.005	<0.0001	1.6
Earthfill_Dam_DS_OUT	3/10/2022 10:30	APZ004	M	C215884	<0.0005	<0.01	<0.0002	<0.002	7.14	<0.001	<0.0000019	0.0012	<0.001	<0.01	0.486	0.00061	2.18	<0.00002	1.66	0.115	5.1	<0.00001	<0.005	<0.005	0.00053	<0.005	0.0088	<0.0001	0.61
Earthfill_Dam_DS_OUT	3/10/2022 10:40	APZ005	D	C215884	<0.0005	<0.01	<0.0002	0.0042	13.5	0.0061	<0.0000019	0.0017	<0.001	<0.01	1.53	0.00333	3.77	<0.00002	15.9	0.158	23.7	<0.00001	<0.005	<0.005	0.00126	<0.005	0.0117	<0.0001	0.26
Earthfill_Dam_DS_OUT	3/17/2022 15:00	AQH799	M	C217776	<0.0005	<0.01	<0.0002	0.0045	12.3	0.0016	<0.0000019	0.002	<0.001	<0.01	1.31	0.00204	3.26	<0.00002	13.3	0.147	26.4	<0.00001	<0.005	<0.005	0.00112	<0.005	0.01	<0.0001	11
Earthfill_Dam_E_BT	3/23/2022 12:30	AQP256	M	C219363	<0.0005	<0.01	<0.0002	0.0044	14.5	<0.001	<0.0000019	0.0018	<0.001	<0.01	1.68	0.00527	3.8	<0.00002	19.9	0.156	27.8	<0.00001	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	0.89
Earthfill_Dam_E_BT	3/30/2022 13:05	AQX834	M	C221206	<0.0005	<0.01	<0.0002	0.0059	14.9	0.0038	<0.0000019	0.0014	<0.001	<0.01	1.39	0.0035	3.89	<0.00002	22.2	0.143	35.2	<0.00001	<0.005	<0.005	0.0014	<0.005	<0.005	<0.0001	2.6
Earthfill_Dam_E_BT	4/7/2022 15:30	ARI194	M	C223271	<0.0005	<0.01	<0.0002	0.005	12.9	0.0065	<0.0000019	0.0016	<0.001	<0.01	1.51	0.00361	4.01	<0.00002	22.5	0.15	36.3	<0.00001	<0.005	<0.005	0.00133	<0.005	0.0095	<0.0001	4.3
Earthfill_Dam_E_BT	4/13/2022 14:10	ARP728	M	C224775	<0.0005	<0.01	<0.0002	0.0052	13.4	0.0026	<0.0000019	0.0014	<0.001	<0.01	1.31	0.00333	3.87	<0.00002	20.5	0.137	30.7	<0.00001	<0.005	<0.005	0.00111	<0.005	<0.005	<0.0001	1.4
Earthfill_Dam_E_BT	4/20/2022 11:40	ARW670	M	C226267	<0.0005	<0.01	<0.0002	0.0048	14.9	<0.001	<0.0000019	0.0024	<0.001	<0.01	1.63	0.00392	3.95	<0.00002	25.9	0.149	37.1	<0.00001	<0.005	<0.005	0.00147	<0.005	<0.005	<0.0001	0.55
Earthfill_Dam_E_BT	4/28/2022 13:00	ASH220	M	C228650	<0.0005	<0.01	<0.0002	0.0056	14.4	0.0027	<0.0000019	0.0015	<0.001	<0.01	1.42	0.00415	3.6	<0.00002	21.6	0.149	31.5	<0.00001	<0.005	<0.005	0.00128	<0.005	0.0052	<0.0001	0.25
Earthfill_Dam_E_BT	5/4/2022 11:20	ASP678	M	C230320	0.00053	<0.01	<0.0002	0.0062	16.5	0.0012	<0.0000019	0.0017	<0.001	<0.01	1.58	0.00426	3.88	<0.00002	23.0	0.182	35.2	<0.00001	<0.005	<0.005	0.0015	<0.005	<0.005	<0.0001	0.32
Earthfill_Dam_E_BT	5/11/2022 13:50	ASZ426	M	C232133	<0.0005	<0.01	<0.0002	0.0052	16.5	0.0025	<0.0000019	0.0016	<0.001	0.012	1.75	0.00492	3.88	<0.00002	24.5	0.174	36.7	<0.00001	<0.005	<0.005	0.0015	<0.005	<0.005	<0.0001	0.38
GC-Debris-US	1/23/2022 18:15	FJ2200194-005	M	FJ2200194																								123
GC-Debris-US	2/9/2022 18:00	AOK264	M	C208577																								1400
GC-Debris-US	2/15/2022 10:55	AOS725	M	C210043																								110

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
GC-Debris-US	3/17/2022 13:40	AQH804	M	C217776																								3800
GC-Debris-US	3/19/2022 17:05	AQJ977	M	C218236																								2400
GC-Debris-US	3/22/2022 10:40	AQN718	M	C218958																								2000
GC-Debris-US	3/26/2022 17:55	AQS241	M	C219944																								1400
GC-Debris-US	3/31/2022 17:00	AQY800	M	C221428																								8400
GC-Debris-US	4/9/2022 11:40	ARK010	M	C223638																								
GC-Debris-US	4/15/2022 11:00	ARQ205	M	C224832																								26
GC-Debris-US	4/30/2022 14:00	ASL382	M	C229488																								>4000
GC-Debris-US	5/4/2022 16:50	ASP684	M	C230320																								>4000
GC-Debris-US	5/10/2022 17:00	ASX008	M	C231638																								>4000
GC-Debris-US	5/21/2022 14:30	ATN143	M	C234510																								1700
GC-Debris-US	5/27/2022 10:10	ATV304	M	C236089																								>4000
GC-Debris-US	5/28/2022 11:00	ATX756	M	C236620																								>4000
GC-Debris-US	6/1/2022 16:10	AUE686	M	C237797																								>4000
GC-Debris-US	6/11/2022 12:20	AUY741	M	C241062																								530
GC-Debris-US	6/17/2022 16:40	AVK726	M	C242942																								18
GC-Debris-US	6/23/2022 14:45	AVV601	M	C244839																								>4000
GC-Debris-US	7/3/2022 15:30	AWM052	M	C247492																								150
GC-Debris-US	7/6/2022 16:35	AWV914	M	C249077																								530
GC-Debris-US	7/24/2022 16:00	AYC683	M	C254290																								0.46
GC-Debris-US	7/31/2022 15:40	AYO877	M	C256301																								2.5
GC-Debris-US	8/4/2022 13:30	AYY908	M	C257848																								1400
GC-Debris-US	8/14/2022 17:10	AZR299	M	C260829																								0.66
L3-DC-DS	2/10/2022 18:45	AOM670	M	C208923																								130
L3-DC-DS	3/17/2022 20:10	AQH808	M	C217776																								230
L3-DC-DS	3/19/2022 18:55	AQJ980	M	C218236																								89
L3-DC-DS	3/22/2022 16:50	AQN721	M	C218958																								210
L3-DC-DS	3/24/2022 15:30	AQP986	M	C219524																								35
L3-DC-DS	3/29/2022 17:50	AQV268	M	C220606																								44
L3-DC-DS	4/9/2022 10:20	ARK008	M	C223638																								
L3-DC-DS	4/23/2022 17:55	ARZ191	M	C226855																								30
L3-DC-DS	4/27/2022 19:00	ASH201	M	C228648																								
L3-DC-DS	5/5/2022 15:10	ASR011	M	C230531																								9.3
L3-DC-DS	5/8/2022 17:20	ASS889	M	C230861																								23
L3-DC-DS	5/12/2022 10:10	ATA819	M	C232369																								18
L3-DC-DS	5/21/2022 16:40	ATN141	M	C234510																								0.95
L3-DC-DS	5/28/2022 19:05	ATX750	M	C236620																								770
L3-DC-DS	6/11/2022 15:00	AUY743	M	C241062																								4.0
L3-DC-US	2/10/2022 18:00	AOM669	M	C208923																								140
L3-DC-US	3/17/2022 20:00	AQH807	M	C217776																								200
L3-DC-US	3/19/2022 18:45	AQJ979	M	C218236																								97
L3-DC-US	3/22/2022 16:40	AQN720	M	C218958																								230
L3-DC-US	3/24/2022 15:20	AQP985	M	C219524																								39
L3-DC-US	3/29/2022 17:40	AQV267	M	C220606																								38
L3-DC-US	4/9/2022 10:40	ARK007	M	C223638																								
L3-DC-US	4/23/2022 17:45	ARZ190	M	C226855																								33
L3-DC-US	4/27/2022 18:50	ASH200	M	C228648																								
L3-DC-US	5/5/2022 15:00	ASR010	M	C230531																								13
L3-DC-US	5/8/2022 17:10	ASS888	M	C230861																								23
L3-DC-US	5/12/2022 10:00	ATA818	M	C232369																								28
L3-DC-US	5/21/2022 16:20	ATN140	M	C234510																								0.81
L3-DC-US	5/28/2022 18:55	ATX749	M	C236620																								780
L3-DC-US	6/11/2022 15:20	AUY742	M	C241062																								3.8
L3-W-DC-EOP	2/9/2022 18:30	AOK265	M	C208577																								170
L3-W-DC-EOP	2/12/2022 17:45	AOP219	M	C209346																								41
L3-W-DC-EOP	3/17/2022 20:20	AQH809	M	C217776																								220
L3-W-DC-EOP	3/19/2022 18:30	AQJ978	M	C218236																								380
L3-W-DC-EOP	3/22/2022 16:35	AQN722	M	C218958																								670
L3-W-DC-EOP	3/24/2022 15:10	AQP984	M	C219524																								120
L3-W-DC-EOP	3/29/2022 17:25	AQV266	M	C220606																								150
L3-W-DC-EOP	4/9/2022 10:30	ARK009	M	C223638																								
L3-W-DC-EOP	4/16/2022 17:40	ARR881	M	C225206																								12
L3-W-DC-EOP	4/22/2022 15:55	ARZ192	M	C226855																								350
L3-W-DC-EOP	4/23/2022 17:30	ARZ189	M	C226855																								36
L3-W-DC-EOP	4/24/2022 14:50	ASA419	M	C227083																								29
L3-W-DC-EOP	4/27/2022 19:10	ASH202	M	C228648																								
L3-W-DC-EOP	5/5/2022 14:50	ASR009	M	C230531																								24
L3-W-DC-EOP	5/8/2022 17:00	ASS887	M	C230861																								42
L3-W-DC-EOP	5/12/2022 9:50	ATA817	M	C232369																								36

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
L3-W-DC-EOP	5/21/2022 16:00	ATN142	M	C234510																								9.1
L3-W-DC-EOP	5/28/2022 18:45	ATX748	M	C236620																								430
L3-W-DC-EOP	6/17/2022 17:45	AVK728	M	C242942																								5.4
L3-W-DC-Sump	6/11/2022 15:30	AUY744	M	C241062																								24
L3-W-DC-Sump	7/3/2022 16:40	AWM054	M	C247492																								9.4
LBEX_B1	1/22/2022 10:30	FJ2200193-002	M	FJ2200193	0.00283	<0.010	<0.000050	0.0033	12.4	0.0145	<0.0000050	0.00255	0.0038	<0.050	5.04	0.00286	0.708	<0.000010	6.43	0.241	54.2	0.000014	<0.00010	<0.00030	0.00116	<0.00050	<0.0010	<0.00020	433
LBGC-OUT	1/23/2022 15:50	FJ2200194-004	M	FJ2200194																								48.8
LBGC-OUT	2/9/2022 17:50	AOK263	M	C208577																								3300
LBGC-OUT	3/17/2022 13:30	AQH805	M	C217776																								3300
LBGC-OUT	3/19/2022 15:15	AQJ976	M	C218236																								460
LBGC-OUT	3/22/2022 10:50	AQN719	M	C218958																								2000
LBGC-OUT	3/26/2022 17:15	AQS240	M	C219944																								79
LBGC-OUT	3/31/2022 18:00	AQY801	M	C221428																								6200
LBGC-OUT	4/9/2022 11:50	ARK011	M	C223638																								
LBGC-OUT	4/15/2022 11:50	ARQ206	M	C224832																								38
LBGC-OUT	4/21/2022 11:45	ARX708	M	C226546																								100
LBGC-OUT	4/30/2022 14:00	ASL381	M	C229488																								>4000
LBGC-OUT	5/4/2022 16:40	ASP683	M	C230320																								>4000
LBGC-OUT	5/10/2022 16:20	ASX007	M	C231638																								>4000
LBGC-OUT	5/21/2022 14:50	ATN144	M	C234510																								1700
LBGC-OUT	5/27/2022 11:05	ATV305	M	C236089																								>4000
LBGC-OUT	5/28/2022 10:45	ATX755	M	C236620																								>4000
LBGC-OUT	6/1/2022 16:45	AUE687	M	C237797																								>4000
LBGC-OUT	6/11/2022 12:00	AUY740	M	C241062																								510
LBGC-OUT	6/17/2022 17:25	AVK727	M	C242942																								35
LBGC-OUT	6/23/2022 14:05	AVV600	M	C244839																								>4000
LBGC-OUT	7/3/2022 15:50	AWM053	M	C247492																								150
LBGC-OUT	7/6/2022 16:00	AWV913	M	C249077																								52
LBGC-OUT	7/24/2022 15:50	AYC682	M	C254290																								0.58
LBGC-OUT	7/31/2022 15:30	AYO876	M	C256301																								0.58
LBGC-OUT	8/4/2022 14:25	AYY909	M	C257848																								1500
LBGC-OUT	8/14/2022 17:00	AZR298	M	C260829																								0.49
LBGC-OUT	10/25/2022 15:55	BFP710	M	C284665																								22
MWTF-CELL-1-PIPE	1/12/2022 8:45	AMY185	M	C201826																								
MWTF-CELL-1-PIPE	1/19/2022 8:45	ANG681	M	C203398																								
MWTF-CELL-1-PIPE	1/26/2022 9:00	ANP082	M	C204889																								
MWTF-CELL-1-PIPE	2/2/2022 9:15	ANZ527	M	C206699																								
MWTF-CELL-1-PIPE	2/9/2022 8:50	AOI319	M	C208269																								
MWTF-CELL-1-PIPE	2/16/2022 8:50	AOS652	M	C210024																								
MWTF-CELL-1-PIPE	2/23/2022 9:00	APC513	M	C211586																								
MWTF-CELL-1-PIPE	3/2/2022 9:30	APM689	M	C213453																								
MWTF-CELL-1-PIPE	3/9/2022 8:45	APW000	M	C215209																								
MWTF-CELL-1-PIPE	3/16/2022 8:50	AQE363	M	C217028																								
MWTF-CELL-1-PIPE	3/23/2022 9:30	AQN282	M	C218879																								
MWTF-CELL-1-PIPE	3/30/2022 9:30	AQV055	M	C220559																								
MWTF-CELL-1-PIPE	4/6/2022 8:50	ARE618	M	C222526																								
MWTF-CELL-1-PIPE	4/13/2022 8:45	ARN240	M	C224394																								
MWTF-CELL-1-PIPE	4/20/2022 9:10	ARV016	M	C225896																								
MWTF-CELL-1-PIPE	4/27/2022 9:30	ASD263	M	C227745																								
MWTF-CELL-1-PIPE	5/3/2022 8:50	ASK914	M	C229394																								
MWTF-CELL-1-PIPE	5/11/2022 8:50	ASW835	M	C231613																								
MWTF-CELL-1-PIPE	5/18/2022 9:05	ATH374	M	C233574																								
MWTF-CELL-1-PIPE	5/25/2022 9:15	ATQ476	M	C235131																								
MWTF-CELL-1-PIPE	6/1/2022 8:50	AUC440	M	C237402																								
MWTF-CELL-1-PIPE	6/8/2022 8:50	AUR914	M	C239868																								
MWTF-CELL-1-PIPE	6/29/2022 8:50	AWE580	M	C246283																								
MWTF-CELL-1-PIPE	7/11/2022 11:35	AXC956	M	C250181	0.00181	<0.01	<0.0002	0.0449	33.7	<0.001	<0.0000019	0.0186	0.0032	0.018	9.23	0.00507	7.02	<0.00002	215	0.232	178	0.000016	<0.005	<0.005	0.00348	<0.005	<0.005	<0.0001	200
MWTF-CELL-1-PIPE	7/28/2022 11:45	AYM157	M	C255903	0.00114	<0.01	<0.0002	0.0266	15.8	<0.001	<0.0000019	0.0165	<0.001	<0.01	7.63	0.00302	4.83	<0.00002	179	0.0719	94.9	0.000013	<0.005	<0.005	0.00236	<0.005	<0.005	<0.0001	160
MWTF-CELL-3	1/5/2022 11:00	AMR869	M	C200496	0.00093	0.006	<0.00020	0.0623	22.9	0.0018	<0.000050	0.0044	0.0010		3.15	0.00179	4.41	<0.000020	67.8	0.114	27.8	<0.000010	<0.0050	<0.0050	0.00229	<0.0050	<0.0050	<0.00010	
MWTF-CELL-3	1/10/2022 9:30	FJ2200044-001	M	FJ2200044	0.00078	<0.010	<0.000050	0.0559	24.7	0.00219	<0.0000050	0.00516	0.0012	<0.050	3.39	0.00181	5.05	<0.000010	70.3	0.130	47.5	<0.000010	0.00035	<0.00030	0.00254	0.00238	0.0017	<0.00020	4.28
MWTF-CELL-3	1/12/2022 8:55	AMY187	M	C201826	0.00066	0.006	<0.00020	0.0703	23.2	0.0146	<0.000050	0.0055	0.0018		3.23	0.00166	5.02	<0.000020	80.6	0.135	44.7	<0.000010	<0.0050	<0.0050	0.00280	<0.0050	<0.0050	<0.00010	
MWTF-CELL-3	1/19/2022 8:55	ANG683	M	C203398	0.00046	0.006	<0.00020	0.0649	24.5	0.0196	<0.000050	0.0068	0.0025		3.92	0.00174	5.48	<0.000020	81.3	0.119	43.0	<0.000010	<0.0050	<0.0050	0.00258	<0.0050	<0.0050	<0.00010	
MWTF-CELL-3	1/26/2022 9:10	ANP081	M	C204889	0.00134	<0.0050	<0.00020	0.0510	21.8	0.0087	<0.000050	0.0058	0.0026		3.92	0.00164	3.86	<0.000020	69.4	0.108	26.0	<0.000010	<0.0050	<0.0050	0.00222	<0.0050	0.0086	<0.00010	
MWTF-CELL-3	2/2/2022 9:10	ANZ526	M	C206699	0.00174	0.0120	<0.00020	0.0731	24.6	0.0089	<0.000050	0.0073	0.0045		4.63	0.00198	4.41	<0.000020	90.1	0.160	85.2	<0.000010	<0.0050	<0.0050	0.00186	<0.0050	0.0195	<0.00010	
MWTF-CELL-3	2/9/2022 8:55	AOI318	M	C208269	0.00242	0.027	<0.00020	0.0480	22.9	0.0229		0.0043	0.0089		4.66	0.00408	3.43	<0.000020	46.8	0.192	82.1	<0.000010	<0.0050	<0.0050	0.00103	<0.0050	<0.0050	<0.00010	
MWTF-CELL-3	2/16/2022 8:55	AOS651	M	C210024	0.00202	0.007	<0.00020	0.0213	15.5	0.0282		0.0064	0.0085		4.23	0.00356	2.45	<0.000020	31.5	0.243	62.3	<0.000010	<0.0050	<0.0050	0.00127	<0.0050	<0.0050	<0.00010	
MWTF-CELL-3	2/23/2022 9:05	APC512	M	C211586	0.00227	0.005	<0.00020	0.0291	16.8	0.0220		0.0051	0.0082		3.95	0.00282	3.19	<0.000020	43.0	0.183	55.7	<0.000010	<0.0050	<0.0050	0.00152	<0.0050	0.0124	<0.00010	
MWTF-CELL-3	3/2/2022 9:15	APM688	M	C213453	0.00187	<0.0050	<0.00020	0.0309	14.7	0.0094		0.0035	0.0023		4.04	0.00260	2.64	<0.000020	41.9	0.161	65.9	<0.000010	<0.0050	<0.0050	0.00046	<0.0050	0.0053	<0.00010	
MWTF-CELL-3	3/9/2022 8:55	APV999	M	C215209	0.00113	<0.0050	<0.00020	0.0487	17.8	0.0036		0.0068	0.0013		3.93	0.00184	6.16	<0.000020	72.2	0.114	44.2	<0.000010	0.0068	<0.0050	0.00169	<0.0050	<0.0050	<0.00010	

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
MWTF-CELL-3	3/16/2022 9:00	AQE362	M	C217028	0.00085	<0.0050	<0.00020	0.0562	20.9	0.0042		0.0066	0.0017		3.45	0.00190	5.20	<0.000020	72.0	0.0970	39.2	<0.000010	<0.0050	<0.0050	0.00230	<0.0050	<0.0050	<0.00010	
MWTF-CELL-3	3/23/2022 9:10	AQN281	M	C218879	0.00161	<0.0050	<0.00020	0.0329	15.2	0.0157		0.0087	0.0080		4.14	0.00252	3.70	<0.000020	48.5	0.177	56.1	<0.000010	<0.0050	<0.0050	0.00178	<0.0050	0.0113	<0.00010	
MWTF-CELL-3	3/30/2022 9:00	AQV054	M	C220559	0.00191	<0.0050	<0.00020	0.0501	18.6	0.0101		0.0081	0.0069		4.25	0.00370	3.77	<0.000020	66.1	0.163	68.5	0.000011	<0.0050	<0.0050	0.00172	<0.0050	0.0099	<0.00010	
MWTF-CELL-3	4/6/2022 8:55	ARE617	M	C222526	0.00146	<0.0050	<0.00020	0.0482	16.8	0.0142		0.0052	0.0095		3.08	0.00260	2.95	<0.000020	57.7	0.133	57.3	<0.000010	<0.0050	<0.0050	0.00172	<0.0050	<0.0050	<0.00010	
MWTF-CELL-3	4/13/2022 8:55	ARN239	M	C224394	0.00143	0.095	<0.00020	0.0417	17.3	0.0136		0.0089	0.0048		3.75	0.00407	3.45	<0.000020	68.7	0.131	69.7	0.000015	<0.0050	<0.0050	0.00214	<0.0050	0.0150	<0.00010	
MWTF-CELL-3	4/20/2022 9:05	ARV015	M	C225896	0.00132	0.005	<0.00020	0.0323	19.0	0.0132		0.0106	0.0047		4.87	0.00306	3.34	<0.000020	72.1	0.162	73.5	<0.000010	<0.0050	<0.0050	0.00238	<0.0050	0.0109	<0.00010	
MWTF-CELL-3	4/27/2022 9:15	ASD262	M	C227745	0.00113	<0.0050	<0.00020	0.0258	16.4	0.0034		0.0095	0.0021		3.96	0.00423	4.73	<0.000020	61.0	0.128	55.0	<0.000010	<0.0050	<0.0050	0.00245	<0.0050	0.0090	<0.00010	
MWTF-CELL-3	5/3/2022 8:55	ASK913	M	C229394	0.00079	<0.0050	<0.00020	0.0865	32.6	0.0309		0.0116	0.0158		5.04	0.0123	3.75	<0.000020	149	0.295	181	0.000012	<0.0050	<0.0050	0.00216	<0.0050	0.0129	<0.00010	
MWTF-CELL-3	5/11/2022 8:55	ASW834	M	C231613	0.00065	<0.0050	<0.00020	0.0905	25.5	0.0183		0.0140	0.0116		4.93	0.0122	4.36	<0.000020	188	0.289	183	0.000018	<0.0050	<0.0050	0.00221	<0.0050	<0.0050	<0.00010	
MWTF-CELL-3	5/18/2022 9:05	ATH373	M	C233574	0.00059	<0.0050	<0.00020	0.0788	18.3	0.0073		0.0128	0.0054		4.00	0.0106	4.73	<0.000020	154	0.241	121	0.000015	<0.0050	<0.0050	0.00192	<0.0050	<0.0050	<0.00010	
MWTF-CELL-3	5/25/2022 9:10	ATQ475	M	C235131	0.00056	<0.0050	<0.00020	0.0929	16.0	0.0036		0.0131	0.0029		4.55	0.00617	3.92	<0.000020	189	0.238	137	0.000016	<0.0050	<0.0050	0.00126	<0.0050	<0.0050	0.00010	
MWTF-CELL-3	6/1/2022 8:55	AUC439	M	C237402	0.00114	0.031	<0.00020	0.121	23.4	0.0442		0.0142	0.0189		5.81	0.00929	4.26	<0.000020	210	0.406	199	0.000031	<0.0050	<0.0050	0.00147	<0.0050	0.0226	<0.00010	
MWTF-CELL-3	6/8/2022 8:55	AUR913	M	C239868	0.00097	<0.0050	<0.00020	0.112	21.3	0.0081		0.0182	0.0062		7.19	0.00831	4.46	<0.000020	235	0.304	184	0.000024	<0.0050	<0.0050	0.00136	<0.0050	<0.0050	<0.00010	
MWTF-CELL-3	6/18/2022 10:00	AVL920	M	C243145	0.00125	0.125	<0.0002	0.068	33.3	0.0335	0.0000024	0.0149	0.0069	0.026	5.97	0.00682	3.58	<0.00002	206	0.276	170	0.000017	<0.005	<0.005	0.00232	<0.005	<0.005	<0.0001	8.7
MWTF-CELL-3	6/19/2022 7:00	AVL891	M	C243135	0.0011	0.06	<0.0002	0.066	32.7	0.0238	<0.0000019	0.013	0.0067	0.017	5.57	0.00702	3.39	<0.00002	180	0.278	168	0.000016	<0.005	<0.005	0.0021	<0.005	<0.005	<0.0001	4.7
MWTF-CELL-3	6/20/2022 11:05	AVO877	M	C243649	0.00119	<0.01	<0.0002	0.0672	35.6	0.0156	0.000002	0.0133	0.0074	<0.01	6.12	0.00714	2.71	<0.00002	152	0.309	178	0.000018	<0.005	<0.005	0.00215	<0.005	<0.005	<0.0001	4.1
MWTF-CELL-3	6/22/2022 9:30	AVQ401	M	C243950	0.00132	<0.0050	<0.00020	0.0655	33.9	0.0102		0.0127	0.0064		6.50	0.00735	2.72	<0.000020	134	0.327	158	0.000016	<0.0050	<0.0050	0.00171	<0.0050	<0.0050	<0.00010	
MWTF-CELL-3	6/29/2022 8:55	AWE579	M	C246283	0.00093	<0.0050	<0.00020	0.0406	21.6	0.0100		0.0110	0.0030		5.99	0.00455	3.22	<0.000020	110	0.211	119	0.000015	<0.0050	<0.0050	0.00086	<0.0050	<0.0050	<0.00010	
MWTF-CELL-3	7/11/2022 12:00	AXC957	M	C250181	0.00221	<0.01	<0.0002	0.0465	28.5	0.0052	<0.0000019	0.0193	0.0027	0.016	9.42	0.00451	3.85	<0.00002	205	0.244	164	0.000016	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	2.1
MWTF-CELL-3	7/19/2022 12:50	AXQ710	M	C252510	0.00149	<0.01	<0.0002	0.0337	24.5	<0.001	<0.0000019	0.0162	0.0016	0.014	7.85	0.00371	5.73	<0.00002	181	0.171	126	0.000013	<0.005	<0.005	0.00304	<0.005	<0.005	<0.0001	1.7
MWTF-CELL-3	7/28/2022 12:10	AYM158	M	C255903	0.0014	<0.01	<0.0002	0.0261	18.1	0.0029	<0.0000019	0.0135	0.0013	<0.01	6.15	0.00326	4.13	<0.00002	147	0.143	87.0	0.000012	<0.005	<0.005	0.00247	<0.005	0.0097	<0.0001	1.0
MWTF-CELL-3	8/3/2022 11:10	AYX384	M	C257672	0.00125	<0.01	<0.0002	0.0243	14.6	<0.001	<0.0000019	0.0154	<0.001	<0.01	6.93	0.00246	4.44	<0.00002	145	0.104	80.8	0.000012	<0.005	<0.005	0.00214	<0.005	0.0064	<0.0001	3.0
MWTF-CELL-3	8/22/2022 15:00	BAG922	M	C263407	0.00109	<0.01	<0.0002	0.0254	13.3	<0.001	<0.0000019	0.0185	0.0013	<0.01	7.21	0.00223	5.5	<0.00002	167	0.0729	88.7	<0.00001	<0.005	<0.005	0.00236	<0.005	<0.005	<0.0001	0.19
MWTF-CELL-3	9/4/2022 15:30	BBI408	M	C268301	0.00082	<0.01	<0.0002	0.0277	12.3	<0.001	<0.0000019	0.02	<0.001	<0.01	7.35	0.0021	5.3	<0.00002	173	0.067	78.1	<0.00001	<0.005	<0.005	0.0022	<0.005	<0.005	<0.0001	1.1
MWTF-CELL-3	9/8/2022 12:15	BBO448	M	C269143	0.00088	<0.01	<0.0002	0.0261	13.1	<0.001	<0.0000019	0.0199	<0.001	<0.01	7.53	0.00207	6.62	<0.00002	171	0.0626	79.1	0.000011	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	1.9
MWTF-CELL-3	9/17/2022 12:20	BCF753	M	C272259	0.00094	<0.01	<0.0002	0.0407	22.9	0.0027	<0.0000019	0.0158	0.0017	<0.01	7.15	0.00202	4.3	<0.00002	241	0.192	175	0.000011	<0.005	<0.005	0.00308	<0.005	<0.005	<0.0001	1.3
MWTF-CELL-3	9/22/2022 13:00	BCR618	M	C273969	0.00101	<0.01	<0.0002	0.0281	32.4	0.0026	<0.0000019	0.0156	0.0034	0.016	8.06	0.00209	4.84	<0.00002	158	0.218	154	<0.00001	<0.005	<0.005	0.00268	<0.005	<0.005	<0.0001	1.2
MWTF-CELL-3	9/30/2022 11:40	BDH546	M	C276348	0.00081	<0.01	<0.0002	0.0226	24.1	0.006	<0.0000019	0.0177	0.002	0.014	7.69	0.00254	5.81	<0.00002	135	0.175	113	<0.00001	<0.005	<0.005	0.00243	<0.005	<0.005	<0.0001	2.1
MWTF-CELL-3	10/6/2022 12:25	BDZ974	M	C278888	0.00095	<0.01	<0.0002	0.0191	21.3	0.0022	<0.0000019	0.0128	0.0011	0.013	7.09	0.00283	7.22	<0.00002	121	0.204	101	<0.00001	<0.005	<0.005	0.00252	<0.005	<0.005	<0.0001	5.6
MWTF-CELL-3	10/19/2022 11:35	BFA350	M	C282741	0.00086	0.012	<0.0002	0.017	22.9	0.0062	<0.0000019	0.0143	0.0017	0.017	6.42	0.00495	6.35	<0.00002	93.7	0.282	100	0.000013	<0.005	<0.005	0.00282	<0.005	<0.005	0.00011	37
MWTF-CELL-3	10/29/2022 15:25	BFZ656	M	C286199	0.00064	<0.01	<0.0002	0.0118	17.1	0.0031	<0.0000019	0.0084	0.0016	0.011	4.58	0.00409	5.75	<0.00002	45.6	0.214	47.4	<0.00001	<0.005	<0.005	0.00189	<0.005	<0.005	<0.0001	11
MWTF-CELL-3	11/3/2022 13:00	BGJ745	M	C287759	0.00124	<0.01	<0.0002	0.0075	13.9	<0.001	<0.0000019	0.0046	0.0012	<0.01	3.30	0.00296	5.61	<0.00002	29.0	0.197	33.3	<0.00001	<0.005	<0.005	0.00156	<0.005	0.0053	<0.0001	18
MWTF-CELL-3	11/9/2022 11:30	BGW285	M	C289508	0.00063	<0.01	<0.0002	0.0071	13.3	0.0026	<0.0000019	0.0036	0.0018	<0.01	2.77	0.00226	4.34	<0.00002	23.2	0.171	27.9	<0.00001	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	13
MWTF-CELL-3	11/19/2022 12:50	BHL413	M	C291899	0.00044	<0.005	<0.0002	0.0072	10.9	0.0028	<0.0000019	0.0024	0.0011	<0.01	2.04	0.00216	3.77	<0.00002	16.9	0.143	23.2	<0.00001	<0.005	<0.005	0.00114	<0.005	<0.005	<0.0001	8.4
MWTF-CELL-3	11/23/2022 13:15	BHR241	M	C292918	0.0007	<0.01	<0.0002	0.0067	10.4	0.0027	<0.0000019	0.0035	0.0011	<0.01	2.16	0.00199	3.75	<0.00002	18.3	0.147	21.3	<0.00001	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	14
MWTF-CELL-3	12/2/2022 11:30	BIF819	M	C295193	0.00041	<0.005	<0.0002	0.006	12.6	0.0023	<0.0000019	0.0027	0.0011	<0.01	1.88	0.0018	3.88	<0.00002	16.6	0.14	20.7	<0.00001	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	3.9
MWTF-CELL-3	12/17/2022 11:30	BJL793	M	C299939	0.00055	<0.01	<0.0002	0.0063	11.3	0.0029	<0.0000019	0.0027	0.0016	<0.01	1.98	0.00214	4.07	<0.00002	14.2	0.147	23.3	<0.00001	<0.005	<0.005	0.00117	<0.005	<0.005	<0.0001	5.1
MWTF-CELL-3	12/20/2022 11:20	BJP135	M	C2A0603	0.00063	<0.01	<0.0002	0.007	12.8	0.0025	<0.0000019	0.003	0.0014	<0.01	2.21	0.00211	4.32	<0.00002	14.2	0.145	23.9	<0.00001	<0.005	<0.005	0.00133	<0.005	0.0066	<0.0001	7.3
MWTF-CELL-3	12/29/2022 13:00	BJT906	M	C2A1753	0.00051	<0.01	<0.0002	0.009	12.9	0.0015	<0.0000019	0.0046	<0.001	<0.01	2.67	0.00149	4.57	<0.00002	22.2	0.114	20.6	<0.00001	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	3.0
MWTF-PAG-POND	1/12/2022 8:50	AMY186	M	C201826	0.00157	<0.0050	<0.00020	0.0721	30.5	0.0587	<0.000050	0.0056	0.0053		3.86	0.00184	5.48	<0.000020	88.9	0.330	59.2	<0.000010	<0.0050	<0.0050	0.00383	<0.0050	0.0340	<0.00010	
MWTF-PAG-POND	1/19/2022 8:50	ANG682	M	C203398	0.00106	<0.0050	<0.00020	0.0693	25.7	0.195	<0.000050	0.0065	0.0047		3.90	0.00190	5.66	<0.000020	84.9	0.278	50.8	<0.000010	<0.0050	<0.0050	0.00306	<0.0050	0.0078	<0.00010	
MWTF-PAG-POND	1/26/2022 9:30	ANP080	M	C204889	0.00222	<0.0050	<0.00020	0.0698	31.4	0.279	<0.000050	0.0093	0.0729		4.49	0.00201	4.37	<0.000020	82.4	0.319	69.4	<0.000010	<0.0050	<0.0050	0.00278	<0.0050	0.194	<0.00010	
MWTF-PAG-POND	2/2/2022 9:00	ANZ525	M	C206699	0.00231	0.005	<0.00020	0.0819	24.6	0.0230	<0.000050	0.0073	0.0049		5.17	0.00151	5.82	<0.000020	112	0.265	46.7	<0.000010	<0.0050	<0.0050	0.00296	<0.0050	0.0091	<0.00010	
MWTF-PAG-POND	2/9/2022 8:45	AOI317	M	C208269	0.00370	<0.0050	<0.00020	0.0432	24.5	0.440		0.0039	0.0595		4.54	0.00502	2.36	<0.000020	34.6	0.271	98.5	0.000012	<0.0050	<0.0050	0.00187	<0.0050	0.0939	<0.00010	
MWTF-PAG-POND	2/16/2022 8:45	AOS650	M	C210024	0.00299	0.017	<0.00020	0.0230	17.0	0.253		0.0064	0.0190		4.30	0.00414	2.71	<0.000020	31.5	0.317	64.0	<0.000010	<0.0050	<0.0050	0.00228	<0.0050	0.0085	<0.00010	
MWTF-PAG-POND	2/23/2022 9:00	APC511	M	C211586	0.00251	<0.0050	<0.00020	0.0302	18.2	0.138		0.0045	0.0140		3.42	0.00228	3.11	<0.000020	45.9	0.257	50.6	<0.000010	<0.0050	<0.0050	0.00209	<0.0050	0.0173	<0.00010	
MWTF-PAG-POND	3/2/2022 9:00	APM687	M	C213453	0.00113	<0.0050	<0.00020	0.0493	14.4	0.0383		0.0041	0.0028		2.68	0.00129	3.26	<0.000020	65.4	0.217	39.3	<0.000010	<0.0050	<0.0050	0.00245	<0.0050	0.0051	0.00056	
MWTF-PAG-POND	3/9/2022 8:50	APV998	M	C215209	0.00105	<0.0050	<0.00020	0.0544	21.2	0.0117		0.0060	0.0039		3.33	0.00148	5.70	<0.000020	66.3	0.298	33.6	0.000011	<0.0050	<0.0050	0.00306	<0.0050	<0.0050	<0.00010	
MWTF-PAG-POND	3/16/2022 8:55	AQE361	M	C217028	0.00160	<0.0050	<0.00020	0.0797	27.4	0.0429		0.0102	0.0083		4.20	0.00257	4.82	<0.000020	117	0.374	63.6	0.000012	<0.0050	<0.0050	0.00412	<0.0050	<0.0050	<0.00010	
MWTF-PAG-POND	3/23/2022 9:00	AQN280	M	C218879	0.00196	<0.0050	<0.00020	0.0382	17.0	0.150		0.0089	0.0205		4.06	0.00356	3.53	<0.000020	55.9	0.255	64.0	0.000011	<0.0050	<0.0050	0.00257	<0.0050	0.0162	<0.00010	
MWTF-PAG-POND	3/30/2022 9:20	AQV053	M	C220559	0.00248	0.011	<0.00020	0.0547	23.1	0.309		0.0056	0.0373		3.50	0.00351	3.62	<0.000020	67.2	0.250	78.7	0.000014	<0.0050	<0.0050	0.00268	<0.0050	0.0520	<0.00010	
MWTF-PAG-POND	4/6/2022 8:45	ARE616	M	C222526	0.00165	<0.0050	<0.00020	0.0551	18.0	0.133		0.0124	0.0133		3.78	0.00433	3.31	<0.000020	97.0	0.224	70.3	0.000013	<0.0050	<0.0050	0.00428	<0.0050	0.0106	<0.00010	
MWTF-PAG-POND	4/13/2022 8:00	ARN238	M	C224394	0.00266	<0.0050	<0.00020	0.0254	23.3	0.0582		0.0120	0.0055		4.54	0.00393	4.66	<0.000020	77.3	0.272	71.6	0.000013	<0.0050	<0.0050	0.00344	<0.0050	0.0084	<0.00010	
MWTF-PAG-POND	4/20/2022 9:00	ARV014	M	C225896	0.00166	<0.0050	<0.00020	0.0224	17.0	0.0149		0.0112	0.0041		4.53	0.00304	5.35	<0.000020	57.6	0.215	50.7	0.000013	<0.0050	<0.0050	0.00360	<0.0050	0.0128	<0.00010	
MWTF-PAG-POND	4/27/2022 9:00	ASD261	M	C227745	0.00260	<0.0050	<0.00020	0.0314	16.0	0.0179		0.0101	0.0048		3.63	0.00369	3.56	<0.000020	70.7	0.218	53.5	<0.000010	<0.0050	<0.0050	0.00329	<0.0050	0.0191	<0.00010	
MWTF-PAG-POND	5/3/2022 8:45	ASK912	M	C229394	0.00393	<0.0050	<0.00020	0.102	27.1	0.375		0.0161	0.0986		4.98	0.0185	3.67	0.000048	209	0.425	218	0.000016	<0.0050	<0.0050	0.00438	<0.0050	0.174	<0.00010	
MWTF-PAG-POND	5/11/2022 8:45	ASW833	M	C231613	0.00268	<0.0050	<0.00020	0.104	28.7	0.356		0.0135	0.0944		4.62	0.0126	4.73	<0.000020	196	0.431	191	0.000024	<0.0050	<0.0050	0.00437	<0.0050	0.155	<0.00010	
MWTF-PAG-POND	5/18/2022 9:05	ATH372	M	C233574	0.00081	<0.0050	<0.00020	0.0822	19.6	0.111		0.0121	0.0288		3.88	0.00921	4.67	<0.000020	153	0.359	110	0.000019	<0.0050	<0.0050	0.00360	<0.0050	0.0094	<0.00010	
MWTF-PAG-POND	5/25/2022 9:00	ATQ474	M	C235131	0.00079	<0.0050	<0.00020	0.110	22.4	0.111		0.0141	0.0316		4.66	0.00660	4.46	<0.000020	205	0.410	146	0.000023	<0.0050	<0.0050	0.00440	<0.0050	0.0093	<0.00010	
MWTF-PAG-POND	6/1/2022 8:45	AUC438	M	C237402	0.00555	0.284	0.00031	0.109	25.9	0.428		0.0168	0.128		6.93	0.00922	6.19	0.000022	208	0.483	181	0.000039	<0.0050	<0.0050	0.00388	<0.0050	0.245	<0.00010	
MWTF-PAG-POND	6/8/2022 8:45	AUR912	M	C239868	0.00247	0.0210	<0.00020	0.0778	14.2	0.0155		0.0265	0.0072		8.68	0.00589	5.37	<0.000020	281	0.278	135	0.000015	<0.0050	<0.0050	0.00279	0.0052	<0.0050	0.00011	
MWTF-PAG-POND	6/12/2022 11:30	AUY704	M	C241043	0.00192	<0.01	<0.0002	0.0957	58.3	0.549	<0.0000019	0.0201	0.0707	0.016	6.98	0.0072	3.37	<0.00002	220	0.476	263	0.000029	<0.005	<0.005	0.00327	<0.005	0.007	<0.0001	20
MWTF-PAG-POND	6/22/2022 9:45	AVQ400	M	C243950	0.00191	0.034	<0.00020	0.0555	27.0	0.0388		0.0143	0.0177		6.95	0.00672	3.65	<0.000020	134	0.345	138	0.000016	<0.0050	<0.0050	0.00261	<0.0050	<0.0050	<0.00010	
MWTF-PAG-POND	6/29/2022 8:45	AWE578	M	C246283	0.00207	<0.0050	<0.00020	0.0477	22.2	0.0072		0.0165	0.0052		8.75	0.00491	3.49	<0.000020	178	0.265	137	0.000014	<0.0050	<0.0050	0.00265	<0.0050	0.0102	<0.00010	
MWTF-PAG-POND	7/11/2022 23:25	AXC955	M	C250181	0.00208	<0.01	<0.0002	0.0445	36.1	0.0033	<0.0000019	0.0191	0.0049	0.02	9.36	0.00525	6.84	<0.00002	218	0.394	186	0.000018	<0.005	<0.005	0.00395	<0.005	<0.005	<0.0001	46
MWTF-PAG-POND	7/28/2022 11:20	AYM156	M	C255903	0.00147	<0.01	<0.0002	0.0264	17.5	<0.001	<0.0000019	0.0168	0.0012	<0.01	7.36	0.00296	4.81	<0.00002	175	0.216	90.7	0.000015	<0.005	<0.005	0.0028	<0.005	<0.005	<0.0001	1.1
MWTF-PAG-POND	8/3/2022 10:40	AYX383	M	C257672	0.00118	<0.01	<0.0002	0.0188	14.6	<0.001	<0.0000019	0.0116	0.0024	<0.01	5.16	0.00317	4.49	<0.00002	102	0.214	62.4	0.000011	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	13
MWTF-PAG-POND	8/22/2022 14:30	BAG921	M	C263407	0.00111	<0.01	<0.0002	0.03	14.2	<0.001	<0.0000019	0.0202	0.0017	<0.01	7.26	0.00238	6.02	<0.00002	180	0.226	87.3	0.000014	<0.005	<0.005	0.0028	<0.005	<0.005	<0.0001	6.6
MWTF-PAG-POND	9/4/2022 15:00	BBI406	M	C268301	0.00116	<0.01	<0.0002	0.0271	14.6	<0.001	<0.0000019	0.0195	0.0013	<0.01	7.16	0.00207	6.36	<0.00002	167	0.203	77.3	0.000013	<0.005	<0.005	0.00261	<0.005	<0.005	<0.0001	11

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
MWTF-PAG-POND	9/8/2022 12:45	BBO449	M	C269143	0.00118	<0.01	<0.0002	0.0381	23.9	0.0027	<0.0000019	0.0181	0.0026	0.011	7.62	0.00232	6.12	<0.00002	234	0.302	151	0.000014	<0.005	<0.005	0.00342	<0.005	<0.005	<0.0001	9.5
MWTF-PAG-POND	9/17/2022 12:00	BCF752	M	C272259	0.00112	<0.01	<0.0002	0.0283	24.3	0.166	<0.0000019	0.0134	0.0185	0.011	6.12	0.00232	5.16	<0.00002	131	0.27	113	0.000012	<0.005	<0.005	0.00318	<0.005	0.0076	<0.0001	37
MWTF-PAG-POND	9/22/2022 12:45	BCR617	M	C273969	0.00115	<0.01	<0.0002	0.0258	36.6	0.0434	<0.0000019	0.0149	0.0071	0.015	7.76	0.00226	5.2	<0.00002	138	0.386	152	0.000013	<0.005	<0.005	0.00331	<0.005	<0.005	<0.0001	7.2
MWTF-PAG-POND	9/30/2022 11:25	BDH547	M	C276348	0.00088	<0.01	<0.0002	0.0204	19.4	0.0031	<0.0000019	0.0169	0.002	0.013	7.16	0.003	7.88	<0.00002	128	0.244	96.2	0.000011	<0.005	<0.005	0.0025	<0.005	<0.005	<0.0001	11
PRHP-WTF-INFLUENT-PIPE	6/13/2022 12:30	AVD895	M	C241931	0.00149	0.033	<0.0002	0.079	40.8	0.0402	<0.0000019	0.0219	0.0136	0.017	7.01	0.00603	3.48	<0.00002	219	0.284	221	0.00002	<0.005	<0.005	0.00242	<0.005	0.0051	0.00016	24
PRHP-WTF-INFLUENT-PIPE	6/14/2022 16:05	AVD461	M	C241802	0.00156	<0.01	<0.0002	0.0764	46.1	0.131		0.0142	0.0315	0.011	6.56	0.008	2.65	<0.00002	247	0.513	267	0.00002	<0.005	<0.005	0.00471	<0.005	0.0142	<0.0001	
PRHP-WTF-INFLUENT-PIPE	6/17/2022 18:20	AVK706	M	C242936	0.00186	<0.01	<0.0002	0.049	41.0	0.184		0.0112	0.0296		5.77	0.00732	2.39	<0.00002	115	0.42	176	0.000017	<0.005	<0.005	0.00322	<0.005	0.018	<0.0001	
PRHP-WTF-INFLUENT-PIPE	6/18/2022 10:35	AVL921	M	C243145	0.00268	<0.01	<0.0002	0.062	35.5	0.26		0.0095	0.0482	<0.01	4.90	0.00794	3.01	<0.00002	120	0.389	163	0.000016	<0.005	<0.005	0.003	<0.005	0.0511	<0.0001	
PRHP-WTF-REACTOR-EOP	6/13/2022 16:00	AVD896	M	C241931	0.00132	0.042	<0.0002	0.0754	39.6	0.004		0.0218	0.0069		6.88	0.00637	3.46	<0.00002	215	0.244	217	0.000018	<0.005	<0.005	0.0022	<0.005	<0.005	<0.0001	
PRHP-WTF-REACTOR-EOP	6/14/2022 15:50	AVD460	M	C241802	0.00102	<0.01	<0.0002	0.0712	37.1	<0.001		0.0151	0.0029	<0.01	6.81	0.00722	3.06	<0.00002	280	0.315	253	0.000016	<0.005	<0.005	0.00175	<0.005	0.0125	<0.0001	
PRHP-WTF-REACTOR-EOP	6/17/2022 18:30	AVK707	M	C242936	0.00128	<0.01	<0.0002	0.0492	40.2	0.0051		0.0115	0.0077		5.89	0.00725	2.51	<0.00002	117	0.347	178	0.000015	<0.005	<0.005	0.00226	<0.005	<0.005	<0.0001	
PRHP-WTF-REACTOR-EOP	6/18/2022 10:50	AVL922	M	C243145	0.00153	<0.01	<0.0002	0.068	36.3	0.0301		0.0097	0.0129	<0.01	4.99	0.00806	3.09	<0.00002	128	0.352	167	0.000017	<0.005	<0.005	0.00248	<0.005	<0.005	<0.0001	
PR-IDZ	1/1/2022 11:45	FJ2200029-005	M	FJ2200029	0.00053	<0.010	<0.000050	<0.0010	5.37	0.00045	<0.0000050	0.000703	0.0007	<0.050	0.350	0.000236	1.92	<0.000010	0.978	0.0853	3.98	<0.000010	<0.00010	<0.00030	0.000373	<0.00050	0.0039	<0.00020	1.30
PR-IDZ	1/5/2022 13:25	FJ2200018-002	M	FJ2200018	0.00064	<0.010	<0.000050	0.0012	7.27	0.00117	<0.0000050	0.000928	0.0008	<0.050	0.501	0.000306	2.23	<0.000010	1.72	0.121	5.41	<0.000010	<0.00010	<0.00030	0.000521	<0.00050	<0.0010	<0.00020	0.71
PR-IDZ	1/13/2022 14:00	FJ2200098-002	M	FJ2200098	0.00060	<0.010	<0.000050	0.0013	6.92	0.00044	<0.0000050	0.000932	0.0008	<0.050	0.457	0.000289	2.28	<0.000010	1.23	0.114	5.22	<0.000010	<0.00010	<0.00030	0.000500	<0.00050	0.0026	<0.00020	1.02
PR-IDZ	1/19/2022 13:00	FJ2200185-003	M	FJ2200185	0.00058	<0.010	<0.000050	0.0012	7.17	0.00045	<0.0000050	0.000892	0.0007	<0.050	0.440	0.000339	2.25	<0.000010	1.22	0.110	5.37	<0.000010	<0.00010	<0.00030	0.000484	<0.00050	0.0023	<0.00020	1.02
PR-IDZ	1/19/2022 13:30	FJ2200185-004	D	FJ2200185	0.00057	<0.010	<0.000050	0.0012	7.08	0.00041	<0.0000050	0.000878	0.0008	<0.050	0.446	0.000306	2.26	<0.000010	1.20	0.110	4.99	<0.000010	<0.00010	<0.00030	0.000479	<0.00050	0.0016	<0.00020	0.71
PR-IDZ	1/26/2022 13:30	ANQ897	M	C205279	0.00075	<0.01	<0.0002	<0.002	5.93	<0.001	<0.0000019	<0.001	<0.001	<0.01	0.390	0.0003	2.12	<0.00002	1.23	0.104	<3.0	<0.00001	<0.005	<0.005	0.00047	<0.005	<0.005	<0.0001	1.8
PR-IDZ	2/3/2022 14:00	AOC178	M	C207302	0.00072	<0.01	<0.0002	<0.002	5.15	<0.001	0.0000034	<0.001	<0.001	0.011	0.376	0.00033	2.08	<0.00002	0.969	0.0925	<3.0	<0.00001	<0.005	<0.005	0.00043	<0.005	<0.005	<0.0001	4.1
PR-IDZ	2/8/2022 14:10	AOI291	M	C208265	0.00059	<0.01	<0.0002	<0.002	5.37	<0.001	<0.0000019	<0.001	<0.001	<0.01	0.395	0.0003	2.15	<0.00002	1.05	0.0938	4.0	<0.00001	<0.005	<0.005	0.00043	<0.005	<0.005	<0.0001	1.6
PR-IDZ	2/16/2022 13:00	AOU841	M	C210450	0.00072	0.034	<0.0002	<0.002	5.89	0.0022	<0.0000019	<0.001	<0.001	<0.01	0.561	0.00026	2.33	<0.00002	1.18	0.123	6.6	<0.00001	<0.005	<0.005	0.00052	<0.005	<0.005	<0.0001	1.3
PR-IDZ	2/24/2022 14:00	APF948	M	C212235	0.00059	<0.01	<0.0002	<0.002	6.28	<0.001	<0.0000019	<0.001	<0.001	<0.01	0.427	0.00025	2.5	<0.00002	1.19	0.11	5.3	<0.00001	<0.005	<0.005	0.00046	<0.005	0.0143	<0.0001	2.1
PR-IDZ	3/2/2022 14:25	APO716	M	C213881	0.00073	<0.01	<0.0002	<0.002	6.15	0.0013	0.0000031	<0.001	<0.001	<0.01	0.339	0.00026	2.31	<0.00002	1.34	0.0902	<3.0	<0.00001	<0.005	<0.005	0.00039	<0.005	<0.005	<0.0001	2.5
PR-IDZ	3/10/2022 11:55	APZ001	M	C215884	0.00059	<0.01	<0.0002	<0.002	6.28	<0.001	<0.0000019	<0.001	<0.001	<0.01	0.472	0.00035	2.28	<0.00002	1.19	0.117	4.3	<0.00001	<0.005	<0.005	0.00051	<0.005	0.0112	<0.0001	2.4
PR-IDZ	3/17/2022 17:00	AQH798	M	C217776	0.0006	<0.01	<0.0002	<0.002	6.78	0.0014	<0.0000019	<0.001	<0.001	<0.01	0.496	0.00032	2.41	<0.00002	1.62	0.12	6.4	<0.00001	<0.005	<0.005	0.00053	<0.005	<0.005	<0.0001	5.3
PR-IDZ	3/23/2022 16:15	AQP258	M	C219363	0.00072	<0.01	<0.0002	<0.002	6.65	<0.001	<0.0000019	<0.001	<0.001	<0.01	0.544	0.00023	2.14	<0.00002	1.29	0.123	<3.0	<0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	<0.0001	4.1
PR-IDZ	3/30/2022 13:40	AQX833	M	C221206	0.00055	<0.01	<0.0002	<0.002	6.23	0.0013	<0.0000019	<0.001	<0.001	<0.01	0.407	0.00028	2.16	<0.00002	1.32	0.0956	3.7	<0.00001	<0.005	<0.005	0.00047	<0.005	<0.005	<0.0001	2.6
PR-IDZ	4/7/2022 15:00	ARI196	M	C223271	0.00055	<0.01	<0.0002	<0.002	5.41	0.0011	<0.0000019	<0.001	<0.001	<0.01	0.403	0.00026	2.2	<0.00002	1.17	0.101	5.1	<0.00001	<0.005	<0.005	0.00046	<0.005	<0.005	<0.0001	3.8
PR-IDZ	4/13/2022 15:00	ARP727	M	C224775	<0.0005	<0.01	<0.0002	<0.002	5.46	<0.001	<0.0000019	<0.001	<0.001	<0.01	0.367	0.00023	2.19	<0.00002	1.14	0.0872	3.6	<0.00001	<0.005	<0.005	0.00038	<0.005	<0.005	<0.0001	3.0
PR-IDZ	4/20/2022 13:30	ARW669	M	C226267	0.00062	<0.01	<0.0002	<0.002	6.44	<0.001	<0.0000019	<0.001	<0.001	<0.01	0.467	0.00032	2.3	<0.00002	1.20	0.114	5.3	<0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	<0.0001	2.0
PR-IDZ	4/28/2022 11:30	ASH218	M	C228650	0.00068	0.011	<0.0002	<0.002	6.54	0.0026	<0.0000019	<0.001	<0.001	<0.01	0.497	0.00047	2.17	<0.00002	1.39	0.107	6.6	<0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	<0.0001	2.2
PR-IDZ	5/4/2022 13:10	ASP677	M	C230320	0.00109	0.023	<0.0002	<0.002	6.34	0.0045	<0.0000019	<0.001	0.0011	<0.01	0.524	0.00034	2.03	<0.00002	1.41	0.122	3.7	<0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	0.00011	71
PR-IDZ	5/11/2022 14:15	ASZ425	M	C232133	0.00103	0.055	<0.0002	<0.002	7.23	0.0092	<0.0000019	<0.001	0.0016	0.01	0.794	0.00034	2.27	<0.00002	1.83	0.117	5.3	<0.00001	<0.005	<0.005	0.00056	<0.005	<0.005	0.00015	110
PR-IDZ	5/19/2022 14:00	ATL912	M	C234314	0.0009	0.051	<0.0002	0.0025	7.16	0.0021	<0.0000019	<0.001	0.0012	<0.01	0.578	0.00025	2.11	<0.00002	1.80	0.1	5.1	<0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	0.00017	56
PR-US-R5A	1/1/2022 10:00	FJ2200029-006	M	FJ2200029	0.00068	<0.010	<0.000050	0.0013	7.16	0.00060	<0.0000050	0.000952	0.0008	<0.050	0.467	0.000316	2.56	<0.000010	1.29	0.116	5.69	<0.000010	<0.00010	<0.00030	0.000495	<0.00050	0.0025	<0.00020	1.51
PR-US-R5A	1/13/2022 15:00	FJ2200098-003	M	FJ2200098	0.00062	<0.010	<0.000050	0.0012	6.80	0.00055	<0.0000050	0.000912	0.0008	<0.050	0.452	0.000315	2.34	<0.000010	1.18	0.111	4.80	<0.000010	<0.00010	<0.00030	0.000502	<0.00050	0.0025	<0.00020	0.98
PR-US-R5A	1/26/2022 12:45	ANQ898	M	C205279	0.0007	<0.01	<0.0002	<0.002	5.75	<0.001	0.0000022	<0.001	<0.001	<0.01	0.377	0.00029	2.11	<0.00002	1.09	0.103	<3.0	<0.00001	<0.005	<0.005	0.00046	<0.005	<0.005	<0.0001	2.6
PR-US-R5A	2/16/2022 16:00	AOU842	M	C210450	0.00076	0.05	<0.0002	<0.002	6.02	0.0041	<0.0000019	<0.001	<0.001	0.012	0.548	0.00032	2.42	<0.00002	1.13	0.122	6.1	<0.00001	<0.005	<0.005	0.00052	<0.005	<0.005	<0.0001	4.1
PR-US-R5A	2/24/2022 14:00	APF949	M	C212235	0.00068	<0.01	<0.0002	<0.002	6.16	<0.001	<0.0000019	<0.001	<0.001	<0.01	0.423	0.00024	2.42	<0.00002	1.14	0.11	4.8	<0.00001	<0.005	<0.005	0.00044	<0.005	<0.005	<0.0001	2.4
PR-US-R5A	3/10/2022 15:20	APZ002	M	C215884	0.00061	<0.01	<0.0002	<0.002	6.16	<0.001	<0.0000019	<0.001	<0.001	<0.01	0.458	0.00028	2.25	<0.00002	1.14	0.115	4.1	<0.00001	<0.005	<0.005	0.00052	<0.005	0.012	<0.0001	2.2
PR-US-R5A	3/17/2022 18:30	AQH800	M	C217776	0.00063	<0.01	<0.0002	<0.002	6.60	<0.001	<0.0000019	<0.001	<0.001	<0.01	0.462	0.00026	2.35	<0.00002	1.23	0.117	5.6	<0.00001	<0.005	<0.005	0.00052	<0.005	<0.005	<0.0001	5.9
PR-US-R5A	3/23/2022 16:15	AQP262	M	C219363	0.00069	<0.01	<0.0002	<0.002	6.64	<0.001	0.0000032	<0.001	<0.001	<0.01	0.476	0.00022	2.14	<0.00002	1.20	0.122	<3.0	<0.00001	<0.005	<0.005	0.0005	<0.005	<0.005	<0.0001	5.8
PR-US-R5A	4/7/2022 11:00	ARI197	M	C223271	0.00058	<0.01	<0.0002	<0.002	5.71	0.0016	<0.0000019	<0.001	<0.001	<0.01	0.425	0.00027	2.21	<0.00002	1.17	0.105	5.2	<0.00001	<0.005	<0.005	0.00048	<0.005	0.0131	<0.0001	3.4
PR-US-R5A	4/28/2022 15:00	ASH219	M	C228650	0.00068	<0.01	<0.0002	<0.002	6.52	0.0018	<0.0000019	<0.001	0.001	<0.01	0.491	0.00041	2.18	<0.00002	1.33	0.106	5.7	<0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	<0.0001	15
PR-US-R5A	5/4/2022 16:00	ASP679	M	C230320	0.00097	<0.01	<0.0002	0.0023	6.57	0.0042	<0.0000019	<0.001	0.0017	<0.01	0.490	0.00043	2.11	<0.00002	2.75	0.126	5.2	<0.00001	<0.005	<0.005	0.00055	<0.005	<0.005	<0.0001	24
PR-US-R5A	5/19/2022 15:30	ATL913	M	C234314	0.00073	0.032	<0.0002	0.0033	8.01	0.0099	<0.0000019	<0.001	0.0011	<0.01	0.558	0.00029	2.2	<0.00002	2.67	0.119	7.7	<0.00001	<0.005	<0.005	0.00058	<0.005	<0.005	<0.0001	31
QAQC_Curing_Tanks	6/23/2022 15:40	AVV602	M	C244839	0.0419	0.028	<0.0002	0.108	5.87	0.0019	<0.0000019	0.0159	<0.001	<0.01	211	0.0055	4.53	<0.00002	313	0.0209	64.8	0.000018	<0.005	<0.005	0.00115	<0.005	0.0407	0.00029	18
RBAC-Sump-BT	1/22/2022 12:45	FJ2200193-003	M	FJ2200193	0.00122	0.103	0.000078	0.151	13.0	0.0505	<0.0000050	0.00262	0.0192	<0.050	2.36	0.000891	3.47	<0.000010	161	0.213	61.4	0.000019	0.00469	0.00666	0.00104	0.00093	0.0202	0.00029	36.2
RSEM-L5E-P2-EOP	1/23/2022 17:35	FJ2200194-003	M	FJ2200194	0.00227	<0.010	<0.000050	0.0042	10.2	0.0817	<0.0000050	0.00181	0.0044	<0.050	2.68	0.00145	1.43	<0.000010	4.18	0.151	28.6	<0.000010	0.00062	0.00048	0.00106	<0.00050	0.0016	<0.00020	78.0
RSEM-L5E-P2-EOP	2/11/2022 12:10	AOM647	M	C208915	0.00326	<0.01	<0.0002	0.0172	19.0	0.397	<0.0000019	0.0025	0.0294	<0.01	4.45	0.00723	0.884	<0.00002	12.9	0.239	83.6	0.000011	<0.005	<0.005	0.00181	<0.005	0.0065	<0.0001	15
RSEM-L5E-P2-EOP	3/23/2022 17:55	AQP259	M	C219363	0.00356	<0.01	<0.0002	0.01	25.7	0.3	<0.0000019	0.0034	0.014	<0.01	5.17	0.00693	1.04	<0.00002	23.1	0.325	88.5	0.000028	<0.005	<0.005	0.0024	<0.005	<0.005	<0.0001	24
RSEM-L5E-P2-EOP	3/24/2022 17:20	AQP982	M	C219524	0.00295	<0.01	<0.0002	0.0092	19.5	0.227	<0.0000019	0.0029	0.0129	<0.01	4.07	0.00558	0.869	<0.00002	22.8	0.261	71.4	<0.00001	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	19
RSEM-L5E-P2-EOP	3/25/2022 13:40	AQP918	M	C219519	0.0029	<0.01	<0.0002	0.0086	16.7	0.197	0.0000045	0.0027	0.0114	<0.01	3.63	0.00515	0.784	<0.00002	21.1	0.233	61.8	<0.00001	<0.005	<0.005	0.00178	<0.005	<0.005	<0.0001	11
RSEM-L5E-P2-EOP	4/12/2022 17:15	ARN335	M	C224402	0.00176	<0.01	<0.0002	0.0066	19.6	0.12	<0.0000019	0.0028	0.0039	<0.01	3.19	0.00524	0.966	<0.00002	20.7	0.225	60.3	<0.00001	<0.005	<0.005	0.00189	<0.005	<0.005	<0.0001	11
RSEM-L5E-P2-EOP	4/13/2022 10:45	ARP730	M	C224775	0.00169	<0.01	<0.0002	0.0069	19.8	0.114	<0.0000019	0.0029	0.004	<0.01	3.13	0.00514	0.985	<0.00002	23.2	0.232	62.1	0.000011	<0.005	<0.005	0.00198	<0.005	<0.005	<0.0001	13
RSEM-L5E-P2-EOP	4/14/2022 11:35	ARQ066	M	C224815	0.00144	<0.01	<0.0002	0.0136	12.9	0.0936	<0.0000019	0.0026	0.0076	<0.01	2.45	0.0057	0.712	<0.00002	50.8	0.163	73.4	<0.00001	<0.005	<0.005	0.00165	<0.005	<0.005	<0.0001	8.0
RSEM-L5E-P2-EOP	4/15/2022 11:30	ARQ202	M	C224832	0.00151	<0.01	<0.0002	0.0133	15.0	0.106	<0.0000019	0.0032	0.0087	<0.01	2.96	0.00496	0.722	<0.00002	59.7	0.21	88.6	<0.00001	<0.005	<0.005	0.00213	<0.005	<0.005	<0.0001	3.5
RSEM-L5E-P2-EOP	4/16/2022 11:30	ARR880	M	C225206	0.00163	<0.01	<0.0002	0.014	14.4	0.11	<0.0000019	0.003	0.0092	<0.01	2.96	0.00522	0.67	<0.00002	59.9	0.199	84.6	<0.00001	<0.005	<0.005	0.00218	<0.005	<0.005	<0.0001	3.9
RSEM-L5E-P2-EOP	4/20/2022 10:40	ARW671	M	C226267	0.00142	<0.01	<0.0002	0.0131	19.3	0.0659	<0.0000019	0.0033	0.0053	<0.01	3.15	0.00664	0.725	<0.00002	62.7	0.227	92.4	<0.00001	<0.005	<0.005	0.00263	<0.005	<0.005	<0.0001	13
RSEM-L5E-P2-EOP	5/28/2022 10:10	ATX754	M	C236620	0.00118	<0.01	<0.0002	0.0247	63.5	0.0395	<0.0000019	0.0047	0.0166	<0.01	4.93	0.0115	0.78	<0.00002	52.5	0.642	191	0.000015	<0.005	<0.005	0.00588	<0.005	<0.005	<0.0001	5.8
RSEM-L5E-P2-EOP	5/29/2022 14:30	ATW970	M	C236421	0.00093	<0.01	<0.0002	0.0451	48.7	0.312	<0.0000019	0.0041	0.0399	<0.01	4.07	0.0103	1.28	<0.00002	189	0.507	247	0.000015	<0.005	<0.005	0.00498	<0.005	0.0231	<0.0001	5.3
RSEM-L5E-P2-EOP	5/30/2022 11:10	ATZ467	M	C236894	0.00126	<0.01	<0.0002	0.0523	48.0	0.451	<0.0000019	0.005	0.0591	<0.01	4.62	0.00999	1.52	<0.00002	212	0.553	273	0.000018	<0.005	<0.005	0.00603	<0.005	0.0434	<0.0001	5.2
RSEM-L5E-P2-SP	1/24/2022 15:00	FJ2200237-003	M	FJ2200237	0.00409	<0.010	<0.000050	0.0069	13.2	0.206	<0.0000050	0.00244	0.0140	<0.050	4.47	0.00259	0.617	<0.000010	7.08	0.188	52.6	<0.000010	0.00124	<0.00030	0.00143	<0.00050	0.0068	<0.00020	54.8
RSEM-L5E-P2-SP	2/7/2022 6:30	AOE530	M	C207636	0.0059	<0.01	<0.0002	0.0224	27.4	0.672	0.0000025	0.0025	0.0793	<0.01	6.08	0.00815	1.18	<0.00002	13.0	0.301	119	<0.00001	<0.005	<0.005	0.00154	<0.005	0.0817	<0.0001	16
RSEM-L5E-P2-SP	2/10/2022 12:55	AOM666	M	C208923	0.00344	<0.01	<0.0002	0.0162	18.5	0.387	<0.0000019	0.0025	0.0258	<0.01	4.66	0.007	0.857	<0.00002	13.2	0.24	84.2	0.000015	<0.005	<0.005	0.00182	<0.005	0.0063	<0.0001	47
RSEM-L5E-P2-SP	2/12/2022 11:10	AOP213	M	C209346	0.00367	<0.01	<0.0002	0.0167	22.1	0.438	<0.0000019	0.0028	0.0331	0.013	5.04	0.00721	0.911	<0.00002	14.8	0.266	92.6	0.000014	<0.005	<0.005	0.00209	<0.005	0.0072	<0.0001	9.6
RSEM-L5E-P2-SP	2/14/2022 10:45	AOQ980	M	C209670	0.00364	<0.01	<0.0002	0.0168	22.9	0.434	<0.0000019	0.0028	0.0315	0.012	4.88	0.00699	0.822	<0.00002	15.2	0.265	85.8	0.000017	<0.005	<0.005	0.00211	<0.005	0.0075	<0.0001	15
RSEM-L5E-P2-SP	3/17/2022 17:00	AQH801	M	C217776	0.00363	<0.01	<0.0002	0.0215	25.3	0.412	<0.0000019	0.003	0.0285	<0.01	5.53	0.00827	0.943	<0.00002	15.1	0.34	102	0.000014	<0.005	<0.005	0.0027	<0.005	0.0054	<0.0001	36
RSEM-L5E-P2-SP	3/18/2022 6:30	AQH795	M	C217775	0.00348	<0.01	<0.0002	0.0135	22.4	0.244	<0.0000019	0.0031	0.0149	<0.01	5.09	0.0065	0.906	<0.00002	13.7	0.284	82.2	0.000016	<0.005	<0.005	0.00231	<0.005	<0.005	<0.0001	49

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
RSEM-L5E-P2-SP	3/19/2022 15:30	AQJ972	M	C218236	0.00342	<0.01	<0.0002	0.0108	21.1	0.209	<0.0000019	0.0031	0.0125	<0.01	4.89	0.00619	0.924	<0.00002	16.5	0.261	72.8	0.000016	<0.005	<0.005	0.0021	<0.005	<0.005	<0.0001	33
RSEM-L5E-P2-SP	3/20/2022 18:00	AQJ916	M	C218219	0.00335	<0.01	<0.0002	0.012	23.0	0.265	<0.0000019	0.0033	0.0158	0.01	5.04	0.00625	0.979	<0.00002	20.5	0.283	83.0	0.000016	<0.005	<0.005	0.00221	<0.005	<0.005	<0.0001	31
RSEM-L5E-P2-SP	3/21/2022 10:30	AQL267	M	C218465	0.0035	<0.01	<0.0002	0.0118	23.6	0.259	<0.0000019	0.0034	0.0149	<0.01	5.25	0.00652	1.06	<0.00002	21.1	0.291	83.3	0.000017	<0.005	<0.005	0.00227	<0.005	<0.005	<0.0001	22
RSEM-L5E-P2-SP	3/22/2022 17:40	AQN716	M	C218958	0.00306	<0.01	<0.0002	0.0109	22.9	0.262	<0.0000019	0.0033	0.0137	0.01	4.81	0.00673	1	<0.00002	21.2	0.287	81.3	0.000015	<0.005	<0.005	0.00226	<0.005	<0.005	<0.0001	19
RSEM-L5E-P2-SP	3/26/2022 18:15	AQS238	M	C219944	0.00319	<0.01	<0.0002	0.0092	23.7	0.233	<0.0000019	0.0034	0.0105	0.011	4.78	0.00713	1.07	<0.00002	22.3	0.305	82.1	0.000013	<0.005	<0.005	0.00235	<0.005	<0.005	<0.0001	13
RSEM-L5E-P2-SP	3/27/2022 16:10	AQS344	M	C219976	0.00347	<0.01	<0.0002	0.0098	25.3	0.23	<0.0000019	0.0035	0.0102	0.01	5.03	0.00711	1.15	<0.00002	23.8	0.315	80.6	0.000016	<0.005	<0.005	0.00259	<0.005	<0.005	<0.0001	13
RSEM-L5E-P2-SP	3/28/2022 17:20	AQU419	M	C220399	0.00352	<0.01	<0.0002	0.0092	24.0	0.213	<0.0000019	0.0034	0.0093	0.01	4.71	0.00685	1.11	<0.00002	23.4	0.301	78.7	0.000016	<0.005	<0.005	0.00245	<0.005	<0.005	<0.0001	6.6
RSEM-L5E-P2-SP	3/29/2022 16:35	AQV264	M	C220606	0.00242	<0.01	<0.0002	0.0076	18.8	0.159	<0.0000019	0.0028	0.0068	<0.01	3.86	0.00537	0.888	<0.00002	20.4	0.234	63.5	0.000014	<0.005	<0.005	0.00194	<0.005	<0.005	<0.0001	5.4
RSEM-L5E-P2-SP	3/30/2022 14:20	AQX837	M	C221206	0.00251	<0.01	<0.0002	0.0076	16.7	0.137	<0.0000019	0.0023	0.0057	<0.01	3.11	0.00445	0.822	<0.00002	18.4	0.19	56.4	0.000013	<0.005	<0.005	0.00177	<0.005	<0.005	<0.0001	5.2
RSEM-L5E-P2-SP	3/31/2022 17:20	AQY796	M	C221428	0.00237	<0.01	<0.0002	0.0086	17.5	0.177	<0.0000019	0.003	0.0072	<0.01	3.77	0.00477	0.974	<0.00002	18.3	0.244	61.5	0.000013	<0.005	<0.005	0.00224	<0.005	<0.005	<0.0001	10
RSEM-L5E-P2-SP	3/31/2022 17:30	AQY797	D	C221428	0.00236	<0.01	<0.0002	0.0087	17.8	0.176	<0.0000019	0.0029	0.007	<0.01	3.82	0.00476	0.949	<0.00002	18.5	0.243	58.3	0.000014	<0.005	<0.005	0.00222	<0.005	<0.005	<0.0001	10
RSEM-L5E-P2-SP	4/1/2022 13:20	AQY728	M	C221415	0.00255	<0.01	<0.0002	0.0082	17.9	0.174	<0.0000019	0.003	0.0069	<0.01	3.72	0.00469	0.933	<0.00002	18.7	0.242	63.3	0.000014	<0.005	<0.005	0.00227	<0.005	<0.005	<0.0001	7.1
RSEM-L5E-P2-SP	4/2/2022 12:35	ARB516	M	C222000	0.00219	<0.01	<0.0002	0.0066	16.5	0.145	<0.0000019	0.0026	0.0058	<0.01	3.28	0.00437	0.788	<0.00002	17.8	0.222	55.0	0.000013	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	4.9
RSEM-L5E-P2-SP	4/2/2022 12:45	ARB517	D	C222000	0.00216	<0.01	<0.0002	0.0073	16.8	0.152	<0.0000019	0.0026	0.0059	<0.01	3.40	0.00475	0.883	<0.00002	18.3	0.22	54.1	0.000012	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	6.2
RSEM-L5E-P2-SP	4/3/2022 11:10	ARB460	M	C221989	0.00165	<0.01	<0.0002	0.0062	13.3	0.112	<0.0000019	0.0021	0.0044	<0.01	2.71	0.00395	0.719	<0.00002	15.3	0.174	43.7	<0.00001	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	4.5
RSEM-L5E-P2-SP	4/4/2022 10:45	ARB189	M	C221904	0.00176	<0.01	<0.0002	0.0058	13.8	0.113	<0.0000019	0.0021	0.0045	<0.01	2.69	0.00388	0.71	<0.00002	15.7	0.164	43.6	0.000011	<0.005	<0.005	0.00154	<0.005	<0.005	<0.0001	5.5
RSEM-L5E-P2-SP	4/6/2022 17:30	ARI190	M	C223269	0.00188	<0.01	<0.0002	0.0056	14.9	0.12	<0.0000019	0.0027	0.0047	<0.01	3.07	0.00457	0.847	<0.00002	17.2	0.203	57.7	<0.00001	<0.005	<0.005	0.00176	<0.005	<0.005	0.00013	11
RSEM-L5E-P2-SP	4/8/2022 10:30	ARI200	M	C223273	0.00197	<0.01	<0.0002	0.0064	16.9	0.137	<0.0000019	0.003	0.0049	<0.01	3.46	0.005	0.977	<0.00002	18.8	0.232	62.7	0.000012	<0.005	<0.005	0.00199	<0.005	<0.005	0.00014	15
RSEM-L5E-P2-SP	4/10/2022 10:30	ARK078	M	C223661	0.00196	<0.01	<0.0002	0.0062	17.8	0.141	<0.0000019	0.003	0.0044	<0.01	3.61	0.00472	0.951	<0.00002	19.8	0.246	59.8	0.000013	<0.005	<0.005	0.00208	<0.005	<0.005	<0.0001	17
RSEM-L5E-P2-SP	4/19/2022 12:00	ARV036	M	C225905	0.00112	<0.01	<0.0002	0.0145	13.2	0.0098	<0.0000019	0.0028	0.0043	<0.01	2.42	0.00484	0.638	<0.00002	51.5	0.184	79.1	<0.00001	<0.005	<0.005	0.00196	<0.005	<0.005	<0.0001	3.4
RSEM-L5E-P2-SP	4/21/2022 11:15	ARX709	M	C226546	0.00165	<0.01	<0.0002	0.0137	14.4	0.0879	<0.0000019	0.0033	0.0094	<0.01	3.15	0.00364	0.584	<0.00002	63.2	0.202	85.7	<0.00001	<0.005	<0.005	0.00249	<0.005	<0.005	<0.0001	6.0
RSEM-L5E-P2-SP	5/5/2022 13:45	ASR007	M	C230531	0.00162	<0.01	<0.0002	0.0221	36.5	0.016	<0.0000019	0.0045	0.0082	<0.01	3.83	0.00785	0.931	<0.00002	110	0.444	161	0.000012	<0.005	<0.005	0.00512	<0.005	<0.005	<0.0001	1.8
RSEM-L5E-P2-SP	5/6/2022 13:15	ASR076	M	C230545	0.00198	<0.01	<0.0002	0.0183	58.1	0.248	<0.0000019	0.0043	0.039	0.016	5.16	0.0085	1.14	<0.00002	50.3	0.572	165	0.000017	<0.005	<0.005	0.00563	<0.005	0.0242	<0.0001	3.6
RSEM-L5E-P2-SP	5/9/2022 10:35	ASV293	M	C231306	0.00155	0.015	<0.0002	0.0182	59.7	0.273	<0.0000019	0.0042	0.0401	<0.01	4.71	0.0128	1.29	<0.00002	45.4	0.58	178	0.000014	<0.005	<0.005	0.00527	<0.005	0.0155	<0.0001	4.4
RSEM-L5E-P2-SP	5/12/2022 11:15	ATA815	M	C232369	0.00119	<0.01	<0.0002	0.0186	57.5	0.216	<0.0000019	0.0044	0.0362	<0.01	4.71	0.0133	1.3	<0.00002	44.6	0.619	174	0.000015	<0.005	<0.005	0.00561	<0.005	<0.005	<0.0001	2.6
RSEM-L5E-P2-SP	5/22/2022 15:30	ATO537	M	C234788	0.00093	<0.01	<0.0002	0.0244	62.3	0.0292	<0.0000019	0.0044	0.0225	<0.01	4.81	0.0103	0.931	<0.00002	48.3	0.601	172	0.000015	<0.005	<0.005	0.00577	<0.005	<0.005	<0.0001	2.4
RSEM-L5E-P2-SP	5/25/2022 13:10	ATT371	M	C235730	0.00093	<0.01	<0.0002	0.0208	63.7	0.0188	<0.0000019	0.0047	0.0194	<0.01	5.04	0.0117	0.894	<0.00002	48.8	0.66	186	0.000015	<0.005	<0.005	0.00579	<0.005	<0.005	<0.0001	1.6
RSEM-L5E-P2-SP	5/27/2022 10:55	ATV303	M	C236089	0.00085	<0.01	<0.0002	0.015	62.0	0.0051	<0.0000019	0.0043	0.0168	<0.01	5.05	0.00987	0.819	<0.00002	48.9	0.617	186	0.000016	<0.005	<0.005	0.00562	<0.005	<0.005	<0.0001	1.3
RSEM-L5E-P2-SP	5/31/2022 15:50	AUC341	M	C237377	0.0024	<0.01	<0.0002	0.0814	62.6	2.12	<0.0000019	0.0023	0.245	<0.01	4.77	0.0158	1.71	<0.00002	45.1	0.692	302	0.000026	<0.005	<0.005	0.00334	<0.005	0.224	<0.0001	3.1
RSEM-L5E-P2-SP	6/2/2022 13:35	AUH702	M	C238258	0.00179	0.011	<0.0002	0.0743	53.4	1.99	<0.0000019	0.0021	0.229	<0.01	4.16	0.017	1.75	<0.00002	41.3	0.675	236	0.000024	<0.005	<0.005	0.00284	<0.005	0.221	<0.0001	2.4
RSEM-L5E-P2-SP	6/5/2022 13:40	AUM445	M	C238986	0.00171	0.01	<0.0002	0.079	67.0	1.74	<0.0000019	0.0023	0.194	<0.01	4.78	0.0155	1.64	<0.00002	56.5	0.755	286	0.000026	<0.005	<0.005	0.00333	<0.005	0.136	0.00011	2.4
RSEM-L5E-P2-SP	6/11/2022 12:30	AUY736	M	C241062	0.00124	<0.01	<0.0002	0.0764	62.4	1.02	<0.0000019	0.0021	0.128	<0.01	4.56	0.0171	1.28	<0.00002	63.8	0.697	262	0.000019	<0.005	<0.005	0.00338	<0.005	0.0318	<0.0001	3.4
RSEM-L5E-P2-SP	6/20/2022 13:35	AVO968	M	C243664	0.0017	0.016	<0.0002	0.0651	62.3	0.393	<0.0000019	0.0027	0.0659	<0.01	4.93	0.0144	0.632	<0.00002	62.3	0.656	257	0.000025	<0.005	<0.005	0.00413	<0.005	0.0103	<0.0001	1.9
RSEM-L5E-P2-SP	6/22/2022 12:05	AVT155	M	C244412	0.00134	0.026	<0.0002	0.063	65.2	0.32	<0.0000019	0.003	0.0562	<0.01	5.10	0.0145	0.635	<0.00002	87.5	0.723	316	0.000023	<0.005	<0.005	0.00462	<0.005	0.0083	0.00012	1.6
RSEM-L5E-P2-SP	7/3/2022 16:00	AWM049	M	C247492	0.0013	0.056	<0.0002	0.0616	67.7	0.122	0.0000028	0.0038	0.0279	<0.01	5.45	0.0138	0.222	<0.00002	135	0.712	327	0.000022	<0.005	<0.005	0.00534	<0.005	<0.005	<0.0001	1.4
RSEM-L5E-P2-SP	7/12/2022 14:40	AXE620	M	C250400	0.0018	0.076	<0.0004	0.0623	76.4	0.0512	<0.0000019	0.0062	0.0134	<0.02	6.35	0.00815	<0.2	<0.00004	288	0.759	404	<0.00002	<0.01	<0.01	0.00692	<0.01	<0.01	<0.0002	1.5
RSEM-L5E-P2-SP	8/4/2022 14:00	AYY906	M	C257848	0.0013	0.038	<0.0004	0.0688	83.2	0.038	<0.0000019	0.0083	0.0078	<0.02	7.11	0.00378	<0.2	<0.00004	316	0.806	433	<0.00002	<0.01	<0.01	0.00646	<0.01	<0.01	<0.0002	0.80
RSEM-L5E-P2-SP	8/27/2022 15:00	BAR928	M	C265307	0.0011	0.021	<0.0004	0.0549	99.2	0.0161	<0.0000019	0.0081	0.0096	<0.02	8.27	0.0021	<0.2	<0.00004	256	0.91	431	<0.00002	<0.01	<0.01	0.00619	<0.01	<0.01	<0.0002	1.2
RSEM-L5W-P2-EOP	3/25/2022 13:25	AQP917	M	C219519	0.0027	<0.01	<0.0002	0.009	12.4	0.162	<0.0000019	0.0022	0.0122	<0.01	2.77	0.00421	0.671	<0.00002	22.4	0.179	53.2	<0.00001	<0.005	<0.005	0.00139	<0.005	0.0053	<0.0001	9.0
RSEM-L5W-P2-EOP	3/26/2022 18:35	AQS239	M	C219944	0.0023	<0.01	<0.0002	0.0103	13.2	0.151	<0.0000019	0.0022	0.0118	0.028	2.83	0.00473	0.741	<0.00002	25.4	0.178	45.6	<0.00001	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	6.9
RSEM-L5W-P2-EOP	5/29/2022 14:10	ATW972	M	C236421	0.00084	<0.01	<0.0002	0.0416	44.6	0.0991	<0.0000019	0.0042	0.0171	<0.01	3.95	0.00949	1.25	<0.00002	209	0.478	243	0.000012	<0.005	<0.005	0.0051	<0.005	<0.005	<0.0001	5.5
RSEM-L5W-P2-EOP	5/30/2022 11:30	ATZ468	M	C236894	0.00105	<0.01	<0.0002	0.0472	44.7	0.0881	<0.0000019	0.0056	0.018	<0.01	4.56	0.00859	1.46	<0.00002	248	0.552	271	0.000016	<0.005	<0.005	0.00672	<0.005	<0.005	<0.0001	4.1
RSEM-L5W-P2-SP	2/7/2022 6:00	AOE529	M	C207636	0.00421	<0.01	<0.0002	0.0161	20.8	0.476	0.0000019	0.0023	0.0479	0.011	5.07	0.0058	0.958	<0.00002	12.2	0.233	90.7	<0.00001	<0.005	<0.005	0.00155	<0.005	0.0382	<0.0001	13
RSEM-L5W-P2-SP	2/10/2022 13:00	AOM667	M	C208923	0.00236	<0.01	<0.0002	0.0072	7.47	0.164	<0.0000019	0.0019	0.0133	<0.01	2.62	0.00246	0.666	<0.00002	12.2	0.12	38.6	<0.00001	<0.005	<0.005	0.00085	<0.005	<0.005	<0.0001	150
RSEM-L5W-P2-SP	2/14/2022 10:55	AOQ981	M	C209670	0.00345	<0.01	<0.0002	0.0106	13.2	0.286	<0.0000019	0.0024	0.0261	<0.01	4.01	0.00387	0.78	<0.00002	13.1	0.185	60.2	<0.00001	<0.005	<0.005	0.00132	<0.005	0.0135	<0.0001	23
RSEM-L5W-P2-SP	3/19/2022 16:30	AQJ973	M	C218236	0.00284	<0.01	<0.0002	0.0146	19.1	0.258	<0.0000019	0.003	0.0186	<0.01	4.32	0.00588	0.895	<0.00002	21.6	0.251	75.0	0.000012	<0.005	<0.005	0.00204	<0.005	<0.005	<0.0001	26
RSEM-L5W-P2-SP	3/20/2022 18:30	AQJ917	M	C218219	0.00253	<0.01	<0.0002	0.011	15.4	0.187	<0.0000019	0.0027	0.013	<0.01	3.51	0.00494	0.82	<0.00002	16.9	0.202	59.2	0.00001	<0.005	<0.005	0.00169	<0.005	<0.005	<0.0001	17
RSEM-L5W-P2-SP	3/21/2022 10:10	AQL266	M	C218465	0.00299	<0.01	<0.0002	0.0117	15.7	0.185	<0.0000019	0.0029	0.0133	<0.01	3.60	0.00471	0.844	<0.00002	18.7	0.207	61.1	0.00001	<0.005	<0.005	0.0017	<0.005	<0.005	<0.0001	17
RSEM-L5W-P2-SP	3/22/2022 17:50	AQN717	M	C218958	0.00182	<0.01	<0.0002	0.0097	12.6	0.143	<0.0000019	0.0026	0.0105	<0.01	2.89	0.00423	0.779	<0.00002	21.0	0.171	53.4	<0.00001	<0.005	<0.005	0.00145	<0.005	<0.005	<0.0001	18
RSEM-L5W-P2-SP	3/23/2022 18:15	AQP260	M	C219363	0.00204	<0.01	<0.0002	0.0095	13.0	0.168	<0.0000019	0.0024	0.0126	<0.01	2.86	0.00446	0.716	<0.00002	23.9	0.185	55.6	<0.00001	<0.005	<0.005	0.00147	<0.005	<0.005	<0.0001	11
RSEM-L5W-P2-SP	3/24/2022 17:35	AQP983	M	C219524	0.00219	<0.01	<0.0002	0.009	12.6	0.163	<0.0000019	0.0022	0.0122	<0.01	2.79	0.00416	0.657	<0.00002	22.1	0.181	52.8	<0.00001	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	10
RSEM-L5W-P2-SP	3/27/2022 16:30	AQS347	M	C219976	0.00219	<0.01	<0.0002	0.0107	13.4	0.147	<0.0000019	0.0024	0.0114	<0.01	2.91	0.0048	0.771	<0.00002	26.6	0.179	59.1	<0.00001	<0.005	<0.005	0.00153	<0.005	<0.005	<0.0001	5.9
RSEM-L5W-P2-SP	3/28/2022 17:40	AQU420	M	C220399	0.00286	<0.01	<0.0002	0.0099	12.1	0.121	<0.0000019	0.0023	0.0094	<0.01	2.67	0.00463	0.738	<0.00002	25.5	0.161	53.2	<0.00001	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	6.9
RSEM-L5W-P2-SP	3/29/2022 16:55	AQV265	M	C220606	0.00216	<0.01	<0.0002	0.0097	11.8	0.118	<0.0000019	0.0021	0.0091	<0.01	2.52	0.00442	0.694	<0.00002	25.0	0.158	52.6	<0.00001	<0.005	<0.005	0.00134	<0.005	<0.005	<0.0001	4.8
RSEM-L5W-P2-SP	3/30/2022 14:50	AQX838	M	C221206	0.00179	<0.01	<0.0002	0.0095	8.51	0.0952	<0.0000019	0.0017	0.0077	<0.01	1.99	0.00354	0.593	<0.00002	19.0	0.121	40.5	<0.00001	<0.005	<0.005	0.00121	<0.005	<0.005	<0.0001	4.6
RSEM-L5W-P2-SP	3/31/2022 17:40	AQY798	M	C221428	0.00098	<0.01	<0.0002	0.007	6.40	0.0608	<0.0000019	0.0015	0.0054	<0.01	1.56	0.0024	0.46	<0.00002	14.8	0.0934	29.7	<0.00001	<0.005	<0.005	0.0009	<0.005	<0.005	<0.0001	5.2
RSEM-L5W-P2-SP	4/1/2022 13:30	AQY729	M	C221415	0.00146	<0.01	<0.0002	0.0085	8.25	0.094	0.0000021	0.0019	0.0077	<0.01	1.97	0.00325	0.605	<0.00002	21.7	0.129	43.4	<0.00001	<0.005	<0.005	0.00125	<0.005	<0.005	<0.0001	5.2
RSEM-L5W-P2-SP	4/2/2022 12:55	ARB518	M	C222000	0.00142	<0.01	<0.0002	0.0085	9.18	0.0945	<0.0000019	0.0019	0.0074	<0.01	2.04	0.00344	0.581	<0.00002	24.2	0.13	42.9	<0.00001	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	6.4
RSEM-L5W-P2-SP	4/3/2022 11:05	ARB461	M	C221989	0.00115	<0.01	<0.0002	0.008	7.80	0.0764	<0.0000019	0.0017	0.0063	<0.01	1.80	0.00308	0.551	<0.00002	21.3	0.113	37.3	<0.00001	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	4.3
RSEM-L5W-P2-SP	4/4/2022 11:00	ARB190	M	C221904	0.00106	<0.01	<0.0002	0.0076	7.03	0.0673	<0.0000019	0.0015	0.0056	<0.01	1.63	0.0031	0.521	<0.00002	19.3	0.103	33.5	<0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	5.6
RSEM-L5W-P2-SP	4/6/2022 18:00	ARI191	M	C223269	0.00114	<0.01	<0.0002	0.0078	8.48	0.084	<0.0000019	0.002	0.0067	<0.01	1.97	0.00389	0.62	<0.00002	25.8	0.125	48.4	<0.00001	<0.005	<0.005	0.00121	<0.005	<0.005	0.00011	5.9
RSEM-L5W-P2-SP	4/8/2022 11:00	ARI201	M	C223273	0.0014	<0.01	<0.0002	0.01	10.2	0.107	<0.0000019	0.0025	0.008	<0.01	2.40	0.00462	0.677	<0.00002	35.6	0.153	61.8	<0.00001	<0.005	<0.005	0.00152	<0.005	<0.005	0.00013	10
RSEM-L5W-P2-SP	4/10/2022 11:00	ARK079	M	C223661	0.0014	<0.01	<0.0002	0.0115	11.0	0.108	<0.0000019	0.0027	0.0081	<0.01	2.56	0.005	0.739	<0.00002	41.1	0.167	63.9	<0.00001	<0.005	<0.005	0.00167	<0.005	<0.005	<0.0001	12
RSEM-L5W-P2-SP	4/12/2022 17:30	ARN336	M	C224402	0.00137	<0.01	<0.0002	0.013	12.3	0.0971	<0.0000019	0.0026	0.0077	<0.01	2.38	0.00557	0.722	<0.00002	48.4	0.16	69.2	<0.00001	<0.005	<0.005	0.00158	<0.005	<0.005	<0.0001	8.2
RSEM-L5W-P2-SP	5/5/2022 13:55	ASR008	M	C230531	0.00176	<0.01	<0.0002	0.0163	49.6	0.186	<0.0000019	0.0044	0.0277	<0.01	4.36	0.0101	1.02	<0.00002	47.7	0.574	142	0.000013	<0.005	<0.005	0.00543	<0.005	0.0163	<0.0001	3.4
RSEM-L5W-P2-SP	5/9/2022 10:45	ASV294	M	C231306	0.00154	0.026	<0.0002	0.0215	42.2	0.0417	<0.0000019	0.0041	0.0112	0.017	4.40	0.0108	0.993	<0.00002	126	0.417	179	0.000013	<0.005	<0.005	0.00534	<0.005	<0.005	<0.0001	5.3
RSEM-L5W-P2-SP	5/12/2022 11:30	ATA816	M	C232369	0.00133	<0.01	<0.0002	0.0211	43.8	0.0226	<0.0000019	0.0042	0.0124	<0.01	4.37	0.0095	0.966	<0.00002	121	0.472	173	0.000012	<0.005	<0.005	0.00551	<0.005	<0.005	<0.0001	2.2
RSEM-L5W-P2-SP	5/22/2022 16:00	ATO538	M	C234788	0.00117	<0.01	<0.0002	0.0406	46.4	0.0021	0.0000021	0.0049	0.0091	<0.01	4.62	0.00748	0.994	<0.00002	223	0.484	230	0.000016	<0.005	<0.005	0.00678	<0.005	<0.005	<0.0001	4.0
RSEM-L5W-P2-SP	5/25/2022 13:25	ATT372	M	C235730	0.00114	<0.01	<0.0002	0.0364	49.6	<0.001	<0.0000019	0.0053	0.0093	<0.01	4.97	0.00908	1.04	<0.00002	270	0.563	280	0.000016	<0.005	<0.005	0.00716	<0.005	<0.005	<0.0001	2.5

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
RSEM-L5W-P2-SP	5/27/2022 10:40	ATV302	M	C236089	0.00119	<0.01	<0.0002	0.0316	49.3	0.0019	<0.0000019	0.0052	0.0094	<0.01	5.08	0.00847	0.991	<0.00002	252	0.574	273	0.000018	<0.005	<0.005	0.0072	<0.005	<0.005	<0.0001	2.0
RSEM-L5W-P2-SP	5/28/2022 9:45	ATX753	M	C236620	0.00104	<0.01	<0.0002	0.0424	50.0	0.0016	<0.0000019	0.0055	0.0084	<0.01	4.78	0.00869	1.06	<0.00002	248	0.591	291	0.000016	<0.005	<0.005	0.00729	<0.005	<0.005	<0.0001	2.9
RSEM-L5W-P2-SP	5/31/2022 15:35	AUC342	M	C237377	0.00132	0.056	<0.0002	0.0556	46.6	0.397	<0.0000019	0.0048	0.0535	0.012	4.82	0.00955	1.7	<0.00002	236	0.592	339	0.000019	<0.005	<0.005	0.00632	<0.005	0.0394	0.00015	7.4
RSEM-L5W-P2-SP	6/2/2022 13:50	AUH703	M	C238258	0.0013	<0.01	<0.0002	0.0613	44.8	0.965	<0.0000019	0.0038	0.116	<0.01	4.14	0.0132	1.67	<0.00002	153	0.597	291	0.00002	<0.005	<0.005	0.00443	<0.005	0.0931	<0.0001	1.5
RSEM-L5W-P2-SP	6/5/2022 14:00	AUM446	M	C238986	0.00112	<0.01	<0.0002	0.0699	53.1	0.709	<0.0000019	0.0043	0.0899	<0.01	4.80	0.0138	1.62	<0.00002	220	0.666	357	0.00002	<0.005	<0.005	0.00531	<0.005	0.0523	0.00011	1.3
RSEM-L5W-P2-SP	6/11/2022 13:00	AUY737	M	C241062	0.00084	<0.01	<0.0002	0.0741	50.5	0.273	<0.0000019	0.0043	0.0592	<0.01	4.69	0.0125	1.3	<0.00002	330	0.646	325	0.000018	<0.005	<0.005	0.00589	<0.005	0.0197	<0.0001	1.7
RSEM-L5W-P2-SP	6/22/2022 12:15	AVT156	M	C244412	0.00129	<0.01	<0.0002	0.0822	56.9	0.022	<0.0000019	0.0055	0.0396	<0.01	5.59	0.0108	0.659	<0.00002	398	0.779	429	0.000025	<0.005	<0.005	0.00763	<0.005	<0.005	0.00012	1.5
RSEM-L5W-P2-SP	7/3/2022 16:30	AWM050	M	C247492	0.00107	<0.01	<0.0002	0.0951	55.4	<0.001	0.0000024	0.0057	0.024	<0.01	5.57	0.0112	0.216	<0.00002	473	0.723	461	0.000027	<0.005	<0.005	0.00767	<0.005	<0.005	<0.0001	2.5
RSEM-L5W-P2-SP	7/12/2022 14:55	AXE621	M	C250400	<0.0025	<0.05	<0.001	0.098	67.9	<0.005	<0.0000019	0.0066	0.0196	<0.05	6.90	0.0103	<0.5	<0.0001	577	0.849	556	<0.00005	<0.025	<0.025	0.009	<0.025	<0.025	<0.0005	3.9
RSEM-L5W-P2-SP	8/4/2022 14:10	AYY907	M	C257848	0.0014	<0.02	<0.0004	0.116	71.4	<0.002	<0.0000019	0.0096	0.0067	<0.02	7.09	0.00679	<0.2	<0.00004	618	0.827	595	0.000032	<0.01	<0.01	0.00895	<0.01	<0.01	<0.0002	2.2
RSEM-L5W-P2-SP	8/27/2022 15:30	BAR929	M	C265307	0.0013	0.022	<0.0004	0.111	76.9	0.0188	<0.0000019	0.0105	0.0087	<0.02	8.11	0.00449	0.482	<0.00004	700	0.833	648	<0.00002	<0.01	<0.01	0.00781	<0.01	<0.01	<0.0002	2.5
RSEM-L6-EOP	4/24/2022 10:30	ASA414	M	C227083	0.00103	<0.01	<0.0002	0.0056	11.6	0.0452	<0.0000019	0.0044	0.0014	<0.01	2.79	0.00155	1.04	<0.00002	26.5	0.186	33.1	<0.00001	<0.005	<0.005	0.00147	<0.005	<0.005	<0.0001	2.7
RSEM-L6-EOP	5/17/2022 12:30	ATH852	M	C233625	0.00073	<0.01	<0.0002	0.0096	20.7	0.0012	<0.0000019	0.0041	0.0011	<0.01	3.03	0.0018	0.364	<0.00002	29.9	0.287	50.3	<0.00001	<0.005	<0.005	0.00224	<0.005	<0.005	<0.0001	3.5
RSEM-L6-EOP	5/18/2022 12:30	ATJ926	M	C234012	0.00087	<0.01	<0.0002	0.0117	21.8	0.0049	<0.0000019	0.0045	0.0011	<0.01	3.16	0.00142	0.419	<0.00002	31.1	0.272	67.4	<0.00001	<0.005	<0.005	0.00264	<0.005	<0.005	<0.0001	3.2
RSEM-L6-EOP	6/5/2022 11:20	AUM442	M	C238986	0.00093	<0.01	<0.0002	0.0106	14.3	<0.001	<0.0000019	0.0043	0.0011	<0.01	2.74	0.00194	0.974	<0.00002	19.5	0.365	37.9	<0.00001	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	1.8
RSEM-L6-SP	3/19/2022 12:50	AQJ975	M	C218236	0.00138	<0.01	<0.0002	0.0043	6.57	0.0486	0.000002	0.0055	0.0015	<0.01	3.20	0.00078	1.29	<0.00002	27.8	0.162	17.9	<0.00001	<0.005	<0.005	0.00098	<0.005	<0.005	<0.0001	28
RSEM-L6-SP	3/21/2022 11:45	AQL271	M	C218465	0.00134	<0.01	<0.0002	0.0045	6.95	0.0531	<0.0000019	0.0054	0.0015	<0.01	3.19	0.00104	1.3	<0.00002	28.1	0.168	19.6	<0.00001	<0.005	<0.005	0.00101	<0.005	<0.005	<0.0001	17
RSEM-L6-SP	4/19/2022 12:50	ARV037	M	C225905	0.00073	<0.01	<0.0002	0.005	8.66	0.0554	<0.0000019	0.0038	0.0011	<0.01	2.22	0.00116	1.02	<0.00002	20.8	0.153	25.8	<0.00001	<0.005	<0.005	0.00109	<0.005	<0.005	<0.0001	3.6
RSEM-L6-SP	4/21/2022 12:20	ARX710	M	C226546	0.00096	<0.01	<0.0002	0.0045	9.62	0.0611	<0.0000019	0.0046	0.0014	<0.01	2.77	0.00062	1.04	<0.00002	23.0	0.174	30.9	<0.00001	<0.005	<0.005	0.00147	<0.005	<0.005	<0.0001	2.6
RSEM-L6-SP	4/23/2022 15:40	ARZ188	M	C226855	0.00087	<0.01	<0.0002	0.0054	11.3	0.0498	<0.0000019	0.0043	0.0013	<0.01	2.79	0.00158	1.03	<0.00002	26.3	0.181	32.7	<0.00001	<0.005	<0.005	0.00146	<0.005	<0.005	<0.0001	3.2
RSEM-L6-SP	5/7/2022 10:15	ASS945	M	C230886	0.00094	<0.01	<0.0002	0.0086	20.3	0.0062	<0.0000019	0.0042	0.0014	0.018	3.60	0.00269	0.764	<0.00002	29.8	0.272	58.8	<0.00001	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	4.8
RSEM-L6-SP	5/31/2022 10:50	AUC337	M	C237377	0.00106	<0.01	<0.0002	0.0092	14.7	0.0121	<0.0000019	0.0043	0.0013	0.015	3.07	0.00135	1.62	<0.00002	19.6	0.38	47.3	<0.00001	<0.005	<0.005	0.00156	<0.005	<0.005	<0.0001	8.4
RSEM-L6-SP	6/4/2022 10:00	AUL722	M	C238905	0.00104	<0.01	<0.0002	0.0101	14.2	0.0012	<0.0000019	0.0043	0.0022	<0.01	2.75	0.00169	1.05	<0.00002	19.2	0.367	38.3	<0.00001	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	2.6
RSEM-L6-SP	10/7/2022 12:20	BEA027	M	C278893	0.00127	<0.01	<0.0002	0.0316	45.8	<0.001	<0.0000019	0.0085	0.0017	0.011	6.15	0.00048	<0.1	<0.00002	57.4	0.794	140	0.00001	<0.005	<0.005	0.00188	<0.005	<0.005	<0.0001	2.2
RSEM-L6-SP	10/22/2022 10:25	BFI045	M	C283756	0.0012	<0.01	<0.0002	0.0335	51.8	<0.001	<0.0000019	0.0086	0.0021	0.015	6.50	0.00042	<0.1	<0.00002	63.5	0.857	152	0.000011	<0.005	<0.005	0.00218	<0.005	<0.005	<0.0001	5.8
RSEM-R5A-P2-A-EOP	3/21/2022 14:25	AQL268	M	C218465	0.00063	<0.01	<0.0002	0.0075	5.96	0.0302	<0.0000019	0.0029	0.0036	<0.01	1.57	0.00626	0.906	<0.00002	25.0	0.12	36.3	<0.00001	<0.005	<0.005	0.0011	<0.005	<0.005	<0.0001	28
RSEM-R5A-P2-A-EOP	3/22/2022 18:20	AQN714	M	C218958	0.00063	<0.01	<0.0002	0.0223	14.6	0.301	<0.0000019	0.0024	0.0519	<0.01	1.74	0.00677	0.911	<0.00002	42.8	0.195	80.5	0.000012	<0.005	<0.005	0.00147	<0.005	0.0818	<0.0001	22
RSEM-R5A-P2-A-EOP	3/23/2022 17:15	AQP261	M	C219363	0.00089	<0.01	<0.0002	0.0108	11.3	0.154	0.0000027	0.0013	0.0289	<0.01	0.959	0.00317	1.79	<0.00002	20.3	0.167	37.0	<0.00001	<0.005	<0.005	0.00089	<0.005	0.0551	<0.0001	14
RSEM-R5A-P2-A-EOP	3/24/2022 14:25	AQP980	M	C219524	0.00085	<0.01	<0.0002	0.0107	11.3	0.146	<0.0000019	0.0014	0.0256	<0.01	0.935	0.00296	1.87	0.000026	20.4	0.168	36.2	0.000015	<0.005	<0.005	0.00091	<0.005	0.0453	<0.0001	8.6
RSEM-R5A-P2-A-EOP	3/25/2022 12:20	AQP913	M	C219519	0.0007	<0.01	<0.0002	0.0089	10.5	0.116	<0.0000019	0.0013	0.0154	<0.01	0.981	0.00285	1.78	<0.00002	18.7	0.162	34.7	<0.00001	<0.005	<0.005	0.00091	<0.005	0.0176	<0.0001	17
RSEM-R5A-P2-A-EOP	5/17/2022 16:30	ATH853	M	C233625	0.00092	<0.01	<0.0002	0.104	42.9	0.183	<0.0000019	0.0206	0.0367	0.01	5.87	0.0189	4.72	<0.00002	282	0.683	288	0.000032	<0.005	<0.005	0.0065	<0.005	0.0055	<0.0001	23
RSEM-R5A-P2-A-EOP	5/19/2022 16:00	ATL915	M	C234314	0.00087	<0.01	<0.0002	0.117	30.7	0.169	0.000002	0.027	0.0305	0.01	5.45	0.015	4.11	<0.00002	306	0.517	261	0.000026	<0.005	<0.005	0.00543	<0.005	0.0179	<0.0001	22
RSEM-R5A-P2-A-EOP	5/20/2022 11:00	ATL360	M	C234241	0.00083	<0.01	<0.0002	0.0901	24.3	0.179	<0.0000019	0.0267	0.0309	0.018	5.18	0.02	4.31	<0.00002	292	0.454	282	0.000028	<0.005	<0.005	0.00457	<0.005	0.0231	<0.0001	22
RSEM-R5A-P2-A-EOP	5/21/2022 13:30	ATN139	M	C234510	0.00079	<0.01	<0.0002	0.103	23.8	0.178	0.0000033	0.0316	0.0291	<0.01	4.84	0.023	4.3	0.000023	329	0.447	286	0.000026	<0.005	<0.005	0.00473	<0.005	0.0201	<0.0001	11
RSEM-R5A-P2-A-EOP	5/29/2022 18:40	ATW971	M	C236421	0.00055	<0.01	<0.0002	0.126	20.8	0.122	<0.0000019	0.012	0.0251	<0.01	4.85	0.0117	3.62	<0.00002	248	0.417	190	0.000024	<0.005	<0.005	0.00275	<0.005	0.0149	<0.0001	28
RSEM-R5A-P2-A-EOP	5/30/2022 12:30	ATZ469	M	C236894	0.00057	<0.01	<0.0002	0.137	22.2	0.233	<0.0000019	0.014	0.0463	<0.01	5.65	0.0168	3.4	<0.00002	284	0.598	238	0.000036	<0.005	<0.005	0.00448	<0.005	0.02	<0.0001	27
RSEM-R5A-P2-A-EOP	5/31/2022 13:40	AUC338	M	C237377	0.00087	0.111	<0.0002	0.146	22.3	0.259	<0.0000019	0.0135	0.0513	0.014	5.77	0.0152	4.41	<0.00002	264	0.558	237	0.000038	<0.005	0.0097	0.00456	<0.005	0.0229	<0.0001	22
RSEM-R5A-P2-A-EOP	6/2/2022 13:50	AUH704	M	C238258	<0.0005	<0.01	<0.0002	0.127	18.5	0.132	<0.0000019	0.0111	0.0349	<0.01	4.48	0.0131	3.47	<0.00002	227	0.475	178	0.000029	<0.005	<0.005	0.00384	<0.005	0.0068	<0.0001	15
RSEM-R5A-P2-A-EOP	6/3/2022 13:20	AUH663	M	C238247	<0.0005	<0.01	<0.0002	0.12	18.1	0.0689	0.0000019	0.0107	0.0259	<0.01	4.24	0.0113	3.31	<0.00002	216	0.447	166	0.000026	<0.005	<0.005	0.00381	<0.005	<0.005	<0.0001	12
RSEM-R5A-P2-A-EOP	6/4/2022 14:25	AUL723	M	C238905	<0.0005	<0.01	<0.0002	0.12	20.1	0.0134	<0.0000019	0.0098	0.0174	<0.01	4.24	0.00918	2.96	<0.00002	214	0.454	145	0.000024	<0.005	<0.005	0.00385	<0.005	<0.005	<0.0001	17
RSEM-R5A-P2-A-EOP	6/5/2022 11:55	AUM444	M	C238986	<0.0005	<0.01	<0.0002	0.109	20.1	0.0082	<0.0000019	0.0093	0.0119	<0.01	4.05	0.00767	2.78	<0.00002	197	0.426	129	0.000023	<0.005	<0.005	0.00373	<0.005	<0.005	<0.0001	23
RSEM-R5A-P2-A-EOP	6/6/2022 11:30	AUO791	M	C239365	0.00052	<0.01	<0.0002	0.0948	19.3	0.0258	<0.0000019	0.0086	0.007	<0.01	3.81	0.00542	2.99	<0.00002	173	0.394	104	0.00002	<0.005	<0.005	0.00361	<0.005	<0.005	<0.0001	38
RSEM-R5A-P2-A-EOP	6/13/2022 17:20	AVO969	M	C243664	0.00112	<0.01	<0.0002	0.102	18.4	<0.001	<0.0000019	0.011	0.004	<0.01	4.50	0.00476	2.16	<0.00002	189	0.371	126	0.000017	<0.005	<0.005	0.00417	<0.005	<0.005	<0.0001	12
RSEM-R5A-P2-A-EOP	6/14/2022 11:30	AVD544	M	C241829	0.00053	<0.01	<0.0002	0.0986	18.7	<0.001	<0.0000019	0.009	0.0043	<0.01	4.23	0.0037	3.8	<0.00002	166	0.361	110	0.00002	<0.005	<0.005	0.00368	<0.005	<0.005	0.00011	17
RSEM-R5A-P2-A-EOP	6/15/2022 14:40	AVG249	M	C242252	0.0006	<0.01	<0.0002	0.101	18.8	<0.001	<0.0000019	0.0083	0.0043	<0.01	4.16	0.00346	3.62	<0.00002	161	0.352	105	0.00002	<0.005	<0.005	0.00359	<0.005	<0.005	0.00014	24
RSEM-R5A-P2-A-EOP	6/16/2022 14:00	AVK124	M	C242788	<0.0005	<0.01	<0.0002	0.0951	17.6	<0.001	<0.0000019	0.0076	0.0035	<0.01	3.63	0.00375	3.9	<0.00002	165	0.326	94.2	0.000014	<0.005	<0.005	0.00342	<0.005	<0.005	<0.0001	29
RSEM-R5A-P2-A-EOP	6/17/2022 13:10	AVK725	M	C242942	0.00069	<0.01	<0.0002	0.036	18.2	0.0239	<0.0000019	0.0054	0.0033	<0.01	4.28	0.00303	3.12	<0.00002	75.5	0.394	62.3	0.000013	<0.005	<0.005	0.00211	<0.005	<0.005	<0.0001	33
RSEM-R5A-P2-A-EOP	6/18/2022 14:35	AVL990	M	C243162	0.00052	<0.01	<0.0002	0.11	17.1	0.0152	<0.0000019	0.0083	0.0052	<0.01	4.27	0.0109	4.28	<0.00002	238	0.405	145	0.000017	<0.005	<0.005	0.00285	<0.005	<0.005	0.00015	23
RSEM-R5A-P2-A-EOP	6/19/2022 13:35	AVM020	M	C243177	<0.0005	<0.01	<0.0002	0.114	16.6	0.0048	<0.0000019	0.0099	0.0049	<0.01	4.24	0.0108	4.71	<0.00002	248	0.389	151	0.000017	<0.005	<0.005	0.00309	<0.005	<0.005	<0.0001	33
RSEM-R5A-P2-A-EOP	6/20/2022 12:45	AVO966	M	C243664	0.00115	<0.01	<0.0002	0.123	16.4	<0.001	<0.0000019	0.0107	0.0046	<0.01	4.73	0.0081	4.02	<0.00002	218	0.392	148	0.000019	<0.005	<0.005	0.00314	<0.005	<0.005	<0.0001	19
RSEM-R5A-P2-A-EOP	6/21/2022 13:00	AVQ612	M	C244010	0.00092	<0.01	<0.0002	0.0444	16.2	0.0095	<0.0000019	0.0056	0.0039	<0.01	4.03	0.00249	3.15	<0.00002	69.9	0.294	50.5	0.000013	<0.005	<0.005	0.00202	<0.005	<0.005	<0.0001	35
RSEM-R5A-P2-A-EOP	6/23/2022 13:00	AVV598	M	C244839	0.00087	<0.01	<0.0002	0.0938	20.0	<0.001	<0.0000019	0.0102	0.0031	<0.01	4.62	0.00617	2.14	<0.00002	200	0.374	160	0.000018	<0.005	<0.005	0.00348	<0.005	<0.005	<0.0001	33
RSEM-R5A-P2-A-EOP	6/24/2022 12:00	AVV587	M	C244835	0.00107	<0.01	<0.0002	0.0896	23.4	0.0012	<0.0000019	0.0111	0.0036	<0.01	4.94	0.00617	1.6	<0.00002	218	0.418	179	0.000019	<0.005	<0.005	0.00388	<0.005	<0.005	<0.0001	32
RSEM-R5A-P2-A-EOP	6/26/2022 12:15	AVZ578	M	C245500	0.00067	<0.01	<0.0002	0.0982	17.7	<0.001	0.000002	0.0084	0.0042	<0.01	3.86	0.00388	3.3	<0.00002	166	0.304	98.1	0.000015	<0.005	<0.005	0.00342	<0.005	<0.005	0.00011	28
RSEM-R5A-P2-A-EOP	6/27/2022 11:20	AVY534	M	C245274	0.0008	<0.01	<0.0002	0.0957	16.7	0.0055	<0.0000019	0.0081	0.0034	<0.01	3.67	0.00404	3.5	<0.00002	163	0.288	86.7	0.000018	<0.005	<0.005	0.00332	<0.005	<0.005	<0.0001	35
RSEM-R5A-P2-A-EOP	7/10/2022 15:55	AWZ488	M	C249617	0.0008	<0.01	<0.0002	0.0992	17.6	<0.001	<0.0000019	0.0097	0.0036	<0.01	3.72	0.00295	2.86	<0.00002	174	0.351	79.8	0.000018	<0.005	<0.005	0.00419	<0.005	<0.005	<0.0001	64
RSEM-R5A-P2-A-EOP	7/12/2022 10:25	AXE617	M	C250400	0.00143	<0.01	<0.0002	0.0942	17.7	<0.001	<0.0000019	0.0104	0.0034	0.01	4.00	0.00283	2.69	<0.00002	182	0.315	89.2	0.000014	<0.005	<0.005	0.00409	<0.005	<0.005	<0.0001	22
RSEM-R5A-P2-A-EOP	7/15/2022 13:30	AXJ366	M	C251330	0.00087	<0.01	<0.0002	0.0802	22.1	<0.001	<0.0000019	0.0127	0.0024	<0.01	5.30	0.00348	2.12	<0.00002	167	0.299	112	0.000013	<0.005	<0.005	0.00299	<0.005	<0.005	<0.0001	17
RSEM-R5A-P2-A-EOP	7/16/2022 13:20	AXN332	M	C251927	0.00093	<0.01	<0.0002	0.0806	23.7	<0.001	<0.0000019	0.0133	0.0024	<0.01	5.76	0.00343	2.51	<0.00002	168	0.306	118	0.000017	<0.005	<0.005	0.00279	<0.005	<0.005	<0.0001	39
RSEM-R5A-P2-A-EOP	7/17/2022 11:55	AXN588	M	C251966	0.00091	<0.01	<0.0002	0.0758	22.9	<0.001	<0.0000019	0.0137	0.0021	<0.01	5.85	0.00359	2.86	<0.00002	169	0.28	118	0.000014	<0.005	<0.005	0.00278	<0.005	<0.005	<0.0001	18
RSEM-R5A-P2-A-EOP	7/28/2022 14:30	AYM154	M	C255903	0.00072	<0.01	<0.0002	0.11	16.2	<0.001	<0.0000019	0.0092	0.0025	<0.01	3.70	0.00268	3.19	<0.00002	163	0.301	74.9	0.000013	<0.005	<0.005	0.00364	<0.005	<0.005	<0.0001	15
RSEM-R5A-P2-A-EOP	7/29/2022 11:45	AYM049	M	C255900	0.00098	<0.01	<0.0002	0.0662	22.1	<0.001	<0.0000019	0.0132	0.0025	<0.01	5.85	0.00308	2.82	<0.00002	165	0.259	102	0.000014	<0.005	<0.005	0.00303	<0.005	<0.005	<0.0001	13
RSEM-R5A-P2-A-EOP	8/3/2022 13:10	AYX382	M	C257672	0.00104	<0.01	<0.0002	0.103	24.0	0.002	<0.0000019	0.0109	0.0108	<0.01	5.41	0.00519	2.58	<0.00002	167	0.672	135	0.000023	<0.005	<0.005	0.0042	<0.005	<0.005	<0.0001	4.1
RSEM-R5A-P2-A-EOP	8/4/2022 11:45	AYY905	M	C257848	0.00112	<0.01	<0.0002	0.109	23.5	0.0149	<0.0000019	0.0107	0.0108	<0.01	5.00	0.0049	2.17	<0.00002	171	0.562	134	0.000022	<0.005	<0.005	0.00445	<0.005	<0.005	<0.0001	5.3
RSEM-R5A-P2-A-EOP	8/18/2022 15:30	BAA276	M	C262439	0.00091	<0.01	<0.0002	0.0913	19.2	<0.001	<0.0000019	0.0121	0.0029	<0.01	5.75	0.0045	3.03	<0.00002	190	0.436	136	0.000018	<0.005	<0.005	0.00368	<0.005	<0.005	<0.0001	3.6
RSEM-R5A-P2-A-EOP	8/19/2022 11:00	BAA262	M	C262436	0.00098	<0.01	<0.0002	0.0921	20.1	<0.001	<0.0000019	0.0114	0.0028	<0.01	5.52	0.00433	2.95	<0.00002	191	0.429	129	0.000017	<0.005	<0.005	0.00362	<0.005	<0.005	<0.0001	7.4
RSEM-R5A-P2-A-EOP	9/9/2022 12:35	BBS003	M	C269764	0.00085	<0.01	<0.0002	0.0293	9.79	<0.001	<0.0000019	0.0061	0.0012	<0.01	1.78	0.00128	2.7	<0.00002	65.9	0.173	35.6	<0.00001	<0.005	<0.005	0.00167	<0.005	<0.005	<0.0001	13
RSEM-R5A-P2-A-EOP	9/10/2022 14:00	BBR902	M	C269730	0.00123	<0.01	<0.0002	0.045	16.9	<0.001	<0.0000019	0.018	0.0016	<0.01	5.71	0.00294	3.51	<0.00002	178	0.21	91.1	0.00001	<0.005	<0.005	0.00326	<0.005	<0.005	<0.0001	7.4
RSEM-R5A-P2-A-EOP	9/11/2022 16:20	BBR961	M	C269754	0.0012	<0.01	<0.0002	0.0485	16.6	<0.001	<0.0000019	0.0174	0.0015	<0.01	5.86	0.00238	3.55	<0.00002	168	0.197	90.0	0.00001	<0.005	<0.005	0.00322	<0.005	<0.005	<0.0001	11

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
RSEM-R5A-P2-A-EOP	9/18/2022 14:30	BCF724	M	C272251	0.00118	<0.01	<0.0002	0.07	24.6	0.0182	<0.0000019	0.0159	0.0041	<0.01	7.60	0.00424	3.02	<0.00002	215	0.79	125	0.000015	<0.005	<0.005	0.00368	<0.005	<0.005	<0.0001	19
RSEM-R5A-P2-A-EOP	9/19/2022 10:20	BCI770	M	C272683	0.00115	<0.01	<0.0002	0.0566	20.5	0.0084	<0.0000019	0.0175	0.0025	<0.01	7.57	0.00345	3.43	<0.00002	197	0.484	127	0.000013	<0.005	<0.005	0.00353	<0.005	<0.005	<0.0001	4.8
RSEM-R5A-P2-A-EOP	9/30/2022 12:20	BDH545	M	C276348	0.00108	<0.01	<0.0002	0.0463	25.8	0.0015	<0.0000019	0.0155	0.0024	<0.01	6.98	0.0026	2.54	<0.00002	189	0.289	137	0.000011	<0.005	<0.005	0.0032	<0.005	<0.005	<0.0001	14
RSEM-R5A-P2-A-EOP	10/1/2022 13:30	BDL250	M	C276877	0.00118	<0.01	<0.0002	0.0513	24.9	0.0042	<0.0000019	0.0151	0.0024	0.01	6.79	0.00258	2.95	<0.00002	193	0.296	134	0.000012	<0.005	<0.005	0.00329	<0.005	<0.005	<0.0001	19
RSEM-R5A-P2-A-EOP	10/19/2022 15:30	BFA347	M	C282741	0.00095	<0.01	<0.0002	0.0356	16.4	<0.001	<0.0000019	0.0099	0.0017	<0.01	3.73	0.00174	3.82	<0.00002	109	0.252	63.9	0.00001	<0.005	<0.005	0.00273	<0.005	<0.005	<0.0001	14
RSEM-R5A-P2-A-EOP	10/28/2022 10:00	BFU723	M	C285458	0.00106	<0.01	<0.0002	0.04	20.1	0.0043	<0.0000019	0.0124	0.0023	<0.01	5.92	0.00331	5.31	<0.00002	113	0.299	82.8	0.000011	<0.005	<0.005	0.00297	<0.005	<0.005	<0.0001	41
RSEM-R5A-P2-A-EOP	10/29/2022 10:35	BFZ655	M	C286199	0.00089	<0.01	<0.0002	0.0405	19.3	0.0031	<0.0000019	0.0109	0.0024	<0.01	5.58	0.0033	4.9	<0.00002	104	0.262	74.2	<0.00001	<0.005	<0.005	0.00257	<0.005	<0.005	<0.0001	26
RSEM-R5A-P2-A-SP	3/17/2022 19:00	AQH802	M	C217776	0.00132	0.044	<0.0002	0.0042	2.55	0.0248	<0.0000019	0.0028	0.0011	<0.01	1.50	0.00246	0.931	<0.00002	12.5	0.0907	13.3	<0.00001	<0.005	<0.005	0.00076	<0.005	<0.005	0.00016	950
RSEM-R5A-P2-A-SP	3/20/2022 11:20	AQJ911	M	C218219	0.00063	<0.01	<0.0002	0.0085	5.92	0.0498	<0.0000019	0.0027	0.0058	<0.01	1.51	0.00437	0.774	<0.00002	22.3	0.117	35.2	<0.00001	<0.005	<0.005	0.00099	<0.005	<0.005	<0.0001	41
RSEM-R5A-P2-A-SP	4/29/2022 11:00	ASH018	M	C228622	0.00127	<0.01	<0.0002	0.151	18.7	0.114	0.0000042	0.0343	0.0227	0.01	6.08	0.0355	3.32	0.000311	423	0.573	359	0.000026	<0.005	<0.005	0.00613	<0.005	0.0077	<0.0001	74
RSEM-R5A-P2-A-SP	5/6/2022 12:05	ASR073	M	C230545	0.00173	<0.01	<0.0002	0.148	26.9	0.247	0.0000032	0.0289	0.0421	0.01	5.48	0.0239	3.62	0.000149	412	0.614	366	0.000028	<0.005	<0.005	0.00576	<0.005	0.0258	<0.0001	120
RSEM-R5A-P2-A-SP	5/18/2022 16:30	ATJ928	M	C234012	0.00118	<0.01	<0.0002	0.115	48.6	0.139	<0.0000019	0.02	0.0347	0.012	6.58	0.0171	4.62	<0.00002	306	0.593	337	0.000028	<0.005	<0.005	0.00682	<0.005	0.0075	<0.0001	7.7
RSEM-R5A-P2-A-SP	5/28/2022 12:45	ATX752	M	C236620	0.00054	<0.01	<0.0002	0.0736	23.7	0.114	<0.0000019	0.008	0.0135	<0.01	6.00	0.00763	3.01	<0.00002	141	0.96	122	0.000024	<0.005	<0.005	0.00321	<0.005	<0.005	<0.0001	46
RSEM-R5A-P2-A-SP	6/1/2022 13:20	AUE683	M	C237797	0.00055	<0.01	<0.0002	0.117	22.0	0.189	<0.0000019	0.0126	0.0444	0.012	5.38	0.0142	3.59	<0.00002	250	0.526	219	0.000032	<0.005	<0.005	0.0044	<0.005	0.0182	<0.0001	8.2
RSEM-R5A-P2-A-SP	6/7/2022 13:00	AUT414	M	C240162	0.00064	<0.01	<0.0002	0.0903	18.9	0.0109	<0.0000019	0.0083	0.0064	<0.01	4.03	0.006	2.96	<0.00002	161	0.388	116	0.000018	<0.005	<0.005	0.00354	<0.005	<0.005	<0.0001	11
RSEM-R5A-P2-A-SP	6/8/2022 16:00	AUT296	M	C240147	0.00061	<0.01	<0.0002	0.0939	19.4	0.0016	<0.0000019	0.0087	0.0062	<0.01	4.15	0.00614	2.87	<0.00002	166	0.395	119	0.00002	<0.005	<0.005	0.00369	<0.005	<0.005	<0.0001	8.6
RSEM-R5A-P2-A-SP	6/10/2022 11:30	AUV212	M	C240508	0.00061	<0.01	<0.0002	0.0913	18.3	<0.001	<0.0000019	0.0088	0.0054	<0.01	4.11	0.00667	2.61	<0.00002	160	0.381	116	0.000017	<0.005	<0.005	0.00355	<0.005	<0.005	<0.0001	11
RSEM-R5A-P2-A-SP	6/22/2022 13:10	AVT154	M	C244412	0.00096	<0.01	<0.0002	0.105	17.1	<0.001	<0.0000019	0.0106	0.0028	<0.01	4.45	0.00556	3.57	<0.00002	198	0.372	140	0.000018	<0.005	<0.005	0.0035	<0.005	<0.005	0.0001	23
RSEM-R5A-P2-A-SP	6/25/2022 11:50	AVZ708	M	C245512	0.00086	<0.01	<0.0002	0.0886	22.6	0.0011	<0.0000019	0.0109	0.0043	<0.01	4.82	0.00852	1.35	<0.00002	209	0.39	185	0.000018	<0.005	<0.005	0.00378	<0.005	<0.005	<0.0001	22
RSEM-R5A-P2-A-SP	6/28/2022 14:00	AWH754	M	C246896	0.00075	<0.01	<0.0002	0.104	15.9	0.003	<0.0000019	0.0074	0.0031	<0.01	3.58	0.00389	3.29	<0.00002	150	0.306	85.6	0.000019	<0.005	<0.005	0.00327	<0.005	<0.005	<0.0001	28
RSEM-R5A-P2-A-SP	7/9/2022 13:15	AWZ516	M	C249625	0.00126	0.179	<0.0002	0.104	18.1	0.0058	<0.0000019	0.0088	0.0046	0.016	3.81	0.00286	3.61	<0.00002	170	0.335	82.5	0.000022	<0.005	0.01	0.00397	<0.005	0.0051	0.00028	39
RSEM-R5A-P2-A-SP	7/11/2022 15:25	AXC659	M	C250105	0.00142	<0.01	<0.0002	0.0971	17.8	<0.001	<0.0000019	0.0099	0.0032	<0.01	3.90	0.00298	3.05	<0.00002	180	0.326	83.4	0.000016	<0.005	<0.005	0.00409	<0.005	<0.005	<0.0001	38
RSEM-R5A-P2-A-SP	7/13/2022 14:05	AXH416	M	C250934	0.00083	<0.01	<0.0002	0.101	17.5	<0.001	<0.0000019	0.0096	0.0032	<0.01	3.67	0.00295	2.61	<0.00002	172	0.342	75.2	0.000017	<0.005	<0.005	0.00438	<0.005	<0.005	<0.0001	95
RSEM-R5A-P2-A-SP	7/14/2022 11:10	AXJ118	M	C251290	0.00105	<0.01	<0.0002	0.0784	24.4	<0.001	<0.0000019	0.0134	0.0029	<0.01	5.67	0.00386	1.91	<0.00002	174	0.323	116	0.000015	<0.005	<0.005	0.00295	<0.005	<0.005	<0.0001	17
RSEM-R5A-P2-A-SP	7/30/2022 14:00	AYP673	M	C256352	0.00087	<0.01	<0.0002	0.113	16.5	<0.001	<0.0000019	0.0106	0.0018	<0.01	3.94	0.00255	4.05	<0.00002	174	0.303	83.4	0.000017	<0.005	<0.005	0.00382	<0.005	<0.005	<0.0001	16
RSEM-R5A-P2-A-SP	8/6/2022 15:10	AZA355	M	C258076	0.00121	<0.01	<0.0002	0.0883	19.3	<0.001	<0.0000019	0.0109	0.0048	<0.01	5.24	0.00545	1.85	<0.00002	156	0.461	121	0.000018	<0.005	<0.005	0.00417	<0.005	<0.005	<0.0001	7.2
RSEM-R5A-P2-A-SP	8/17/2022 12:30	BAA265	M	C262437	0.00105	<0.01	<0.0002	0.0892	20.0	<0.001	<0.0000019	0.012	0.0029	<0.01	5.98	0.00457	2.98	<0.00002	184	0.45	135	0.000017	<0.005	<0.005	0.00379	<0.005	<0.005	<0.0001	62
RSEM-R5A-P2-A-SP	8/20/2022 16:30	BAD642	M	C262969	0.001	<0.01	<0.0002	0.0898	19.4	<0.001	<0.0000019	0.0127	0.0023	<0.01	5.58	0.00391	2.62	<0.00002	185	0.433	137	0.000018	<0.005	<0.005	0.00393	<0.005	<0.005	<0.0001	2.8
RSEM-R5A-P2-A-SP	8/21/2022 16:40	BAD603	M	C262959	0.00132	<0.01	<0.0002	0.0944	19.7	0.0014	<0.0000019	0.0112	0.0028	<0.01	5.26	0.00311	2.6	<0.00002	190	0.421	120	0.000019	<0.005	<0.005	0.00408	<0.005	<0.005	<0.0001	57
RSEM-R5A-P2-A-SP	8/22/2022 17:00	BAG920	M	C263407	0.00114	<0.01	<0.0002	0.089	20.8	<0.001	<0.0000019	0.0112	0.0026	<0.01	5.36	0.0032	2.52	<0.00002	183	0.422	122	0.000017	<0.005	<0.005	0.00394	<0.005	<0.005	<0.0001	7.5
RSEM-R5A-P2-A-SP	9/29/2022 17:30	BDH542	M	C276348	0.00149	<0.01	<0.0002	0.083	20.1	0.0026	<0.0000019	0.0144	0.0028	<0.01	6.15	0.00391	3.09	<0.00002	217	0.411	118	0.000016	<0.005	<0.005	0.00416	<0.005	<0.005	<0.0001	63
RSEM-R5A-P2-A-SP	10/14/2022 15:45	BER009	M	C281389	0.00139	<0.01	<0.0002	0.0811	20.7	<0.001	<0.0000019	0.0162	0.0024	<0.01	5.34	0.00296	5.27	<0.00002	212	0.363	103	0.00001	<0.005	<0.005	0.00406	<0.005	<0.005	<0.0001	83
RSEM-R5A-P2-A-SP	10/15/2022 17:30	BER010	M	C281389	0.00154	<0.01	<0.0002	0.0816	21.0	0.0056	<0.0000019	0.0164	0.003	<0.01	5.19	0.00289	5.54	<0.00002	213	0.355	101	0.000012	<0.005	<0.005	0.0041	<0.005	<0.005	<0.0001	210
RSEM-R5A-P2-A-SP	10/16/2022 17:30	BER096	M	C281399	0.00159	<0.01	<0.0002	0.0796	21.1	0.0082	<0.0000019	0.0164	0.0029	<0.01	5.18	0.00287	5.46	<0.00002	212	0.353	103	0.000012	<0.005	<0.005	0.0041	<0.005	0.0121	<0.0001	68
RSEM-R5A-P2-A-SP	10/17/2022 9:30	BER152	M	C281421	0.00153	<0.01	<0.0002	0.0785	20.6	0.0086	<0.0000019	0.0162	0.0029	<0.01	5.21	0.00284	5.37	<0.00002	214	0.358	103	<0.00001	<0.005	<0.005	0.00413	<0.005	<0.005	<0.0001	48
RSEM-R5A-P2-A-SP	10/18/2022 13:45	BEX621	M	C282315	0.00152	<0.01	<0.0002	0.0873	19.3	0.0072	<0.0000019	0.0165	0.003	<0.01	5.20	0.00269	5.39	<0.00002	205	0.366	106	<0.00001	<0.005	<0.005	0.00414	<0.005	<0.005	<0.0001	22
RSEM-R5A-P2-A-SP	10/30/2022 13:20	BFZ647	M	C286196	0.00112	<0.01	<0.0002	0.0695	19.7	0.0017	<0.0000019	0.0137	0.0027	<0.01	5.18	0.00239	4.45	<0.00002	173	0.326	92.8	<0.00001	<0.005	<0.005	0.00361	<0.005	<0.005	<0.0001	35
RSEM-R5A-P2-B-EOP	3/20/2022 11:40	AQJ913	M	C218219	0.00068	<0.01	<0.0002	0.0117	7.51	0.104	<0.0000019	0.0025	0.0169	<0.01	1.55	0.00475	0.743	<0.00002	26.2	0.13	43.3	<0.00001	<0.005	<0.005	0.00103	<0.005	0.0166	<0.0001	51
RSEM-R5A-P2-B-EOP	3/21/2022 14:55	AQL269	M	C218465	0.00084	<0.01	<0.0002	0.0245	14.2	0.312	<0.0000019	0.0022	0.0659	<0.01	1.66	0.00681	0.912	<0.00002	44.5	0.191	80.0	0.000012	<0.005	<0.005	0.00117	<0.005	0.128	<0.0001	27
RSEM-R5A-P2-B-SP	3/17/2022 19:30	AQH803	M	C217776	0.00117	0.036	<0.0002	0.0054	2.57	0.04	<0.0000019	0.0027	0.0024	<0.01	1.36	0.00169	0.572	<0.00002	13.7	0.0837	16.4	<0.00001	<0.005	<0.005	0.00042	<0.005	<0.005	0.00011	590
RSEM-R5A-P2-B-SP	3/19/2022 16:05	AQJ974	M	C218236	0.00073	<0.01	<0.0002	0.0067	4.58	0.0407	<0.0000019	0.0024	0.0049	<0.01	1.41	0.00348	0.645	<0.00002	18.1	0.0992	25.4	<0.00001	<0.005	<0.005	0.00086	<0.005	<0.005	<0.0001	65
RSEM-R5A-P2-B-SP	5/6/2022 12:15	ASR074	M	C230545	0.0022	<0.01	<0.0002	0.134	64.0	0.898	0.0000059	0.0101	0.176	0.017	5.79	0.0233	3.69	0.000059	325	0.714	420	0.000044	<0.005	<0.005	0.0068	<0.005	0.213	<0.0001	15
RSEM-R5A-P2-B-SP	5/31/2022 13:55	AUC339	M	C237377	0.00107	0.05	<0.0002	0.114	36.7	0.319	<0.0000019	0.0152	0.0617	0.013	5.76	0.0154	4.49	<0.00002	246	0.613	298	0.000039	<0.005	<0.005	0.00504	<0.005	0.0518	<0.0001	9.5
RSEM-R5A-P2-B-SP	6/4/2022 14:25	AUL724	M	C238905	0.00076	<0.01	<0.0002	0.11	25.4	0.0278	<0.0000019	0.0141	0.0178	<0.01	4.94	0.0127	3.45	<0.00002	239	0.505	188	0.000028	<0.005	<0.005	0.00425	<0.005	0.0075	<0.0001	9.0
RSEM-R5A-P2-B-SP	6/19/2022 14:00	AVM018	M	C243177	0.0007	<0.01	<0.0002	0.0792	20.9	0.0084	<0.0000019	0.0096	0.0043	<0.01	4.12	0.00971	2.04	<0.00002	220	0.4	176	0.000016	<0.005	<0.005	0.00357	<0.005	<0.005	<0.0001	8.3
RSEM-R5A-P2-C-SP	3/20/2022 12:25	AQJ914	M	C218219	0.00102	<0.01	<0.0002	0.0097	6.46	0.144	<0.0000019	0.002	0.0267	<0.01	1.25	0.00272	0.561	<0.00002	16.3	0.106	32.2	<0.00001	<0.005	<0.005	0.00063	<0.005	0.0477	<0.0001	47
RSEM-R5A-P2-C-SP	5/6/2022 12:30	ASR075	M	C230545	0.00136	<0.01	<0.0002	0.107	20.7	0.165	<0.0000019	0.032	0.0347	0.016	5.03	0.0181	3.84	0.000134	325	0.419	266	0.000027	<0.005	<0.005	0.00445	<0.005	0.0343	<0.0001	9.0
RSEM-R5A-P2-C-SP	5/31/2022 13:55	AUC340	M	C237377	0.00559	0.045	<0.0002	0.125	45.4	0.865	<0.0000019	0.0103	0.221	0.013	4.66	0.016	4.17	<0.00002	247	0.569	356	0.00004	<0.005	<0.005	0.00398	<0.005	0.669	<0.0001	4.3
RSEM-R5A-P2-C-SP	6/4/2022 14:25	AUL725	M	C238905	0.00157	<0.01	<0.0002	0.113	46.5	0.507	<0.0000019	0.0143	0.134	<0.01	5.57	0.017	4.05	<0.00002	289	0.669	269	0.00004	<0.005	<0.005	0.00482	<0.005	0.249	<0.0001	3.3
RSEM-R5A-P2-D-SP	5/7/2022 14:35	ASS947	M	C230886	0.0188	<0.01	<0.0002	0.15	92.0	1.65	0.0000049	0.0132	0.407	0.015	5.55	0.0215	3.19	0.000109	247	0.623	427	0.000052	<0.005	<0.005	0.0057	<0.005	1.25	<0.0001	5.6
RSEM-R5A-P2-D-SP	6/1/2022 13:45	AUE684	M	C237797	0.252	9.52	0.00037	0.364	264	6.63	0.0000023	<0.001	2.08	0.013	5.18	0.0274	6.47	0.000034	300	1.05	879	0.00014	<0.005	<0.005	0.0315	<0.005	8.83	<0.0001	11
RSEM-R5B-P2-Sump	3/21/2022 16:30	AQL264	M	C218465	0.00179	<0.01	<0.0002	0.0378	15.7	0.331	<0.0000019	0.0096	0.058	0.013	6.40	0.00329	1.59	<0.00002	50.5	0.269	75.2	0.000015	<0.005	<0.005	0.0024	<0.005	0.0538	<0.0001	22
RSEM-R5B-P2-Sump	3/30/2022 11:55	AQX831	M	C221206	0.00112	<0.01	<0.0002	0.0396	13.2	0.231	0.0000031	0.0131	0.0309	<0.01	6.11	0.00425	2.09	<0.00002	59.2	0.261	67.0	0.000019	<0.005	<0.005	0.00378	<0.005	0.0151	0.00011	13
RSEM-R5B-P2-Sump	4/6/2022 16:20	ARI189	M	C223269	0.00084	<0.01	<0.0002	0.0356	12.6	0.138	<0.0000019	0.0156	0.0199	<0.01	5.56	0.00428	1.99	<0.00002	64.4	0.26	67.6	0.000019	<0.005	<0.005	0.00386	<0.005	0.0054	0.00017	17
RSEM-R5B-P2-Sump	4/13/2022 16:35	ARP729	M	C224775	0.00062	<0.01	<0.0002	0.0373	12.6	0.0854	<0.0000019	0.0129	0.0124	<0.01	4.46	0.00481	2.05	<0.00002	66.5	0.238	60.6	0.000014	<0.005	<0.005	0.00322	<0.005	<0.005	<0.0001	12
RSEM-R5B-P2-Sump	4/19/2022 16:00	ARV038	M	C225905	0.0006	<0.01	<0.0002	0.0367	12.4	0.0652	<0.0000019	0.0128	0.0108	<0.01	4.50	0.00429	1.97	<0.00002	63.1	0.262	60.2	0.000017	<0.005	<0.005	0.00381	<0.005	<0.005	<0.0001	13
RSEM-R5B-P2-Sump	5/3/2022 10:30	ASO450	M	C230063	0.00354	<0.01	<0.0002	0.118	23.2	0.37	<0.0000019	0.0213	0.106	<0.01	4.89	0.0251	2.62	0.000065	243	0.528	244	0.000027	<0.005	<0.005	0.00508	<0.005	0.2	<0.0001	4.4
RSEM-R5B-P2-Sump	5/7/2022 13:55	ASS946	M	C230886	0.00091	<0.01	<0.0002	0.129	27.7	0.439	<0.0000019	0.0188	0.106	0.016	5.72	0.0191	2.82	0.000058	251	0.537	242	0.000031	<0.005	<0.005	0.00518	<0.005	0.121	<0.0001	74
RSEM-R5B-P2-Sump	5/10/2022 13:45	ASX009	M	C231638	0.00066	<0.01	<0.0002	0.132	23.4	0.317	<0.0000019	0.0172	0.0693	<0.01	4.44	0.0174	3.39	0.00004	242	0.487	216	0.000022	<0.005	<0.005	0.0044	<0.005	0.0593	<0.0001	15
RSEM-R5B-P2-Sump	5/13/2022 12:55	ATB016	M	C232410	<0.0005	<0.01	<0.0002	0.144	25.7	0.335	<0.0000019	0.0174	0.0798	0.011	5.25	0.0134	3.31	<0.00002	276	0.527	223	0.000027	<0.005	<0.005	0.0054	<0.005	0.0506	<0.0001	8.3
RSEM-R5B-P2-Sump	5/16/2022 10:55	ATC673	M	C232726	<0.0005	<0.01	<0.0002	0.11	24.7	0.269	<0.0000019	0.0166	0.0646	0.01	4.79	0.0111	3.96	<0.00002	242	0.476	221	0.000028	<0.005	<0.005	0.00531	<0.005	0.0267	<0.0001	25
RSEM-R5B-P2-Sump	5/19/2022 16:30	ATL914	M	C234314	<0.0005	<0.01	<0.0002	0.138	26.4	0.271	<0.0000019	0.0179	0.0587	<0.01	5.14	0.00997	4.37	<0.00002	297	0.546	205	0.000029	<0.005	<0.005	0.0055	<0.005	0.0266	<0.0001	11
RSEM-R5B-P2-Sump	5/22/2022 12:00	ATO536	M	C234788	<0.0005	<0.01	<0.0002	0.143	24.5	0.193	<0.0000019	0.0168	0.0457	<0.01	4.88	0.00861	4.43	<0.00002	245	0.49	181	0.000028	<0.005	<0.005	0.00535	<0.005	0.0105	<0.0001	15
RSEM-R5B-P2-Sump	5/25/2022 12:00	ATT370	M	C235730	<0.0005	<0.01	<0.0002	0.101	24.8	0.157	<0.0000019	0.0165	0.0388	0.013	5.35	0.00847	5.13	<0.00002	239	0.528	184	0.000031	<0.005	<0.005	0.00519	<0.005	<0.005	<0.0001	4.9
RSEM-R5B-P2-Sump	5/28/2022 14:10	ATX751	M	C236620	<0.0005	0.028	<0.0002	0.121	21.4	0.0945	<0.0000019	0.013	0.0148	<0.01	5.49	0.0134	3.8	<0.00002	241	0.647	198	0.000028	<0.005	<0.005	0.00434	<0.005	<0.005	0.00015	87
RSEM-R5B-P2-Sump	5/29/2022 15:30	ATW987	M	C236421	0.00061	<0.01	<0.0002	0.14	21.8	0.226	<0.0000019	0.0117	0.0425	<0.01	5.16	0.0162	3	<0.00002	275	0.525	219	0.00003	<0.005	<0.005	0.00351	<0.005	0.0193	<0.0001	27
RSEM-R5B-P2-Sump	6/1/2022 12:45	AUE682	M	C237797	0.00058	<0.01	<0.0002	0.118	22.3	0.148	<0.0000019	0.0117	0.0398	0.012	5.20	0.0121	3.63	<0.00002	249	0.514	209	0.000032	<0.005	<0.005	0.0044	<0.005	0.0096	<0.0001	34
RSEM-R5B-P2-Sump	6/5/2022 12:25	AUM443	M	C238986	0.00057	<0.01	<0.0002	0.0981	19.8	0.0286	<0.0000019	0.0085	0.0074	<0.01	3.81	0.00583	2.97	<0.00002	171	0.409	108	0.000021	<0.005	<0.005	0.00365	<0.005	<0.005	<0.0001	110
RSEM-R5B-P2-Sump	6/11/2022 13:00	AUY738	M	C241062	<0.0005	<0.01	<0.0002	0.0964	17.8	<0.001	<0.0000019	0.0079	0.0043	<0.01	3.83	0.00405	4.12	<0.00002	172	0.323	100	0.000017	<0.005	<0.005	0.00334	<0.005	<0.005	<0.0001	29

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
RSEM-R5B-P2-Sump	6/15/2022 14:10	AVG250	M	C242252	0.00057	<0.01	<0.0002	0.0987	19.0	<0.001	<0.0000019	0.0082	0.0043	<0.01	4.20	0.00337	3.66	<0.00002	161	0.355	105	0.000019	<0.005	<0.005	0.00358	<0.005	<0.005	0.00017	18
RSEM-R5B-P2-Sump	6/18/2022 14:00	AVL991	M	C243162	0.00051	<0.01	<0.0002	0.109	17.2	0.0129	<0.0000019	0.0084	0.0055	<0.01	4.37	0.0105	4.29	<0.00002	238	0.405	147	0.000018	<0.005	<0.005	0.00302	<0.005	<0.005	<0.0001	26
RSEM-R5B-P2-Sump	6/23/2022 13:45	AVV599	M	C244839	0.00074	0.122	<0.0002	0.099	17.0	0.002	<0.0000019	0.0071	0.0027	<0.01	3.68	0.00293	3.33	<0.00002	149	0.286	88.0	0.000017	<0.005	<0.005	0.0032	<0.005	<0.005	<0.0001	33
RSEM-R5B-P2-Sump	6/26/2022 11:55	AVZ579	M	C245500	0.00057	<0.01	<0.0002	0.0996	16.3	<0.001	<0.0000019	0.0077	0.0043	<0.01	3.61	0.00375	3.49	<0.00002	154	0.288	87.4	0.000015	<0.005	<0.005	0.00332	<0.005	<0.005	<0.0001	28
RSEM-R5B-P2-Sump	7/3/2022 15:00	AWM048	M	C247492	0.00067	<0.01	<0.0002	0.0986	15.6	<0.001	<0.0000019	0.0077	0.0031	<0.01	3.46	0.00307	2.66	<0.00002	138	0.293	75.5	0.000016	<0.005	<0.005	0.0036	<0.005	<0.005	0.00021	20
RSEM-R5B-P2-Sump	7/5/2022 13:30	AWR508	M	C248315	0.00159	<0.01	<0.0002	0.107	16.6	<0.001	<0.0000019	0.0076	0.0031	<0.01	3.53	0.00294	2.45	<0.00002	157	0.298	70.3	0.000017	<0.005	<0.005	0.00364	<0.005	<0.005	<0.0001	23
RSEM-R5B-P2-Sump	7/8/2022 12:35	AWW524	M	C249170	0.00067	<0.01	<0.0002	0.101	16.9	<0.001	<0.0000019	0.0088	0.0039	<0.01	3.59	0.00296	2.42	<0.00002	160	0.331	75.1	0.000017	<0.005	<0.005	0.00393	<0.005	<0.005	<0.0001	35
RSEM-R5B-P2-Sump	7/13/2022 13:35	AXH417	M	C250934	0.00058	<0.01	<0.0002	0.102	17.1	<0.001	<0.0000019	0.009	0.0034	<0.01	3.54	0.00299	2.93	<0.00002	164	0.334	72.4	0.000017	<0.005	<0.005	0.00425	<0.005	<0.005	<0.0001	120
RSEM-R5B-P2-Sump	7/16/2022 12:50	AXN333	M	C251927	0.0008	<0.01	<0.0002	0.114	15.5	<0.001	<0.0000019	0.0113	0.0016	<0.01	3.89	0.0026	4.08	<0.00002	162	0.28	76.1	0.000017	<0.005	<0.005	0.00344	<0.005	<0.005	<0.0001	210
RSEM-R5B-P2-Sump	7/23/2022 13:00	AYB215	M	C254120	0.00067	<0.01	<0.0002	0.103	15.5	<0.001	<0.0000019	0.0103	0.0021	<0.01	3.60	0.00277	3.98	<0.00002	166	0.296	74.0	<0.00001	<0.005	<0.005	0.00372	<0.005	<0.005	<0.0001	38
RSEM-R5B-P2-Sump	7/28/2022 14:00	AYM155	M	C255903	0.00073	<0.01	<0.0002	0.109	16.3	<0.001	<0.0000019	0.0091	0.0035	<0.01	3.78	0.00256	2.91	<0.00002	163	0.299	77.2	0.000013	<0.005	<0.005	0.00366	<0.005	<0.005	<0.0001	17
RSEM-R5B-P2-Sump	8/2/2022 13:05	AYU377	M	C257067	0.00114	<0.01	<0.0002	0.0804	22.0	0.0139	<0.0000019	0.0094	0.005	<0.01	5.28	0.0047	2.01	<0.00002	161	0.732	99.9	0.000018	<0.005	<0.005	0.00333	<0.005	<0.005	<0.0001	5.7
RSEM-R5B-P2-Sump	8/6/2022 14:45	AZA358	M	C258076	0.00108	<0.01	<0.0002	0.108	21.2	0.0055	<0.0000019	0.0143	0.0074	<0.01	6.72	0.0112	3.12	<0.00002	212	0.65	170	0.000025	<0.005	<0.005	0.00382	<0.005	<0.005	<0.0001	5.5
RSEM-R5B-P2-Sump	8/14/2022 16:30	AZR294	M	C260829	0.00091	<0.01	<0.0002	0.0993	20.0	0.002	<0.0000019	0.0115	0.0034	<0.01	5.76	0.00508	2	<0.00002	199	0.478	130	0.000017	<0.005	<0.005	0.00336	<0.005	<0.005	<0.0001	6.3
RSEM-R5B-P2-Sump	8/27/2022 14:30	BAR927	M	C265307	0.00136	<0.01	<0.0002	0.0793	17.5	<0.001	<0.0000019	0.0142	0.0021	<0.01	4.60	0.00262	4.15	<0.00002	181	0.332	98.7	0.000014	<0.005	<0.005	0.00378	<0.005	<0.005	<0.0001	77
RSEM-R5B-P2-Sump	9/5/2022 16:00	BBI329	M	C268286	0.00139	<0.01	<0.0002	0.086	18.3	<0.001	<0.0000019	0.019	0.0019	<0.01	4.61	0.00394	4.73	<0.00002	216	0.318	106	0.000012	<0.005	<0.005	0.00439	<0.005	<0.005	<0.0001	48
RSEM-R5B-P2-Sump	9/8/2022 11:55	BBO447	M	C269143	0.00138	<0.01	<0.0002	0.0888	18.6	<0.001	<0.0000019	0.0191	0.0019	<0.01	4.74	0.00387	5.23	<0.00002	218	0.35	105	0.000014	<0.005	<0.005	0.00445	<0.005	<0.005	<0.0001	50
RSEM-R5B-P2-Sump	9/15/2022 14:35	BCC126	M	C271667	0.00116	<0.01	<0.0002	0.0798	20.3	<0.001	<0.0000019	0.0144	0.0018	<0.01	4.12	0.00348	2.39	<0.00002	195	0.343	99.4	0.000011	<0.005	<0.005	0.00488	<0.005	<0.005	<0.0001	36
RSEM-R5B-P2-Sump	9/24/2022 12:20	BCV562	M	C274577	0.00138	<0.01	<0.0002	0.0871	19.4	<0.001	<0.0000019	0.0164	0.0023	<0.01	7.02	0.00567	4.13	<0.00002	222	0.434	123	0.000012	<0.005	<0.005	0.00394	<0.005	<0.005	<0.0001	33
RSEM-R5B-P2-Sump	9/28/2022 15:40	BDE182	M	C276033	0.00135	<0.01	<0.0002	0.0889	19.9	<0.001	<0.0000019	0.0142	0.0023	<0.01	5.97	0.0036	3.47	<0.00002	201	0.396	114	0.000012	<0.005	<0.005	0.00415	<0.005	<0.005	0.00018	2.0
RSEM-R5B-P2-Sump	10/4/2022 11:50	BDR440	M	C277814	0.00118	<0.01	<0.0002	0.0796	21.2	<0.001	<0.0000019	0.0131	0.0025	0.018	4.69	0.00333	4.45	<0.00002	189	0.356	92.1	0.000011	<0.005	<0.005	0.00436	<0.005	<0.005	<0.0001	180
RSEM-R5B-P2-Sump	10/9/2022 11:45	BED927	M	C279394	0.00121	<0.01	<0.0002	0.0785	21.6	<0.001	<0.0000019	0.0144	0.0022	<0.01	5.35	0.0027	4.69	<0.00002	205	0.332	101	0.000011	<0.005	<0.005	0.00388	<0.005	<0.005	<0.0001	30
RSEM-R5B-P2-Sump	10/13/2022 16:40	BEN621	M	C280837	0.00127	<0.01	<0.0002	0.0789	20.1	0.0019	<0.0000019	0.0155	0.0023	<0.01	5.22	0.00279	5.19	<0.00002	207	0.349	97.6	0.000011	<0.005	<0.005	0.00403	<0.005	<0.005	<0.0001	69
RSEM-R5B-P2-Sump	10/20/2022 12:15	BFD238	M	C283174	0.0014	<0.01	<0.0002	0.0862	19.3	<0.001	<0.0000019	0.0155	0.0023	<0.01	4.94	0.00274	5.52	<0.00002	201	0.313	98.8	<0.00001	<0.005	<0.005	0.00405	<0.005	<0.005	<0.0001	210
RSEM-R5B-P2-Sump	10/25/2022 14:35	BFP709	M	C284665	0.00128	<0.01	<0.0002	0.0752	19.1	0.0018	<0.0000019	0.0137	0.003	<0.01	4.48	0.00249	4.96	<0.00002	173	0.331	89.4	0.00001	<0.005	<0.005	0.0038	<0.005	<0.005	<0.0001	34
RSEM-R6E-EOP	1/23/2022 11:15	FJ2200194-002	M	FJ2200194	0.00078	<0.010	<0.000050	0.0028	6.61	0.0131	<0.0000050	0.00146	0.0015	<0.050	1.08	0.000282	1.94	<0.000010	4.73	0.121	7.08	<0.000010	<0.00010	<0.00030	0.000516	<0.00050	<0.0010	<0.00020	12.7
RSEM-R6E-EOP	2/8/2022 11:35	AOI289	M	C208265	0.00096	<0.01	<0.0002	0.0121	10.3	0.0557	0.0000019	0.0049	0.0037	<0.01	3.61	0.00064	2.95	<0.00002	24.1	0.199	19.4	<0.00001	<0.005	<0.005	0.00071	<0.005	<0.005	<0.0001	61
RSEM-R6E-EOP	2/12/2022 13:50	AOP216	M	C209346	0.00119	<0.01	<0.0002	0.0211	11.7	0.0416	<0.0000019	0.0048	0.0046	<0.01	3.56	0.00193	2.31	<0.00002	25.0	0.195	38.4	<0.00001	<0.005	<0.005	0.00067	<0.005	<0.005	<0.0001	12
RSEM-R6E-EOP	2/13/2022 10:35	AOP245	M	C209355	0.00079	<0.01	<0.0002	0.0125	7.18	0.034	<0.0000019	0.0048	0.0041	0.014	3.50	0.00043	1.8	<0.00002	18.4	0.204	17.2	0.00001	<0.005	<0.005	0.0008	<0.005	<0.005	<0.0001	7.5
RSEM-R6E-EOP	2/14/2022 13:00	AOQ978	M	C209670	0.00072	<0.01	<0.0002	0.0133	7.89	0.0362	<0.0000019	0.0051	0.0042	<0.01	3.63	0.00045	1.85	<0.00002	19.8	0.223	18.7	<0.00001	<0.005	<0.005	0.00084	<0.005	<0.005	<0.0001	8.1
RSEM-R6E-EOP	2/15/2022 15:45	AOS723	M	C210043	0.00088	0.02	<0.0002	0.0135	8.92	0.0457	<0.0000019	0.0065	0.0048	0.014	4.47	0.0004	2.1	<0.00002	22.3	0.326	24.9	<0.00001	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	23
RSEM-R6E-EOP	2/16/2022 10:30	AOU839	M	C210450	0.00095	0.054	<0.0002	0.0149	8.40	0.0387	0.0000023	0.0065	0.0047	0.016	4.09	0.00053	2.1	<0.00002	21.2	0.294	24.2	<0.00001	<0.005	<0.005	0.00101	<0.005	<0.005	<0.0001	5.7
RSEM-R6E-EOP	3/16/2022 7:00	AQE821	M	C217156	0.00121	0.014	<0.0002	0.0449	19.3	0.0102	<0.0000019	0.0064	0.0029	<0.01	3.65	0.00205	5.27	<0.00002	70.2	0.128	46.6	<0.00001	<0.005	<0.005	0.00174	<0.005	0.0273	<0.0001	4.3
RSEM-R6E-EOP	3/17/2022 16:30	AQH796	M	C217776	0.00085	<0.01	<0.0002	0.0224	11.2	0.0877	<0.0000019	0.0051	0.0043	<0.01	4.02	0.00066	1.68	<0.00002	21.1	0.362	38.5	0.000013	<0.005	<0.005	0.0015	<0.005	<0.005	<0.0001	990
RSEM-R6E-EOP	3/18/2022 5:00	AQH793	M	C217775	0.00081	<0.01	<0.0002	0.0211	16.3	0.217	<0.0000019	0.0075	0.0088	<0.01	5.45	0.00074	2.9	<0.00002	33.1	0.412	39.9	<0.00001	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	14
RSEM-R6E-EOP	4/6/2022 12:30	ARI187	M	C223269	0.00083	<0.01	<0.0002	0.0126	9.15	0.073	<0.0000019	0.0041	0.0058	<0.01	2.57	0.0007	2.02	<0.00002	17.6	0.217	28.9	<0.00001	<0.005	<0.005	0.0012	<0.005	<0.005	0.00011	14
RSEM-R6E-EOP	4/8/2022 12:30	ARI202	M	C223273	0.0007	<0.01	<0.0002	0.0153	11.3	0.0956	<0.0000019	0.0044	0.0067	<0.01	2.85	0.00095	2.15	<0.00002	22.5	0.253	36.1	<0.00001	<0.005	<0.005	0.00136	<0.005	<0.005	0.00012	71
RSEM-R6E-EOP	4/10/2022 12:30	ARK076	M	C223661	0.00077	<0.01	<0.0002	0.0162	13.7	0.112	<0.0000019	0.0053	0.0067	<0.01	3.64	0.00123	2.25	<0.00002	29.9	0.321	42.9	<0.00001	<0.005	<0.005	0.00172	<0.005	<0.005	<0.0001	15
RSEM-R6E-EOP	4/11/2022 9:30	ARK111	M	C223675	0.00066	<0.01	<0.0002	0.0172	13.2	0.109	<0.0000019	0.0052	0.0063	<0.01	3.45	0.00122	2.3	<0.00002	28.6	0.311	41.5	<0.00001	<0.005	<0.005	0.00163	<0.005	<0.005	<0.0001	13
RSEM-R6E-EOP	4/12/2022 10:20	ARN333	M	C224402	0.00061	<0.01	<0.0002	0.0173	14.5	0.103	<0.0000019	0.0048	0.0067	<0.01	3.35	0.00141	2.44	<0.00002	29.3	0.302	41.1	<0.00001	<0.005	<0.005	0.00148	<0.005	<0.005	<0.0001	8.7
RSEM-R6E-EOP	4/13/2022 12:00	ARP725	M	C224775	0.00069	<0.01	<0.0002	0.0169	16.1	0.118	<0.0000019	0.0054	0.0075	<0.01	3.73	0.00142	2.55	<0.00002	32.1	0.326	44.9	0.000011	<0.005	<0.005	0.00164	<0.005	<0.005	<0.0001	7.5
RSEM-R6E-EOP	4/14/2022 9:25	ARQ064	M	C224815	0.00077	<0.01	<0.0002	0.0168	15.3	0.117	<0.0000019	0.0051	0.0074	<0.01	3.48	0.00118	2.62	<0.00002	29.5	0.318	43.3	0.00001	<0.005	<0.005	0.0016	<0.005	<0.005	<0.0001	7.5
RSEM-R6E-EOP	4/15/2022 13:35	ARQ198	M	C224832	0.00065	<0.01	<0.0002	0.0166	17.0	0.117	<0.0000019	0.0054	0.0076	<0.01	3.71	0.0012	2.7	<0.00002	33.4	0.344	46.3	<0.00001	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	5.7
RSEM-R6E-EOP	4/15/2022 13:45	ARQ199	D	C224832	0.00067	<0.01	<0.0002	0.0172	16.9	0.12	<0.0000019	0.0055	0.0075	<0.01	3.78	0.00118	2.76	<0.00002	33.5	0.346	48.3	0.00001	<0.005	<0.005	0.00187	<0.005	<0.005	<0.0001	5.6
RSEM-R6E-EOP	4/16/2022 13:35	ARR878	M	C225206	0.00074	<0.01	<0.0002	0.0143	18.2	0.136	<0.0000019	0.0051	0.0084	<0.01	3.89	0.00168	2.67	<0.00002	34.8	0.357	48.8	0.000011	<0.005	<0.005	0.00193	<0.005	<0.005	<0.0001	5.5
RSEM-R6E-EOP	4/17/2022 16:55	ARR903	M	C225213	0.00068	<0.01	<0.0002	0.0173	17.1	0.127	<0.0000019	0.0051	0.0079	<0.01	3.74	0.0017	2.78	<0.00002	32.5	0.348	46.6	<0.00001	<0.005	<0.005	0.00198	<0.005	<0.005	<0.0001	5.6
RSEM-R6E-EOP	4/18/2022 13:45	ARU247	M	C225693	0.00051	<0.01	<0.0002	0.0164	13.8	0.1	<0.0000019	0.0042	0.0061	<0.01	2.96	0.00149	2.73	<0.00002	23.5	0.286	36.4	<0.00001	<0.005	<0.005	0.00163	<0.005	<0.005	<0.0001	7.4
RSEM-R6E-EOP	4/19/2022 13:30	ARV034	M	C225905	0.00061	<0.01	<0.0002	0.0168	15.6	0.114	<0.0000019	0.0048	0.007	<0.01	3.29	0.0014	2.75	<0.00002	26.7	0.323	40.8	<0.00001	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	5.6
RSEM-R6E-EOP	4/20/2022 12:25	ARW667	M	C226267	0.00067	<0.01	<0.0002	0.016	17.0	0.115	<0.0000019	0.0051	0.0071	<0.01	3.54	0.00187	2.94	<0.00002	31.2	0.316	45.0	<0.00001	<0.005	<0.005	0.00205	<0.005	<0.005	<0.0001	4.4
RSEM-R6E-EOP	4/21/2022 13:15	ARX706	M	C226546	0.00074	<0.01	<0.0002	0.0165	16.4	0.118	<0.0000019	0.0054	0.0074	<0.01	3.66	0.00119	3.1	<0.00002	29.2	0.325	43.7	0.000011	<0.005	<0.005	0.00219	<0.005	<0.005	<0.0001	4.0
RSEM-R6E-EOP	4/22/2022 11:25	ARX719	M	C226550	0.00082	<0.01	<0.0002	0.0147	16.9	0.128	<0.0000019	0.0052	0.0081	0.011	3.93	0.00098	3.1	<0.00002	29.9	0.338	42.8	0.000013	<0.005	<0.005	0.00219	<0.005	<0.005	<0.0001	4.7
RSEM-R6E-EOP	4/22/2022 11:35	ARX720	D	C226550	0.00074	<0.01	<0.0002	0.0149	15.6	0.116	<0.0000019	0.0053	0.0073	<0.01	3.53	0.00096	2.99	<0.00002	27.6	0.319	42.2	0.000011	<0.005	<0.005	0.00219	<0.005	<0.005	<0.0001	4.7
RSEM-R6E-EOP	4/23/2022 15:20	ARZ185	M	C226855	0.00071	<0.01	<0.0002	0.0156	17.7	0.108	<0.0000019	0.0048	0.0069	<0.01	3.57	0.00199	2.96	<0.00002	31.4	0.324	43.0	<0.00001	<0.005	<0.005	0.002	<0.005	<0.005	<0.0001	12
RSEM-R6E-EOP	4/24/2022 11:10	ASA415	M	C227083	0.00081	<0.01	<0.0002	0.0148	17.3	0.11	<0.0000019	0.0046	0.0067	<0.01	3.42	0.00194	2.92	<0.00002	30.6	0.311	41.8	<0.00001	<0.005	<0.005	0.00192	<0.005	<0.005	<0.0001	6.4
RSEM-R6E-EOP	4/24/2022 11:20	ASA416	D	C227083	0.00065	<0.01	<0.0002	0.0147	17.3	0.109	<0.0000019	0.0046	0.0066	<0.01	3.40	0.00199	2.94	<0.00002	30.5	0.31	42.2	<0.00001	<0.005	<0.005	0.00192	<0.005	<0.005	<0.0001	6.2
RSEM-R6E-EOP	4/25/2022 11:10	ASA412	M	C227083	0.00075	<0.01	<0.0002	0.0142	16.7	0.104	<0.0000019	0.0044	0.0062	<0.01	3.25	0.00208	2.91	<0.00002	29.6	0.295	39.0	<0.00001	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	6.0
RSEM-R6E-EOP	4/26/2022 11:30	ASD456	M	C227799	0.00085	<0.01	<0.0002	0.0163	16.7	0.101	<0.0000019	0.0043	0.0064	<0.01	3.27	0.00213	2.84	<0.00002	30.1	0.295	42.4	0.000011	<0.005	<0.005	0.00182	<0.005	0.0061	<0.0001	8.1
RSEM-R6E-EOP	4/27/2022 11:30	ASH196	M	C228648	0.00094	<0.01	<0.0002	0.0153	16.8	0.101	<0.0000019	0.0043	0.0064	<0.01	3.27	0.00264	2.89	<0.00002	30.8	0.3	42.2	<0.00001	<0.005	<0.005	0.00185	<0.005	0.0058	<0.0001	10
RSEM-R6E-EOP	4/28/2022 12:00	ASH216	M	C228650	0.00076	<0.01	<0.0002	0.0148	16.5	0.103	<0.0000019	0.0043	0.0054	<0.01	3.69	0.00183	2.94	<0.00002	30.6	0.331	39.6	<0.00001	<0.005	<0.005	0.00172	<0.005	<0.005	<0.0001	47
RSEM-R6E-EOP	4/29/2022 9:30	ASH016	M	C228622	0.00077	<0.01	<0.0002	0.0199	17.9	0.134	<0.0000019	0.0047	0.0114	<0.01	4.33	0.0016	2.68	<0.00002	30.0	0.393	44.3	0.000012	<0.005	<0.005	0.00193	<0.005	0.0061	<0.0001	32
RSEM-R6E-EOP	4/30/2022 11:30	ASL379	M	C229488	0.00083	<0.01	<0.0002	0.0305	20.8	0.242	<0.0000019	0.0046	0.0364	<0.01	4.18	0.00173	2.72	<0.00002	31.5	0.415	60.9	<0.00001	<0.005	<0.005	0.00209	<0.005	0.0148	<0.0001	17
RSEM-R6E-EOP	5/1/2022 10:30	ASL426	M	C229493	0.00083	<0.01	<0.0002	0.0458	25.6	0.341	<0.0000019	0.0046	0.0605	<0.01	4.22	0.00201	2.81	<0.00002	39.1	0.44	80.3	<0.00001	<0.005	<0.005	0.00222	<0.005	0.0294	<0.0001	13
RSEM-R6E-EOP	5/2/2022 10:30	ASL339	M	C229475	0.00101	<0.01	<0.0002	0.0425	26.3	0.328	<0.0000019	0.0046	0.0579	<0.01	4.26	0.00174	2.8	<0.00002	40.7	0.449	84.2	0.000014	<0.005	<0.005	0.00231	<0.005	0.0233	<0.0001	9.3
RSEM-R6E-EOP	5/3/2022 14:15	ASO447	M	C230063	0.00104	<0.01	<0.0002	0.0489	26.4	0.328	<0.0000019	0.0046	0.0622	<0.01	4.10	0.00215	2.6	<0.00002	42.4	0.498	82.7	0.000015	<0.005	<0.005	0.00241	<0.005	0.0188	<0.0001	13
RSEM-R6E-EOP	5/4/2022 12:10	ASP675	M	C230320	0.00098	<0.01	<0.0002	0.0484	26.7	0.289	<0.0000019	0.0045	0.0573	<0.01	4.04	0.00232	2.57	<0.00002	43.4	0.503	82.5	0.000016	<0.005	<0.005	0.00244	<0.005	0.014	<0.0001	13
RSEM-R6E-EOP	5/5/2022 11:05	ASR003	M	C230531	0.00159	<0.01	<0.0002	0.0511	27.3	0.258	<0.0000019	0.0046	0.0531	<0.01	4.17	0.00198	2.56	<0.00002	44.1	0.519	80.5	0.000015	<0.005	<0.005	0.00257	<0.005	0.0113	<0.0001	7.1
RSEM-R6E-EOP	5/5/2022 11:15	ASR004	D	C230531	0.00103	<0.01	<0.0002	0.0528	28.2	0.27	<0.0000019	0.0046	0.055	<0.01	4.27	0.00243	2.64	<0.00002	45.4	0.529	85.1	0.000016	<0.005	<0.005	0.00259	<0.005	0.0115	<0.0001	7.3
RSEM-R6E-EOP	5/6/2022 10:20	ASR071	M	C230545	0.0012	<0.01	<0.0002	0.047	29.7	0.252	<0.0000019	0.0043	0.0463	0.012	4.57	0.00204	2.69	<0.00002	47.4	0.451	85.4	0.000017	<0.005	<0.005	0.0025	<0.005	0.0084	<0.0001	9.5
RSEM-R6E-EOP	5/7/2022 11:15	ASS942	M	C230886	0.00079	<0.01	<0.0002	0.0411	27.3	0.205	<0.0000019	0.0048	0.0383	0.015	4.91	0.00181	2.66	<0.00002	44.5	0.444	74.4	0.000016	<0.005	<0.005	0.00257	<0.005	<0.005	<0.0001	12

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
RSEM-R6E-EOP	5/8/2022 14:35	ASS883	M	C230861	0.00073	<0.01	<0.0002	0.0401	28.2	0.157	<0.0000019	0.0051	0.0316	<0.01	4.70	0.00195	3.02	<0.00002	48.4	0.457	83.5	0.000014	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	7.2
RSEM-R6E-EOP	5/9/2022 13:40	ASV291	M	C231306	0.00089	0.067	<0.0002	0.0403	26.1	0.148	<0.0000019	0.0052	0.032	0.02	5.05	0.00189	2.88	<0.00002	44.5	0.446	76.0	0.000016	<0.005	<0.005	0.00259	<0.005	<0.005	<0.0001	9.4
RSEM-R6E-EOP	5/10/2022 10:50	ASX003	M	C231638	0.00059	<0.01	<0.0002	0.0401	23.6	0.12	<0.0000019	0.0052	0.0275	<0.01	4.25	0.00207	2.82	<0.00002	41.4	0.446	77.5	0.000015	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	5.9
RSEM-R6E-EOP	5/11/2022 12:15	ASZ423	M	C232133	0.00074	<0.01	<0.0002	0.045	28.6	0.168	<0.0000019	0.0055	0.0423	0.012	5.10	0.00249	3.22	<0.00002	52.8	0.515	80.7	0.000016	<0.005	<0.005	0.00291	<0.005	<0.005	<0.0001	5.6
RSEM-R6E-EOP	5/12/2022 13:55	ATA813	M	C232369	0.00067	<0.01	<0.0002	0.0444	28.6	0.164	<0.0000019	0.0055	0.0422	0.013	4.78	0.00163	3	<0.00002	52.2	0.494	85.4	0.000015	<0.005	<0.005	0.00292	<0.005	<0.005	<0.0001	3.7
RSEM-R6E-EOP	5/13/2022 11:00	ATB011	M	C232410	0.0008	<0.01	<0.0002	0.0484	28.1	0.17	<0.0000019	0.0048	0.0408	<0.01	4.83	0.00169	2.55	<0.00002	50.5	0.502	79.2	0.000015	<0.005	<0.005	0.00285	<0.005	<0.005	<0.0001	3.1
RSEM-R6E-EOP	5/14/2022 14:25	ATD058	M	C232817	0.00059	<0.01	<0.0002	0.0441	28.9	0.134	<0.0000019	0.0048	0.0371	<0.01	4.55	0.00169	2.52	<0.00002	52.4	0.474	86.5	0.000013	<0.005	<0.005	0.00279	<0.005	<0.005	<0.0001	2.7
RSEM-R6E-EOP	5/15/2022 11:30	ATD050	M	C232812	0.00055	<0.01	<0.0002	0.0491	29.4	0.126	<0.0000019	0.0048	0.0359	<0.01	4.48	0.00151	2.43	<0.00002	53.4	0.491	87.8	0.000016	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	3.2
RSEM-R6E-EOP	5/16/2022 10:00	ATC671	M	C232726	0.00059	<0.01	<0.0002	0.0485	30.4	0.129	<0.0000019	0.0045	0.0362	<0.01	4.46	0.00164	2.47	<0.00002	54.8	0.489	90.5	0.000014	<0.005	<0.005	0.00285	<0.005	<0.005	<0.0001	2.6
RSEM-R6E-EOP	5/17/2022 11:30	ATH850	M	C233625	0.00058	<0.01	<0.0002	0.0495	27.9	0.104	<0.0000019	0.004	0.0272	<0.01	4.27	0.0017	2.37	<0.00002	46.1	0.646	63.9	0.000013	<0.005	<0.005	0.00251	<0.005	<0.005	<0.0001	2.8
RSEM-R6E-EOP	5/18/2022 11:30	ATJ924	M	C234012	0.00072	<0.01	<0.0002	0.0598	33.1	0.105	<0.0000019	0.0043	0.0309	<0.01	5.85	0.00097	2.54	<0.00002	53.3	1.03	81.2	0.000022	<0.005	<0.005	0.00292	<0.005	<0.005	<0.0001	3.3
RSEM-R6E-EOP	5/19/2022 12:30	ATL910	M	C234314	0.00056	<0.01	<0.0002	0.0614	34.5	0.0835	<0.0000019	0.0052	0.027	<0.01	6.10	0.00107	2.36	<0.00002	54.5	1.35	76.9	0.000022	<0.005	<0.005	0.0028	<0.005	<0.005	<0.0001	2.7
RSEM-R6E-EOP	5/20/2022 10:00	ATL358	M	C234241	0.00063	<0.01	<0.0002	0.0436	32.9	0.0571	<0.0000019	0.0035	0.0241	0.027	6.18	0.00243	2.54	<0.00002	51.2	1.16	78.1	0.000019	<0.005	<0.005	0.00241	<0.005	<0.005	<0.0001	3.8
RSEM-R6E-EOP	5/21/2022 10:00	ATN137	M	C234510	0.0006	<0.01	<0.0002	0.0439	31.4	0.0483	0.0000033	0.0037	0.0196	<0.01	5.32	0.00106	2.65	<0.00002	49.2	1.07	65.9	0.000017	<0.005	<0.005	0.00235	<0.005	<0.005	<0.0001	5.6
RSEM-R6E-EOP	5/22/2022 14:30	ATO534	M	C234788	<0.0005	<0.01	<0.0002	0.0397	27.9	0.0319	<0.0000019	0.0032	0.0159	<0.01	4.77	0.00088	2.55	<0.00002	42.2	0.779	50.7	0.000017	<0.005	<0.005	0.00213	<0.005	<0.005	<0.0001	6.3
RSEM-R6E-EOP	5/23/2022 10:30	ATO583	M	C234797	0.00051	<0.01	<0.0002	0.0365	27.8	0.0288	<0.0000019	0.0032	0.014	<0.01	4.59	0.00067	2.77	<0.00002	41.2	0.755	49.2	0.000017	<0.005	<0.005	0.00209	<0.005	<0.005	<0.0001	5.5
RSEM-R6E-EOP	5/24/2022 10:30	ATR509	M	C235358	0.00053	<0.01	<0.0002	0.0254	25.8	0.0206	<0.0000019	0.0029	0.012	0.011	4.54	0.00083	2.91	<0.00002	36.6	0.627	46.8	0.000018	<0.005	<0.005	0.00203	<0.005	<0.005	<0.0001	3.6
RSEM-R6E-EOP	5/25/2022 15:15	ATT368	M	C235730	<0.0005	<0.01	<0.0002	0.0198	26.8	0.0097	<0.0000019	0.0028	0.0093	<0.01	4.70	0.00087	2.99	<0.00002	37.2	0.579	44.1	0.000013	<0.005	<0.005	0.00175	<0.005	<0.005	<0.0001	4.0
RSEM-R6E-EOP	5/26/2022 15:10	ATV282	M	C236083	<0.0005	<0.01	<0.0002	0.0138	26.7	0.008	<0.0000019	0.0027	0.0078	<0.01	4.61	0.0007	3.51	<0.00002	35.4	0.518	46.1	0.000017	<0.005	<0.005	0.0017	<0.005	<0.005	<0.0001	4.3
RSEM-R6E-EOP	5/26/2022 15:20	ATV283	D	C236083	<0.0005	<0.01	<0.0002	0.013	25.4	0.0083	<0.0000019	0.0025	0.0077	<0.01	4.49	0.00077	3.24	<0.00002	33.7	0.518	44.5	0.000014	<0.005	<0.005	0.00162	<0.005	<0.005	<0.0001	4.3
RSEM-R6E-EOP	5/27/2022 13:25	ATV300	M	C236089	<0.0005	<0.01	<0.0002	0.0142	24.8	0.0078	<0.0000019	0.0024	0.0068	0.012	4.32	0.00067	3.04	<0.00002	31.8	0.472	36.8	0.000013	<0.005	<0.005	0.00158	<0.005	<0.005	<0.0001	3.8
RSEM-R6E-EOP	5/28/2022 16:15	ATX746	M	C236620	0.00054	<0.01	<0.0002	0.0316	26.3	0.12	<0.0000019	0.0035	0.0127	<0.01	6.31	0.00111	2.57	<0.00002	32.6	1.42	52.2	0.00002	<0.005	<0.005	0.00222	<0.005	<0.005	<0.0001	14
RSEM-R6E-EOP	5/29/2022 17:30	ATW968	M	C236421	0.00065	<0.01	<0.0002	0.0534	25.7	0.293	<0.0000019	0.0033	0.0475	<0.01	4.83	0.00172	2.2	<0.00002	38.5	0.958	73.4	0.000018	<0.005	<0.005	0.00233	<0.005	0.0216	<0.0001	8.9
RSEM-R6E-EOP	5/30/2022 16:10	ATZ465	M	C236894	0.00086	<0.01	<0.0002	0.0592	27.1	0.294	<0.0000019	0.0046	0.0563	<0.01	4.57	0.00249	2.94	<0.00002	57.8	0.743	90.2	0.000021	<0.005	<0.005	0.00321	<0.005	0.0259	<0.0001	7.0
RSEM-R6E-EOP	5/31/2022 11:10	AUC335	M	C237377	0.00075	<0.01	<0.0002	0.0494	24.2	0.232	<0.0000019	0.0044	0.0465	<0.01	4.34	0.00276	3	<0.00002	58.2	0.624	86.3	0.000022	<0.005	<0.005	0.00288	<0.005	0.0194	<0.0001	6.5
RSEM-R6E-EOP	6/1/2022 11:10	AUE680	M	C237797	0.0007	<0.01	<0.0002	0.0418	23.0	0.148	<0.0000019	0.0044	0.0304	0.012	4.12	0.00301	3.18	<0.00002	57.0	0.498	77.3	0.00002	<0.005	<0.005	0.00267	<0.005	0.0092	<0.0001	7.5
RSEM-R6E-EOP	6/2/2022 10:30	AUH700	M	C238258	0.00051	<0.01	<0.0002	0.0313	18.4	0.0508	<0.0000019	0.0034	0.0149	<0.01	3.36	0.00242	3.46	<0.00002	40.6	0.369	49.4	0.000017	<0.005	<0.005	0.00203	<0.005	<0.005	<0.0001	3.7
RSEM-R6E-EOP	6/3/2022 11:55	AUH661	M	C238247	0.00051	<0.01	<0.0002	0.0264	21.0	0.0137	<0.0000019	0.0031	0.01	<0.01	3.67	0.00182	3.26	<0.00002	37.2	0.381	42.4	0.000015	<0.005	<0.005	0.00194	<0.005	<0.005	<0.0001	3.2
RSEM-R6E-EOP	6/4/2022 10:25	AUL720	M	C238905	0.00051	<0.01	<0.0002	0.0222	20.8	0.0089	<0.0000019	0.003	0.0078	<0.01	3.53	0.00148	3.3	<0.00002	31.5	0.351	34.4	0.000015	<0.005	<0.005	0.00187	<0.005	<0.005	<0.0001	4.9
RSEM-R6E-EOP	6/5/2022 11:45	AUM440	M	C238986	<0.0005	<0.01	<0.0002	0.018	18.8	0.0053	<0.0000019	0.0026	0.0056	<0.01	3.30	0.00113	3.19	<0.00002	25.1	0.304	26.9	0.000012	<0.005	<0.005	0.00165	<0.005	<0.005	<0.0001	5.1
RSEM-R6E-EOP	6/6/2022 10:40	AUO789	M	C239365	0.00054	<0.01	<0.0002	0.0162	18.8	0.0079	<0.0000019	0.0025	0.0055	<0.01	3.35	0.00099	3.16	<0.00002	24.2	0.3	23.8	0.000012	<0.005	<0.005	0.00157	<0.005	<0.005	<0.0001	3.5
RSEM-R6E-EOP	6/7/2022 11:30	AUT412	M	C240162	0.00066	<0.01	<0.0002	0.0132	18.1	0.0034	<0.0000019	0.0024	0.0043	<0.01	3.44	0.00115	3.22	<0.00002	19.4	0.267	26.3	0.000011	<0.005	<0.005	0.00164	<0.005	<0.005	<0.0001	2.8
RSEM-R6E-EOP	6/8/2022 12:30	AUT294	M	C240147	0.00064	<0.01	<0.0002	0.0146	18.0	0.0047	<0.0000019	0.0025	0.0044	<0.01	3.42	0.00125	3.3	<0.00002	20.0	0.271	26.6	0.000011	<0.005	<0.005	0.00167	<0.005	<0.005	<0.0001	3.8
RSEM-R6E-EOP	6/9/2022 13:00	AUV205	M	C240504	0.00065	<0.01	<0.0002	0.0136	17.8	0.0039	<0.0000019	0.0023	0.0039	<0.01	3.41	0.0011	3.15	<0.00002	18.4	0.277	26.2	0.000011	<0.005	<0.005	0.00156	<0.005	<0.005	<0.0001	2.6
RSEM-R6E-EOP	6/10/2022 10:30	AUV210	M	C240508	0.00079	<0.01	<0.0002	0.0127	17.8	0.0064	<0.0000019	0.0024	0.0044	<0.01	3.63	0.00116	3.13	<0.00002	18.2	0.298	26.2	0.000012	<0.005	<0.005	0.00154	<0.005	<0.005	<0.0001	2.7
RSEM-R6E-EOP	6/11/2022 9:30	AUY734	M	C241062	<0.0005	<0.01	<0.0002	0.0123	17.1	0.0019	<0.0000019	0.0023	0.0033	<0.01	3.22	0.00093	3.24	<0.00002	18.9	0.265	26.2	<0.00001	<0.005	<0.005	0.00159	<0.005	<0.005	<0.0001	1.9
RSEM-R6E-EOP	6/12/2022 10:00	AUY702	M	C241043	0.00079	<0.01	<0.0002	0.0129	19.3	0.0054	<0.0000019	0.0029	0.0034	<0.01	3.72	0.00092	3.15	<0.00002	20.2	0.304	29.6	0.00001	<0.005	<0.005	0.00178	<0.005	<0.005	<0.0001	4.1
RSEM-R6E-EOP	6/13/2022 11:30	AVD503	M	C241814	0.00187	<0.01	<0.0002	0.0112	18.6	0.0042	<0.0000019	0.0028	0.0029	<0.01	3.61	0.0009	3.01	<0.00002	19.3	0.278	31.5	0.000012	<0.005	<0.005	0.00156	<0.005	<0.005	<0.0001	3.9
RSEM-R6E-EOP	6/14/2022 10:00	AVD542	M	C241829	0.00081	<0.01	<0.0002	0.0111	18.4	0.0055	<0.0000019	0.0028	0.0027	<0.01	3.57	0.00091	2.97	<0.00002	19.4	0.269	28.2	<0.00001	<0.005	<0.005	0.00144	<0.005	<0.005	<0.0001	3.1
RSEM-R6E-EOP	6/15/2022 11:45	AVG247	M	C242252	0.00083	<0.01	<0.0002	0.0107	18.2	0.0053	<0.0000019	0.0029	0.0026	<0.01	3.61	0.00099	3	<0.00002	18.6	0.261	30.2	<0.00001	<0.005	<0.005	0.00135	<0.005	<0.005	0.0001	2.9
RSEM-R6E-EOP	6/16/2022 12:35	AVK122	M	C242788	0.0006	<0.01	<0.0002	0.0103	16.0	0.0051	<0.0000019	0.0028	0.0021	<0.01	3.02	0.00108	3.42	<0.00002	17.2	0.232	24.6	<0.00001	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	3.3
RSEM-R6E-EOP	6/17/2022 11:25	AVK723	M	C242942	0.00079	<0.01	<0.0002	0.0099	18.8	0.0264	<0.0000019	0.0038	0.0029	<0.01	4.16	0.00104	3.08	<0.00002	18.5	0.361	29.5	0.000012	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	4.3
RSEM-R6E-EOP	6/18/2022 12:35	AVL988	M	C243162	0.00057	<0.01	<0.0002	0.0116	15.1	0.0271	<0.0000019	0.0034	0.003	<0.01	3.61	0.0012	3.48	<0.00002	17.6	0.36	27.6	<0.00001	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	3.3
RSEM-R6E-EOP	6/19/2022 11:30	AVM016	M	C243177	0.00052	<0.01	<0.0002	0.0119	14.9	0.0257	<0.0000019	0.0033	0.0036	<0.01	3.33	0.00129	3.76	<0.00002	18.4	0.319	27.9	<0.00001	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	3.6
RSEM-R6E-EOP	6/19/2022 11:40	AVM017	D	C243177	0.00058	<0.01	<0.0002	0.0121	14.5	0.0249	<0.0000019	0.0032	0.0036	<0.01	3.26	0.00129	3.76	<0.00002	18.1	0.311	25.5	<0.00001	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	4.3
RSEM-R6E-EOP	6/20/2022 10:40	AVO964	M	C243664	0.00127	<0.01	<0.0002	0.014	14.8	0.0197	<0.0000019	0.0036	0.0048	<0.01	3.71	0.00115	3.15	<0.00002	16.6	0.296	28.5	0.000012	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	3.2
RSEM-R6E-EOP	6/21/2022 11:25	AVQ610	M	C244010	0.0009	<0.01	<0.0002	0.0134	16.0	0.0127	<0.0000019	0.0037	0.0047	<0.01	3.69	0.00119	3	<0.00002	17.4	0.271	31.1	0.000011	<0.005	<0.005	0.00147	<0.005	<0.005	<0.0001	2.9
RSEM-R6E-EOP	6/22/2022 10:55	AVT152	M	C244412	0.00081	<0.01	<0.0002	0.0125	15.8	0.0095	<0.0000019	0.0033	0.0035	<0.01	3.28	0.00111	3.09	<0.00002	16.7	0.254	35.1	0.000011	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	4.4
RSEM-R6E-EOP	6/23/2022 11:05	AVV596	M	C244839	0.00074	<0.01	<0.0002	0.0123	17.2	0.016	<0.0000019	0.0032	0.0034	<0.01	3.39	0.00122	3.15	<0.00002	17.6	0.245	33.1	0.000011	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	3.1
RSEM-R6E-EOP	6/24/2022 10:50	AVV585	M	C244835	0.00068	<0.01	<0.0002	0.0121	17.3	0.031	<0.0000019	0.003	0.0038	<0.01	3.58	0.00114	3.16	<0.00002	18.1	0.249	28.8	0.000011	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	3.5
RSEM-R6E-EOP	6/24/2022 11:00	AVV586	D	C244835	0.00065	<0.01	<0.0002	0.0121	17.1	0.0305	<0.0000019	0.003	0.0037	<0.01	3.33	0.0011	3.32	<0.00002	17.4	0.242	36.2	0.00001	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	3.9
RSEM-R6E-EOP	6/25/2022 10:30	AVZ706	M	C245512	0.00065	<0.01	<0.0002	0.0122	17.7	0.0079	0.0000019	0.003	0.0049	<0.01	3.40	0.00136	3.18	<0.00002	18.1	0.241	35.0	0.000012	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	2.9
RSEM-R6E-EOP	6/26/2022 9:55	AVZ576	M	C245500	0.00062	<0.01	<0.0002	0.0116	16.8	0.0066	<0.0000019	0.003	0.0047	<0.01	3.33	0.00134	2.93	<0.00002	17.7	0.23	31.8	0.000012	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	3.4
RSEM-R6E-EOP	6/26/2022 10:05	AVZ577	D	C245500	0.00061	<0.01	<0.0002	0.0114	17.7	0.0067	<0.0000019	0.003	0.0049	<0.01	3.42	0.00131	3.01	<0.00002	18.3	0.239	31.2	0.000013	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	2.5
RSEM-R6E-EOP	6/27/2022 10:15	AVY532	M	C245274	<0.0005	<0.01	<0.0002	0.0115	17.0	0.0081	<0.0000019	0.003	0.0034	<0.01	3.21	0.00141	2.97	<0.00002	17.9	0.222	30.9	0.000014	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	2.4
RSEM-R6E-EOP	6/28/2022 12:30	AWH752	M	C246896	0.00062	<0.01	<0.0002	0.0104	15.5	0.0114	<0.0000019	0.0031	0.0023	<0.01	3.21	0.00137	2.85	<0.00002	15.7	0.226	28.1	0.000013	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	5.3
RSEM-R6E-EOP	6/29/2022 14:30	AWH757	M	C246898	0.00059	<0.01	<0.0002	0.0099	15.2	0.0198	<0.0000019	0.0033	0.0029	<0.01	3.25	0.0013	3.09	<0.00002	14.9	0.222	28.4	0.000015	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	4.8
RSEM-R6E-EOP	6/30/2022 12:30	AWH755	M	C246897	0.00057	<0.01	<0.0002	0.0097	15.3	0.0069	<0.0000019	0.0034	0.0019	<0.01	3.24	0.00126	3.03	<0.00002	15.0	0.22	27.8	0.000014	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	6.9
RSEM-R6E-EOP	7/1/2022 12:30	AWJ893	M	C247203	0.00063	<0.01	<0.0002	0.0098	17.8	0.0103	<0.0000019	0.0041	0.0023	<0.01	3.51	0.00108	3.23	<0.00002	17.1	0.247	30.8	0.000013	<0.005	<0.005	0.00156	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	7/2/2022 12:00	AWJ848	M	C247196	0.00056	<0.01	<0.0002	0.0104	17.8	0.0449	<0.0000019	0.0041	0.0025	<0.01	3.50	0.00105	3.41	<0.00002	17.5	0.254	30.0	0.000013	<0.005	<0.005	0.00158	<0.005	<0.005	<0.0001	1.6
RSEM-R6E-EOP	7/3/2022 11:00	AWM045	M	C247492	0.00054	<0.01	<0.0002	0.0109	21.0	0.0283	<0.0000019	0.004	0.0028	<0.01	4.16	0.00111	4.04	<0.00002	19.6	0.257	26.5	0.000016	<0.005	<0.005	0.00169	<0.005	<0.005	<0.0001	3.3
RSEM-R6E-EOP	7/4/2022 10:00	AWM515	M	C247552	0.00055	<0.01	<0.0002	0.0113	20.0	0.0121	<0.0000019	0.0039	0.0022	<0.01	4.06	0.00144	3.44	<0.00002	19.1	0.265	28.7	0.000017	<0.005	<0.005	0.00178	<0.005	<0.005	<0.0001	4.3
RSEM-R6E-EOP	7/5/2022 10:00	AWR506	M	C248315	0.00145	<0.01	<0.0002	0.0109	18.0	0.0086	<0.0000019	0.0035	0.0024	<0.01	3.27	0.00107	3.4	<0.00002	17.7	0.233	26.7	0.000015	<0.005	<0.005	0.00159	<0.005	<0.005	<0.0001	3.8
RSEM-R6E-EOP	7/6/2022 14:05	AWV908	M	C249077	0.00064	<0.01	<0.0002	0.01	17.7	0.011	<0.0000019	0.0037	0.0025	<0.01	3.27	0.00124	3.3	<0.00002	18.3	0.226	28.1	0.000014	<0.005	<0.005	0.00161	<0.005	<0.005	<0.0001	3.7
RSEM-R6E-EOP	7/6/2022 14:15	AWV909	D	C249077	0.00059	<0.01	<0.0002	0.0098	16.8	0.0099	<0.0000019	0.0034	0.0023	<0.01	3.14	0.00107	3.25	<0.00002	17.6	0.215	26.3	0.000013	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	3.7
RSEM-R6E-EOP	7/7/2022 11:45	AWW342	M	C249139	0.00059	<0.01	<0.0002	0.0098	16.4	0.0074	<0.0000019	0.0033	0.0022	<0.01	3.07	0.00125	3.27	<0.00002	17.6	0.209	26.5	0.000013	<0.005	<0.005	0.00144	<0.005	<0.005	<0.0001	3.1
RSEM-R6E-EOP	7/8/2022 11:35	AWW521	M	C249170	0.00064	<0.01	<0.0002	0.0108	18.8	0.0091	<0.0000019	0.004	0.0029	<0.01	3.44	0.00113	3.22	<0.00002	20.7	0.259	30.3	0.000014	<0.005	<0.005	0.00161	<0.005	<0.005	<0.0001	3.9
RSEM-R6E-EOP	7/9/2022 10:30	AWZ514	M	C249625	0.00097	0.051	<0.0002	0.0114	19.0	0.0172	<0.0000019	0.004	0.0025	<0.01	3.56	0.00113	3.48	<0.00002	21.1	0.272	30.7	0.000016	<0.005	<0.005	0.00161	<0.005	<0.005	<0.0001	3.3
RSEM-R6E-EOP	7/9/2022 10:40	AWZ515	D	C249625	0.00108	0.054	<0.0002	0.0113	19.2	0.0184	<0.0000019	0.004	0.0026	<0.01	3.60	0.00112	3.54	<0.00002	21.4	0.265	32.0	0.000017	<0.005	<0.005	0.00164	<0.005	0.0127	<0.0001	2.8

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
RSEM-R6E-EOP	7/10/2022 14:10	AWZ486	M	C249617	0.00066	<0.01	<0.0002	0.0106	18.7	0.0087	<0.0000019	0.0038	0.0022	<0.01	3.49	0.00106	3.27	<0.00002	20.8	0.253	33.8	0.000015	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	3.7
RSEM-R6E-EOP	7/11/2022 12:35	AXC657	M	C250105	0.00135	0.011	<0.0002	0.0103	19.2	0.0075	<0.0000019	0.0037	0.0021	<0.01	3.61	0.00107	3.57	<0.00002	21.0	0.244	32.6	0.000014	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	3.2
RSEM-R6E-EOP	7/12/2022 12:05	AXE615	M	C250400	0.00141	0.02	<0.0002	0.0099	18.6	0.0058	<0.0000019	0.0035	0.0021	<0.01	3.45	0.00105	3.35	<0.00002	20.2	0.238	34.6	0.000016	<0.005	<0.005	0.00134	<0.005	<0.005	<0.0001	3.2
RSEM-R6E-EOP	7/12/2022 12:15	AXE616	D	C250400	0.00136	0.012	<0.0002	0.0098	18.7	0.0056	<0.0000019	0.0035	0.0021	<0.01	3.47	0.00103	3.32	<0.00002	20.2	0.231	31.6	0.000014	<0.005	<0.005	0.00135	<0.005	<0.005	<0.0001	3.3
RSEM-R6E-EOP	7/13/2022 11:25	AXH414	M	C250934	0.00065	<0.01	<0.0002	0.0112	19.3	0.0144	<0.0000019	0.0036	0.002	<0.01	3.50	0.00101	3.26	<0.00002	20.9	0.254	30.7	0.000014	<0.005	<0.005	0.00139	<0.005	<0.005	<0.0001	3.1
RSEM-R6E-EOP	7/14/2022 11:10	AXJ116	M	C251290	0.00066	0.01	<0.0002	0.0104	19.1	0.0126	<0.0000019	0.0035	0.0019	<0.01	3.50	0.001	3.19	<0.00002	20.8	0.257	30.2	0.000014	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	3.1
RSEM-R6E-EOP	7/14/2022 11:20	AXJ117	D	C251290	0.0006	0.011	<0.0002	0.0097	18.9	0.012	<0.0000019	0.0035	0.0022	<0.01	3.48	0.00098	3.18	<0.00002	20.4	0.246	29.4	0.000015	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	2.9
RSEM-R6E-EOP	7/15/2022 13:10	AXJ364	M	C251330	0.00059	<0.01	<0.0002	0.0104	18.1	0.0021	<0.0000019	0.0033	0.0017	<0.01	3.35	0.00101	3.42	<0.00002	19.1	0.233	31.0	0.000014	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	3.2
RSEM-R6E-EOP	7/16/2022 11:30	AXN330	M	C251927	0.00062	<0.01	<0.0002	0.0111	18.2	0.0041	<0.0000019	0.0035	0.0017	<0.01	3.42	0.00096	3.57	<0.00002	19.9	0.246	31.0	0.00002	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	3.5
RSEM-R6E-EOP	7/17/2022 10:30	AXN586	M	C251966	0.00063	<0.01	<0.0002	0.0101	18.8	0.0036	<0.0000019	0.0035	0.0017	<0.01	3.53	0.00096	3.58	<0.00002	20.5	0.245	32.1	0.000013	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	2.3
RSEM-R6E-EOP	7/17/2022 10:40	AXN587	D	C251966	0.00059	<0.01	<0.0002	0.0101	18.3	0.0026	<0.0000019	0.0035	0.0016	<0.01	3.42	0.00099	3.55	<0.00002	20.0	0.238	31.5	0.000014	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	2.6
RSEM-R6E-EOP	7/18/2022 14:00	AXQ723	M	C252515	0.00058	<0.01	<0.0002	0.01	18.1	0.0035	<0.0000019	0.0035	0.0015	<0.01	3.52	0.001	3.29	<0.00002	19.9	0.234	31.8	0.000017	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	3.3
RSEM-R6E-EOP	7/19/2022 12:00	AXQ708	M	C252510	0.00055	<0.01	<0.0002	0.0108	17.7	0.0042	<0.0000019	0.0034	0.0015	<0.01	3.43	0.00096	3.32	<0.00002	19.2	0.231	29.9	0.000016	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	2.2
RSEM-R6E-EOP	7/20/2022 14:00	AXX165	M	C253451	0.00055	<0.01	<0.0002	0.0095	17.2	0.0077	<0.0000019	0.0035	0.0016	<0.01	3.41	0.00091	3.6	<0.00002	19.1	0.238	30.6	0.000015	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	3.5
RSEM-R6E-EOP	7/21/2022 13:00	AXX154	M	C253447	<0.0005	<0.01	<0.0002	0.0092	17.6	0.0116	<0.0000019	0.0032	0.0016	<0.01	3.31	0.00091	3.86	<0.00002	18.2	0.245	28.6	0.000014	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	4.5
RSEM-R6E-EOP	7/22/2022 10:00	AXX133	M	C253442	<0.0005	<0.01	<0.0002	0.0091	17.0	0.0148	<0.0000019	0.0028	0.0015	<0.01	3.10	0.00087	3.82	<0.00002	16.3	0.241	25.8	0.000014	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	4.4
RSEM-R6E-EOP	7/23/2022 9:30	AYB213	M	C254120	<0.0005	<0.01	<0.0002	0.0098	19.0	0.0014	<0.0000019	0.0028	0.0013	<0.01	3.07	0.00091	3.91	<0.00002	17.7	0.251	24.7	0.000013	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	2.7
RSEM-R6E-EOP	7/24/2022 12:30	AYC676	M	C254290	<0.0005	<0.01	<0.0002	0.0097	19.1	0.003	<0.0000019	0.003	0.0013	<0.01	3.10	0.00095	3.91	<0.00002	17.5	0.259	25.2	0.000013	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	4.7
RSEM-R6E-EOP	7/24/2022 13:00	AYC679	D	C254290	<0.0005	<0.01	<0.0002	0.0102	19.6	0.0029	<0.0000019	0.0031	0.0013	<0.01	3.19	0.00098	4.09	<0.00002	17.7	0.261	26.1	0.000013	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	4.4
RSEM-R6E-EOP	7/25/2022 9:00	AYC674	M	C254289	<0.0005	<0.01	<0.0002	0.0098	19.3	0.0061	<0.0000019	0.0035	0.0014	<0.01	3.22	0.0011	4.16	<0.00002	17.0	0.256	27.9	0.000013	<0.005	<0.005	0.00155	<0.005	<0.005	<0.0001	3.2
RSEM-R6E-EOP	7/26/2022 11:15	AYG701	M	C254966	<0.0005	<0.01	<0.0002	0.0102	20.3	0.0031	<0.0000019	0.0037	0.0014	<0.01	3.43	0.00112	4.7	<0.00002	17.4	0.26	30.9	0.000014	<0.005	<0.005	0.00158	<0.005	<0.005	<0.0001	1.7
RSEM-R6E-EOP	7/27/2022 11:40	AYK060	M	C255556	0.00051	<0.01	<0.0002	0.0094	19.1	<0.001	<0.0000019	0.0035	0.0013	<0.01	3.40	0.001	4.34	<0.00002	17.2	0.235	31.5	0.000015	<0.005	<0.005	0.00152	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	7/27/2022 11:50	AYK061	D	C255556	0.00051	<0.01	<0.0002	0.0095	19.3	<0.001	<0.0000019	0.0036	0.0013	<0.01	3.35	0.00107	4.36	<0.00002	16.9	0.239	28.5	0.000015	<0.005	<0.005	0.00151	<0.005	<0.005	<0.0001	1.4
RSEM-R6E-EOP	7/28/2022 12:40	AYM152	M	C255903	0.00058	<0.01	<0.0002	0.01	19.4	0.0016	<0.0000019	0.0037	0.0011	<0.01	3.30	0.00105	4.17	<0.00002	17.2	0.232	28.7	0.000015	<0.005	<0.005	0.0015	<0.005	<0.005	<0.0001	3.9
RSEM-R6E-EOP	7/29/2022 12:20	AYM047	M	C255900	0.00058	<0.01	<0.0002	0.0099	19.9	<0.001	<0.0000019	0.0037	0.0012	<0.01	3.44	0.00097	4.35	<0.00002	18.5	0.238	29.6	0.000016	<0.005	<0.005	0.00154	<0.005	<0.005	<0.0001	1.9
RSEM-R6E-EOP	7/30/2022 12:05	AYP671	M	C256352	0.00057	<0.01	<0.0002	0.0095	18.9	0.0012	<0.0000019	0.0038	0.0011	<0.01	3.29	0.00091	4.43	<0.00002	17.5	0.233	27.9	0.000016	<0.005	<0.005	0.00144	<0.005	<0.005	<0.0001	1.4
RSEM-R6E-EOP	7/31/2022 11:45	AYO872	M	C256301	0.00051	<0.01	<0.0002	0.0085	17.6	0.003	<0.0000019	0.0039	0.0011	<0.01	3.24	0.00084	4.29	<0.00002	17.0	0.24	26.5	0.000015	<0.005	<0.005	0.00147	<0.005	<0.005	<0.0001	0.59
RSEM-R6E-EOP	7/31/2022 11:55	AYO873	D	C256301	0.00051	<0.01	<0.0002	0.0085	17.6	0.0027	<0.0000019	0.0039	0.0011	<0.01	3.26	0.00081	4.27	<0.00002	17.0	0.244	25.8	0.000015	<0.005	<0.005	0.00148	<0.005	<0.005	<0.0001	1.4
RSEM-R6E-EOP	8/1/2022 11:55	AYR821	M	C256691	0.00067	0.054	<0.0002	0.0105	18.3	0.0278	<0.0000019	0.0041	0.0015	<0.01	3.52	0.00094	4.2	<0.00002	18.3	0.321	25.8	0.000014	<0.005	<0.005	0.00152	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	8/2/2022 11:35	AYU375	M	C257067	0.00056	0.107	<0.0002	0.018	23.7	0.0635	<0.0000019	0.0044	0.004	<0.01	6.09	0.00109	3.23	<0.00002	21.9	1.34	39.3	0.00002	<0.005	<0.005	0.00184	<0.005	<0.005	<0.0001	0.13
RSEM-R6E-EOP	8/2/2022 11:45	AYU376	D	C257067	0.00053	<0.01	<0.0002	0.018	24.1	0.0622	<0.0000019	0.0044	0.0041	<0.01	6.23	0.00097	3.58	<0.00002	22.3	1.35	39.2	0.000019	<0.005	<0.005	0.00185	<0.005	<0.005	<0.0001	2.0
RSEM-R6E-EOP	8/3/2022 11:50	AYX380	M	C257672	0.00059	<0.01	<0.0002	0.0183	22.3	0.0066	<0.0000019	0.0048	0.0032	<0.01	5.87	0.00097	4.12	<0.00002	20.9	1.3	39.6	0.00002	<0.005	<0.005	0.00192	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	8/4/2022 11:00	AYY903	M	C257848	<0.0005	<0.01	<0.0002	0.015	20.2	0.0069	<0.0000019	0.0047	0.0017	<0.01	5.37	0.00104	4.46	<0.00002	21.1	0.992	30.5	0.000015	<0.005	<0.005	0.00164	<0.005	<0.005	<0.0001	2.2
RSEM-R6E-EOP	8/5/2022 10:10	AYY783	M	C257846	0.00056	<0.01	<0.0002	0.0159	20.3	0.0025	<0.0000019	0.0047	0.0024	<0.01	5.14	0.00092	4.22	<0.00002	21.0	1.01	36.7	0.000018	<0.005	<0.005	0.0018	<0.005	<0.005	<0.0001	0.97
RSEM-R6E-EOP	8/6/2022 11:20	AZA353	M	C258076	<0.0005	<0.01	<0.0002	0.0143	19.9	0.0038	<0.0000019	0.0044	0.0015	<0.01	4.61	0.00109	4.58	<0.00002	20.7	0.741	28.0	0.000018	<0.005	<0.005	0.00165	<0.005	<0.005	<0.0001	1.9
RSEM-R6E-EOP	8/6/2022 11:20	AZA354	D	C258076	<0.0005	<0.01	<0.0002	0.0146	19.8	0.004	<0.0000019	0.0045	0.0015	<0.01	4.52	0.0011	4.59	<0.00002	20.8	0.741	28.0	0.000016	<0.005	<0.005	0.00165	<0.005	<0.005	<0.0001	1.7
RSEM-R6E-EOP	8/7/2022 12:10	AZC300	M	C258444	<0.0005	<0.01	<0.0002	0.0145	19.6	0.0028	<0.0000019	0.0042	0.0012	<0.01	4.19	0.00107	4.61	<0.00002	20.5	0.589	28.0	0.000016	<0.005	<0.005	0.00165	<0.005	<0.005	<0.0001	2.2
RSEM-R6E-EOP	8/8/2022 16:00	AZK277	M	C259762	<0.0005	<0.01	<0.0002	0.0147	19.1	<0.001	<0.0000019	0.004	0.001	<0.01	3.85	0.00099	4.21	<0.00002	21.1	0.423	27.7	0.000014	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	1.0
RSEM-R6E-EOP	8/9/2022 13:00	AZK373	M	C259776	<0.0005	<0.01	<0.0002	0.0153	19.3	0.002	<0.0000019	0.0041	0.0011	<0.01	3.97	0.00105	4.31	<0.00002	21.0	0.465	27.1	0.000014	<0.005	<0.005	0.00153	<0.005	<0.005	<0.0001	1.1
RSEM-R6E-EOP	8/10/2022 15:00	AZL947	M	C259983	<0.0005	<0.01	<0.0002	0.0138	19.7	<0.001	<0.0000019	0.0039	<0.001	<0.01	3.70	0.00091	4.46	<0.00002	21.2	0.373	26.9	0.000014	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	1.8
RSEM-R6E-EOP	8/11/2022 13:30	AZL943	M	C259981	<0.0005	<0.01	<0.0002	0.016	19.5	<0.001	<0.0000019	0.0036	<0.001	<0.01	3.59	0.00086	4.85	<0.00002	20.4	0.332	29.4	0.000011	<0.005	<0.005	0.00143	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	8/12/2022 12:00	AZL945	M	C259982	<0.0005	<0.01	<0.0002	0.0155	19.1	<0.001	<0.0000019	0.0035	<0.001	<0.01	3.42	0.00088	4.26	<0.00002	19.8	0.304	27.7	0.000012	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	1.8
RSEM-R6E-EOP	8/13/2022 10:00	AZR090	M	C260796	<0.0005	<0.01	<0.0002	0.0154	18.8	<0.001	<0.0000019	0.0035	<0.001	<0.01	3.27	0.00083	4.2	<0.00002	19.4	0.27	26.8	0.000012	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	0.24
RSEM-R6E-EOP	8/14/2022 14:30	AZR292	M	C260829	<0.0005	<0.01	<0.0002	0.0137	19.4	0.0061	<0.0000019	0.0032	0.001	<0.01	3.55	0.0008	4.94	<0.00002	20.6	0.275	28.5	0.00001	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	1.6
RSEM-R6E-EOP	8/14/2022 14:40	AZR295	D	C260829	<0.0005	<0.01	<0.0002	0.0142	18.4	0.0068	<0.0000019	0.0036	0.001	<0.01	3.29	0.00081	4.95	<0.00002	19.3	0.308	26.9	0.000014	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	1.7
RSEM-R6E-EOP	8/15/2022 14:30	AZW324	M	C261663	<0.0005	<0.01	<0.0002	0.0172	19.1	0.0081	<0.0000019	0.0038	0.0013	<0.01	4.09	0.00082	4.16	<0.00002	20.1	0.464	26.8	0.000014	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	2.0
RSEM-R6E-EOP	8/16/2022 13:00	AZW500	M	C261690	<0.0005	<0.01	<0.0002	0.0164	19.0	0.0023	<0.0000019	0.0038	0.0011	<0.01	3.87	0.00083	4.04	<0.00002	20.3	0.424	27.1	0.000013	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	1.7
RSEM-R6E-EOP	8/17/2022 13:30	BAA263	M	C262437	<0.0005	<0.01	<0.0002	0.0164	19.4	<0.001	<0.0000019	0.0037	0.001	<0.01	4.08	0.00078	4.75	<0.00002	21.5	0.401	30.8	0.000012	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	8/18/2022 13:00	BAA274	M	C262439	<0.0005	<0.01	<0.0002	0.015	17.8	<0.001	<0.0000019	0.0035	<0.001	<0.01	3.70	0.0008	4.45	<0.00002	20.5	0.341	26.2	0.000011	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	1.3
RSEM-R6E-EOP	8/19/2022 10:00	BAA260	M	C262436	<0.0005	<0.01	<0.0002	0.0145	17.7	<0.001	<0.0000019	0.0036	<0.001	<0.01	3.68	0.00075	4.38	<0.00002	20.8	0.319	27.4	0.000012	<0.005	<0.005	0.00131	<0.005	<0.005	<0.0001	1.7
RSEM-R6E-EOP	8/20/2022 11:30	BAD640	M	C262969	0.00098	<0.01	<0.0002	0.0146	18.1	0.0013	<0.0000019	0.0039	0.001	<0.01	3.82	0.00071	4.52	<0.00002	21.5	0.325	30.3	0.000013	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	1.8
RSEM-R6E-EOP	8/21/2022 11:00	BAD601	M	C262959	0.00052	<0.01	<0.0002	0.014	17.6	0.0011	<0.0000019	0.0037	0.001	<0.01	3.85	0.00073	4.4	<0.00002	21.5	0.296	30.3	0.000011	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	1.7
RSEM-R6E-EOP	8/22/2022 13:30	BAG918	M	C263407	<0.0005	0.014	<0.0002	0.0141	17.0	0.0026	<0.0000019	0.0037	0.0011	<0.01	3.70	0.00072	4.37	<0.00002	21.3	0.275	28.6	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	1.8
RSEM-R6E-EOP	8/23/2022 13:30	BAM964	M	C264451	<0.0005	0.018	<0.0002	0.0135	17.3	0.0024	<0.0000019	0.0042	<0.001	<0.01	3.99	0.00076	4.62	<0.00002	22.5	0.28	27.3	<0.00001	<0.005	<0.005	0.0006	<0.005	<0.005	<0.0001	1.9
RSEM-R6E-EOP	8/23/2022 14:00	BAM967	D	C264451	<0.0005	0.012	<0.0002	0.013	17.1	0.0017	<0.0000019	0.004	<0.001	<0.01	3.97	0.00079	4.66	<0.00002	22.5	0.279	29.1	<0.00001	<0.005	<0.005	0.00051	<0.005	<0.005	<0.0001	2.1
RSEM-R6E-EOP	8/24/2022 13:30	BAM915	M	C264441	<0.0005	0.014	<0.0002	0.0138	17.3	0.0017	<0.0000019	0.0042	<0.001	<0.01	3.91	0.00082	5.29	<0.00002	22.9	0.274	28.1	<0.00001	<0.005	<0.005	0.00064	<0.005	<0.005	<0.0001	2.0
RSEM-R6E-EOP	8/25/2022 15:15	BAO144	M	C264632	<0.0005	0.024	<0.0002	0.015	18.8	0.0011	0.0000023	0.0038	0.0011	<0.01	3.78	0.00063	5.13	<0.00002	23.1	0.258	27.0	<0.00001	<0.005	<0.005	0.00119	<0.005	<0.005	<0.0001	2.2
RSEM-R6E-EOP	8/26/2022 6:30	BAO137	M	C264629	<0.0005	0.023	<0.0002	0.0147	19.0	<0.001	<0.0000019	0.0036	0.0011	<0.01	3.83	0.00068	4.94	<0.00002	22.3	0.249	27.0	<0.00001	<0.005	<0.005	0.00119	<0.005	<0.005	<0.0001	0.11
RSEM-R6E-EOP	8/27/2022 12:30	BAR925	M	C265307	<0.0005	0.04	<0.0002	0.0122	16.9	0.0136	<0.0000019	0.0037	0.0013	<0.01	3.85	0.00059	3.97	<0.00002	19.3	0.263	23.1	<0.00001	<0.005	<0.005	0.00119	<0.005	<0.005	<0.0001	2.0
RSEM-R6E-EOP	8/28/2022 14:00	BAR946	M	C265316	<0.0005	0.036	<0.0002	0.0121	17.7	0.0037	<0.0000019	0.0033	0.0012	<0.01	3.68	0.00064	4.04	<0.00002	18.0	0.244	24.2	<0.00001	<0.005	<0.005	0.00117	<0.005	<0.005	<0.0001	2.4
RSEM-R6E-EOP	8/29/2022 14:10	BAU337	D	C265774	<0.0005	0.033	<0.0002	0.0115	16.6	0.0031	<0.0000019	0.0031	0.0011	<0.01	3.37	0.00057	3.33	<0.00002	16.2	0.241	23.5	<0.00001	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0001	2.2
RSEM-R6E-EOP	8/29/2022 14:30	BAU335	M	C265774	<0.0005	0.032	<0.0002	0.0119	17.3	0.0027	<0.0000019	0.003	0.0011	<0.01	3.41	0.00061	3.39	<0.00002	16.8	0.24	23.6	<0.00001	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	2.0
RSEM-R6E-EOP	8/30/2022 13:30	BBA809	M	C266812	<0.0005	0.029	<0.0002	0.0118	17.5	0.0037	<0.0000019	0.0028	<0.001	<0.01	3.33	0.00057	3.97	<0.00002	15.0	0.237	22.9	<0.00001	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	1.9
RSEM-R6E-EOP	8/31/2022 14:10	BBA806	M	C266810	<0.0005	0.023	<0.0002	0.0121	17.4	0.0033	<0.0000019	0.0034	<0.001	<0.01	3.35	0.00055	4.13	<0.00002	15.0	0.259	25.3	<0.00001	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0001	2.1
RSEM-R6E-EOP	9/1/2022 13:00	BBC912	M	C267169	<0.0005	0.017	<0.0002	0.0125	17.1	<0.001	<0.0000019	0.0036	<0.001	<0.01	3.37	0.00055	3.91	<0.00002	14.9	0.223	22.0	<0.00001	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	1.4
RSEM-R6E-EOP	9/2/2022 9:00	BBC920	M	C267172	<0.0005	0.014	<0.0002	0.0116	16.8	<0.001	<0.0000019	0.0033	<0.001	<0.01	3.33	0.00056	3.92	<0.00002	14.3	0.219	20.9	<0.00001	<0.005	<0.005	0.00109	<0.005	<0.005	<0.0001	0.76
RSEM-R6E-EOP	9/3/2022 14:30	BBE154	M	C267383	<0.0005	0.01	<0.0002	0.0118	17.5	<0.001	<0.0000019	0.0032	<0.001	<0.01	3.27	0.00052	3.95	<0.00002	13.9	0.222	22.2	<0.00001	<0.005	<0.005	0.0011	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	9/4/2022 14:00	BBI404	M	C268301	<0.0005	<0.01	<0.0002	0.0101	16.4	0.0016	<0.0000019	0.003	<0.001	<0.01	3.24	0.00053	3.81	<0.00002	13.1	0.214	20.7	<0.00001	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0001	2.3

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
RSEM-R6E-EOP	9/4/2022 14:10	BBI407	D	C268301	<0.0005	<0.01	<0.0002	0.0101	16.4	0.0026	0.0000027	0.003	<0.001	<0.01	3.18	0.00052	3.82	<0.00002	12.9	0.214	20.6	<0.00001	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	2.0
RSEM-R6E-EOP	9/5/2022 13:00	BBI327	M	C268286	<0.0005	<0.01	<0.0002	0.0328	16.4	0.0028	<0.0000019	0.003	<0.001	0.049	3.24	0.00054	3.86	<0.00002	13.7	0.215	20.7	<0.00001	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0001	1.6
RSEM-R6E-EOP	9/6/2022 15:15	BBI318	M	C268280	<0.0005	<0.01	<0.0002	0.0101	16.7	0.0013	<0.0000019	0.003	<0.001	<0.01	3.26	0.00055	3.76	<0.00002	13.6	0.207	21.4	<0.00001	<0.005	<0.005	0.00109	<0.005	<0.005	0.00112	1.4
RSEM-R6E-EOP	9/7/2022 11:50	BBM321	M	C268788	<0.0005	<0.01	<0.0002	0.009	16.4	0.0024	<0.0000019	0.0028	<0.001	<0.01	3.21	0.00057	3.9	<0.00002	14.2	0.215	21.9	<0.00001	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	2.3
RSEM-R6E-EOP	9/7/2022 12:00	BBM322	D	C268788	<0.0005	<0.01	<0.0002	0.009	16.6	0.0022	<0.0000019	0.0029	<0.001	<0.01	3.22	0.00055	3.94	<0.00002	14.1	0.219	21.9	<0.00001	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	2.2
RSEM-R6E-EOP	9/8/2022 13:30	BBO445	M	C269143	<0.0005	<0.01	<0.0002	0.0088	16.0	<0.001	<0.0000019	0.0026	<0.001	<0.01	3.05	0.0005	4.56	<0.00002	12.2	0.196	19.2	<0.00001	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	1.8
RSEM-R6E-EOP	9/9/2022 10:30	BBS001	M	C269764	<0.0005	<0.01	<0.0002	0.0086	14.9	0.0017	<0.0000019	0.0024	<0.001	<0.01	2.84	0.00047	3.94	<0.00002	10.5	0.187	17.6	<0.00001	<0.005	<0.005	0.00097	<0.005	<0.005	<0.0001	2.4
RSEM-R6E-EOP	9/10/2022 12:20	BBR900	M	C269730	0.0008	<0.01	<0.0002	0.0072	14.5	0.0027	<0.0000019	0.0025	<0.001	<0.01	2.74	0.00051	3.96	<0.00002	8.71	0.178	17.7	0.00001	<0.005	<0.005	0.00096	<0.005	<0.005	<0.0001	3.1
RSEM-R6E-EOP	9/10/2022 12:30	BBR901	D	C269730	<0.0005	<0.01	<0.0002	0.0071	14.8	0.0027	<0.0000019	0.0025	<0.001	<0.01	2.83	0.00054	4.02	<0.00002	8.97	0.179	18.1	0.00001	<0.005	<0.005	0.00096	<0.005	<0.005	<0.0001	2.5
RSEM-R6E-EOP	9/11/2022 14:30	BBR959	M	C269754	<0.0005	<0.01	<0.0002	0.0083	14.7	0.0025	<0.0000019	0.0022	<0.001	<0.01	2.82	0.00056	4.07	<0.00002	7.77	0.175	15.7	0.000014	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	3.1
RSEM-R6E-EOP	9/12/2022 11:50	BBU605	M	C270263	<0.0005	<0.01	<0.0002	0.008	14.9	0.0027	<0.0000019	0.0022	<0.001	<0.01	2.88	0.00057	3.86	<0.00002	7.58	0.178	14.7	0.000014	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	2.2
RSEM-R6E-EOP	9/13/2022 14:10	BBX514	M	C270776	<0.0005	<0.01	<0.0002	0.0084	14.3	0.0041	<0.0000019	0.0021	<0.001	<0.01	2.83	0.00068	3.76	<0.00002	7.38	0.172	15.0	0.000015	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	2.1
RSEM-R6E-EOP	9/14/2022 10:05	BBZ913	M	C271275	<0.0005	<0.01	<0.0002	0.0082	15.9	<0.001	<0.0000019	0.0021	<0.001	<0.01	2.93	0.00058	4.45	<0.00002	8.63	0.179	15.9	0.000015	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	2.8
RSEM-R6E-EOP	9/14/2022 10:15	BBZ914	D	C271275	<0.0005	<0.01	<0.0002	0.0082	15.9	<0.001	<0.0000019	0.002	<0.001	<0.01	2.92	0.00057	4.27	<0.00002	8.75	0.172	16.3	0.000016	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	3.2
RSEM-R6E-EOP	9/15/2022 9:30	BCC124	M	C271667	<0.0005	<0.01	<0.0002	0.0083	15.9	0.0013	<0.0000019	0.002	<0.001	<0.01	2.86	0.00055	4.47	<0.00002	9.22	0.172	16.4	0.000014	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	3.6
RSEM-R6E-EOP	9/16/2022 12:40	BCF677	M	C272242	<0.0005	<0.01	<0.0002	0.0077	15.2	0.0035	<0.0000019	0.0024	<0.001	<0.01	2.92	0.00056	4.03	<0.00002	8.91	0.177	17.3	0.000015	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	2.1
RSEM-R6E-EOP	9/16/2022 12:50	BCF678	D	C272242	<0.0005	<0.01	<0.0002	0.0076	14.6	0.0031	0.000002	0.0025	<0.001	<0.01	2.81	0.00056	3.97	<0.00002	8.64	0.174	16.5	0.000015	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	1.9
RSEM-R6E-EOP	9/17/2022 11:10	BCF750	M	C272259	<0.0005	<0.01	<0.0002	0.0133	17.7	0.0087	0.0000021	0.0037	0.0016	<0.01	4.67	0.0006	4.12	<0.00002	13.0	0.647	22.9	0.000018	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	2.5
RSEM-R6E-EOP	9/18/2022 11:10	BCF722	M	C272251	<0.0005	<0.01	<0.0002	0.0148	18.3	0.0105	<0.0000019	0.0041	0.0016	<0.01	5.11	0.00077	4.15	<0.00002	14.7	0.834	24.9	0.000017	<0.005	<0.005	0.00136	<0.005	<0.005	<0.0001	2.7
RSEM-R6E-EOP	9/19/2022 9:20	BCI768	M	C272683	<0.0005	<0.01	<0.0002	0.0131	17.0	0.0059	<0.0000019	0.0036	0.0014	<0.01	4.25	0.00071	4.55	<0.00002	12.3	0.586	24.0	0.000016	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	4.0
RSEM-R6E-EOP	9/20/2022 14:50	BCL543	M	C273070	<0.0005	<0.01	<0.0002	0.0102	15.8	0.0027	<0.0000019	0.0032	0.0011	<0.01	3.41	0.00062	4.17	<0.00002	11.4	0.305	20.8	0.000012	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	1.9
RSEM-R6E-EOP	9/21/2022 13:15	BCR697	M	C273972	<0.0005	<0.01	<0.0002	0.0092	15.3	0.0017	<0.0000019	0.0032	0.001	<0.01	3.22	0.0006	4.04	<0.00002	11.5	0.255	20.8	0.000012	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	1.2
RSEM-R6E-EOP	9/22/2022 14:30	BCR616	D	C273969	<0.0005	<0.01	<0.0002	0.0089	14.8	0.0012	<0.0000019	0.0031	<0.001	<0.01	3.12	0.00057	3.58	<0.00002	11.7	0.241	21.1	0.000011	<0.005	<0.005	0.00096	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	9/22/2022 14:45	BCR614	M	C273969	<0.0005	<0.01	<0.0002	0.0089	14.9	0.0013	<0.0000019	0.0031	<0.001	<0.01	3.22	0.00059	3.6	<0.00002	11.9	0.242	20.8	0.000013	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	1.4
RSEM-R6E-EOP	9/23/2022 11:15	BCR891	M	C273985	<0.0005	<0.01	<0.0002	0.009	14.8	0.0025	<0.0000019	0.0031	<0.001	<0.01	3.22	0.00061	3.65	<0.00002	11.9	0.241	21.0	0.000013	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	1.6
RSEM-R6E-EOP	9/24/2022 10:00	BCV560	M	C274577	<0.0005	<0.01	<0.0002	0.0089	14.8	0.0017	<0.0000019	0.0031	0.0012	<0.01	3.26	0.00056	3.45	<0.00002	11.8	0.228	20.7	0.000011	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	9/25/2022 14:15	BCV619	M	C274593	<0.0005	<0.01	<0.0002	0.0088	14.6	0.003	<0.0000019	0.0032	<0.001	<0.01	3.22	0.00057	3.38	<0.00002	12.0	0.212	20.5	0.000014	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	1.9
RSEM-R6E-EOP	9/26/2022 9:15	BCV504	M	C274562	<0.0005	<0.01	<0.0002	0.0085	14.5	0.0042	<0.0000019	0.0033	<0.001	<0.01	3.33	0.00051	3.71	<0.00002	11.8	0.224	20.0	0.000012	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	2.7
RSEM-R6E-EOP	9/27/2022 10:20	BDB609	M	C275584	<0.0005	<0.01	<0.0002	0.0094	14.2	0.0032	<0.0000019	0.0031	<0.001	<0.01	3.17	0.00045	4.02	<0.00002	10.9	0.217	19.8	0.000014	<0.005	<0.005	0.00087	<0.005	<0.005	<0.0001	1.7
RSEM-R6E-EOP	9/28/2022 10:20	BDE178	M	C276033	<0.001	<0.02	<0.0004	0.0093	13.9	0.0028	<0.0000019	0.0029	<0.002	<0.02	3.25	0.00045	4.15	<0.00004	9.82	0.201	18.6	<0.00002	<0.01	<0.01	0.00076	<0.01	<0.01	<0.0002	2.9
RSEM-R6E-EOP	9/28/2022 10:30	BDE179	D	C276033	<0.0005	<0.01	<0.0002	0.009	14.0	0.0032	<0.0000019	0.003	<0.001	<0.01	3.24	0.00045	4.02	<0.00002	9.87	0.21	19.6	0.000014	<0.005	<0.005	0.00082	<0.005	<0.005	<0.0001	2.1
RSEM-R6E-EOP	9/29/2022 10:30	BDH540	M	C276348	<0.0005	<0.01	<0.0002	0.0068	13.8	0.0013	<0.0000019	0.003	<0.001	<0.01	2.69	0.00053	4.05	<0.00002	7.97	0.19	18.3	0.000013	<0.005	<0.005	0.00099	<0.005	<0.005	<0.0001	9.2
RSEM-R6E-EOP	9/30/2022 10:45	BDH543	M	C276348	<0.0005	<0.01	<0.0002	0.0063	13.5	0.0011	<0.0000019	0.003	<0.001	<0.01	2.51	0.00053	4.08	<0.00002	7.43	0.184	18.3	0.000014	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	4.4
RSEM-R6E-EOP	10/1/2022 9:30	BDL248	M	C276877	<0.0005	<0.01	<0.0002	0.0061	13.4	0.0011	<0.0000019	0.0031	<0.001	<0.01	2.50	0.00056	4.22	<0.00002	7.51	0.176	18.9	0.000013	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	4.9
RSEM-R6E-EOP	10/1/2022 9:40	BDL251	D	C276877	<0.0005	<0.01	<0.0002	0.0062	13.5	0.0012	<0.0000019	0.0031	<0.001	<0.01	2.50	0.00051	4.11	<0.00002	7.51	0.18	19.0	0.000013	<0.005	<0.005	0.00109	<0.005	<0.005	<0.0001	5.4
RSEM-R6E-EOP	10/2/2022 10:15	BDL180	M	C276859	<0.0005	<0.01	<0.0002	0.0062	13.3	0.0024	<0.0000019	0.0031	<0.001	<0.01	2.50	0.00052	4	<0.00002	7.71	0.178	18.0	0.000014	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0001	5.5
RSEM-R6E-EOP	10/3/2022 10:20	BDP149	M	C277443	<0.0005	<0.01	<0.0002	0.0067	13.6	0.004	<0.0000019	0.0033	<0.001	<0.01	2.67	0.00057	3.74	<0.00002	8.87	0.169	19.9	0.000012	<0.005	<0.005	0.00109	<0.005	<0.005	<0.0001	3.6
RSEM-R6E-EOP	10/4/2022 10:25	BDR435	M	C277814	<0.0005	<0.01	<0.0002	0.0066	13.4	<0.001	<0.0000019	0.0036	<0.001	<0.01	2.63	0.00059	3.9	<0.00002	9.95	0.165	20.6	0.000011	<0.005	<0.005	0.00113	<0.005	<0.005	<0.0001	18
RSEM-R6E-EOP	10/5/2022 10:45	BDV020	M	C278393	0.00073	<0.01	<0.0002	0.0207	21.5	0.0027	<0.0000019	0.0114	0.0017	<0.01	5.56	0.0016	3.17	<0.00002	102	0.188	88.5	0.00001	<0.005	<0.005	0.00196	<0.005	<0.005	<0.0001	7.5
RSEM-R6E-EOP	10/6/2022 10:40	BDZ970	M	C278888	<0.0005	<0.01	<0.0002	0.0058	14.2	0.003	<0.0000019	0.003	0.001	<0.01	2.32	0.00051	4.19	<0.00002	8.22	0.17	22.0	<0.00001	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	8.3
RSEM-R6E-EOP	10/7/2022 12:00	BEA025	M	C278893	<0.0005	<0.01	<0.0002	0.0056	14.1	0.0031	<0.0000019	0.0028	<0.001	<0.01	2.30	0.0005	4.07	<0.00002	7.74	0.167	21.8	<0.00001	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	3.1
RSEM-R6E-EOP	10/8/2022 10:15	BED963	M	C279402	<0.0005	<0.01	<0.0002	0.0057	14.4	0.0028	<0.0000019	0.0028	<0.001	<0.01	2.42	0.0005	3.9	<0.00002	8.00	0.162	21.7	<0.00001	<0.005	<0.005	0.00097	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	10/9/2022 9:35	BED925	M	C279394	<0.0005	<0.01	<0.0002	0.0054	13.8	0.0027	<0.0000019	0.0028	<0.001	<0.01	2.29	0.00049	3.79	<0.00002	7.61	0.159	21.6	0.00001	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	10/10/2022 9:55	BED792	M	C279368	0.00132	<0.01	<0.0002	0.0055	13.7	0.0028	<0.0000019	0.0031	<0.001	<0.01	2.31	0.00048	3.64	<0.00002	7.68	0.158	21.2	<0.00001	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	1.5
RSEM-R6E-EOP	10/11/2022 12:15	BEK435	M	C280406	<0.0005	<0.01	<0.0002	0.0062	13.8	0.0029	<0.0000019	0.0029	0.001	<0.01	2.37	0.00053	3.69	<0.00002	7.86	0.166	22.3	<0.00001	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	4.1
RSEM-R6E-EOP	10/12/2022 14:30	BEK645	M	C280448	<0.0005	<0.01	<0.0002	0.0063	13.7	0.0034	<0.0000019	0.0029	0.0013	<0.01	2.39	0.00052	3.6	<0.00002	7.93	0.161	22.0	<0.00001	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	1.6
RSEM-R6E-EOP	10/13/2022 13:00	BEN617	M	C280837	<0.0005	<0.01	<0.0002	0.0066	14.2	0.0043	<0.0000019	0.0029	<0.001	<0.01	2.40	0.00051	3.49	<0.00002	8.27	0.165	21.8	<0.00001	<0.005	<0.005	0.00098	<0.005	<0.005	<0.0001	2.7
RSEM-R6E-EOP	10/13/2022 13:30	BEN619	D	C280837	<0.0005	<0.01	<0.0002	0.0064	14.4	0.0036	<0.0000019	0.003	<0.001	<0.01	2.42	0.00049	3.66	<0.00002	8.34	0.168	21.1	0.00001	<0.005	<0.005	0.00101	<0.005	<0.005	<0.0001	3.4
RSEM-R6E-EOP	10/14/2022 11:30	BEN599	M	C280833	<0.0005	<0.01	<0.0002	0.0062	14.2	0.0035	<0.0000019	0.003	<0.001	<0.01	2.45	0.00048	3.66	<0.00002	8.07	0.165	20.5	0.000012	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	2.0
RSEM-R6E-EOP	10/15/2022 13:30	BER007	M	C281389	<0.0005	<0.01	<0.0002	0.0064	14.3	0.0013	<0.0000019	0.0031	<0.001	<0.01	2.50	0.00049	3.54	<0.00002	8.16	0.161	19.5	0.000011	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	2.3
RSEM-R6E-EOP	10/16/2022 15:30	BER094	M	C281399	<0.0005	<0.01	<0.0002	0.0064	14.2	0.0032	<0.0000019	0.003	<0.001	<0.01	2.54	0.0005	3.68	<0.00002	8.63	0.167	20.6	0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	2.8
RSEM-R6E-EOP	10/17/2022 11:15	BER150	M	C281421	<0.0005	<0.01	<0.0002	0.0057	14.3	0.0027	<0.0000019	0.003	<0.001	<0.01	2.46	0.00052	3.64	<0.00002	8.05	0.161	20.8	0.00001	<0.005	<0.005	0.00097	<0.005	<0.005	<0.0001	2.1
RSEM-R6E-EOP	10/18/2022 9:30	BEX619	M	C282315	<0.0005	<0.01	<0.0002	0.0059	13.4	0.0026	<0.0000019	0.0028	<0.001	<0.01	2.58	0.00049	3.6	<0.00002	7.53	0.169	20.0	<0.00001	<0.005	<0.005	0.00096	<0.005	<0.005	<0.0001	3.9
RSEM-R6E-EOP	10/19/2022 12:30	BFA345	M	C282741	<0.0005	<0.01	<0.0002	0.0051	13.3	0.0017	<0.0000019	0.0029	<0.001	<0.01	2.50	0.00059	3.26	<0.00002	7.85	0.158	20.6	0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	2.1
RSEM-R6E-EOP	10/19/2022 12:40	BFA346	D	C282741	<0.0005	<0.01	<0.0002	0.0048	13.2	0.0017	<0.0000019	0.0028	<0.001	0.016	2.44	0.00063	3.32	<0.00002	7.55	0.145	18.9	<0.00001	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	2.5
RSEM-R6E-EOP	10/20/2022 10:00	BFD236	M	C283174	<0.0005	<0.01	<0.0002	0.0063	14.1	0.0013	<0.0000019	0.0029	<0.001	<0.01	2.60	0.00052	3.67	<0.00002	8.19	0.162	20.3	0.000012	<0.005	<0.005	0.00101	<0.005	<0.005	<0.0001	4.2
RSEM-R6E-EOP	10/21/2022 10:10	BFD223	M	C283172	<0.0005	<0.01	<0.0002	0.0064	14.1	0.0027	<0.0000019	0.003	<0.001	<0.01	2.69	0.00054	3.79	<0.00002	8.34	0.164	21.0	0.000011	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	5.5
RSEM-R6E-EOP	10/22/2022 11:20	BFI041	M	C283756	<0.0005	<0.01	<0.0002	0.0056	14.3	0.0016	<0.0000019	0.0028	<0.001	<0.01	2.47	0.0005	3.57	<0.00002	7.87	0.163	21.0	0.00001	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	3.2
RSEM-R6E-EOP	10/22/2022 11:30	BFI042	D	C283756	<0.0005	<0.01	<0.0002	0.0056	13.8	0.0016	<0.0000019	0.0028	<0.001	<0.01	2.46	0.00049	3.63	<0.00002	7.75	0.16	20.5	<0.00001	<0.005	<0.005	0.00094	<0.005	<0.005	<0.0001	3.0
RSEM-R6E-EOP	10/23/2022 10:15	BFI228	M	C283774	<0.0005	<0.01	<0.0002	0.0059	13.6	0.0014	<0.0000019	0.0026	<0.001	<0.01	2.49	0.00048	3.97	<0.00002	7.40	0.157	20.5	0.00001	<0.005	<0.005	0.00097	<0.005	<0.005	<0.0001	2.7
RSEM-R6E-EOP	10/24/2022 9:45	BFL669	M	C284145	<0.0005	<0.01	<0.0002	0.0058	13.3	0.0028	<0.0000019	0.0027	<0.001	<0.01	2.47	0.0005	4.1	<0.00002	7.18	0.155	19.7	<0.00001	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	2.7
RSEM-R6E-EOP	10/25/2022 10:35	BFP705	M	C284665	<0.0005	<0.01	<0.0002	0.0058	13.5	0.0059	<0.0000019	0.0028	<0.001	<0.01	2.71	0.00055	3.75	<0.00002	8.31	0.24	18.8	<0.00001	<0.005	<0.005	0.00097	<0.005	<0.005	<0.0001	5.9
RSEM-R6E-EOP	10/25/2022 10:45	BFP706	D	C284665	<0.0005	<0.01	<0.0002	0.0058	13.2	0.0058	<0.0000019	0.0027	<0.001	<0.01	2.67	0.00057	3.74	<0.00002	8.18	0.244	17.9	<0.00001	<0.005	<0.005	0.00097	<0.005	<0.005	<0.0001	5.2
RSEM-R6E-EOP	10/26/2022 12:30	BFS034	M	C285038	<0.0005	<0.01	<0.0002	0.0058	13.4	0.0063	<0.0000019	0.0027	<0.001	<0.01	2.68	0.00055	3.73	<0.00002	8.35	0.23	18.6	<0.00001	<0.005	<0.005	0.001	<0.005	<0.005	<0.0001	5.3
RSEM-R6E-EOP	10/27/2022 10:05	BFU904	M	C285466	<0.0005	<0.01	<0.0002	0.0055	13.0	0.0052	<0.0000019	0.0027	<0.001	<0.01	2.57	0.00052	3.69	<0.00002	7.87	0.199	20.6	<0.00001	<0.005	<0.005	0.00092	<0.005	<0.005	<0.0001	7.7
RSEM-R6E-EOP	10/27/2022 10:15	BFU905	D	C285466	<0.0005	<0.01	<0.0002	0.0055	13.0	0.0052	0.0000026	0.0027	<0.001	<0.01	2.51	0.00054	3.69	<0.00002	7.78	0.198	18.8	<0.00001	<0.005	<0.005	0.0009	<0.005	<0.005	<0.0001	8.6
RSEM-R6E-EOP	10/28/2022 11:30	BFU721	M	C285458	<0.0005	<0.01	<0.0002	0.0058	13.6	0.0034	<0.0000019	0.0028	<0.001	<0.01	2.42	0.00057	3.58	<0.00002	8.49	0.178	18.9	0.000013	<0.005	<0.005	0.00096	<0.005	<0.005	<0.0001	11
RSEM-R6E-EOP	10/29/2022 9:45	BFZ653	M	C286199	<0.0005	<0.01	<0.0002	0.0055	13.7	0.0032	<0.0000019	0.0028	<0.001	<0.01	2.35	0.0006	3.6	<0.00002	8.33	0.157	19.7	0.000011	<0.005	<0.005	0.0009	<0.005	<0.005	<0.0001	23

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
RSEM-R6E-EOP	10/30/2022 11:20	BFZ645	M	C286196	<0.0005	<0.01	<0.0002	0.0051	13.1	0.003	0.000002	0.0028	<0.001	<0.01	2.29	0.00059	3.59	<0.00002	7.56	0.15	19.5	0.000011	<0.005	<0.005	0.0009	<0.005	<0.005	<0.0001	14
RSEM-R6E-EOP	10/31/2022 11:00	BGA235	M	C286288	<0.0005	<0.01	<0.0002	0.0051	13.0	0.0042	<0.0000019	0.0029	<0.001	<0.01	2.24	0.00064	3.7	<0.00002	7.68	0.145	19.6	<0.00001	<0.005	<0.005	0.0008	<0.005	<0.005	<0.0001	9.7
RSEM-R6E-EOP	11/1/2022 15:20	BGE763	M	C286877	0.00063	0.045	<0.0002	0.0048	13.0	0.0049	<0.0000019	0.0032	0.0078	<0.01	1.93	0.00061	3.22	<0.00002	7.17	0.141	17.0	<0.00001	<0.005	<0.005	0.00077	<0.005	<0.005	<0.0001	3.9
RSEM-R6E-EOP	11/2/2022 12:30	BGJ735	M	C287754	<0.0005	<0.01	<0.0002	0.0042	12.8	0.0053	<0.0000019	0.0029	<0.001	<0.01	2.07	0.00058	3.83	<0.00002	6.90	0.152	19.0	<0.00001	<0.005	<0.005	0.00078	<0.005	<0.005	<0.0001	6.5
RSEM-R6E-EOP	11/3/2022 14:00	BGJ743	M	C287759	<0.0005	<0.01	<0.0002	0.0045	13.4	<0.001	<0.0000019	0.0027	<0.001	<0.01	2.06	0.00066	4.06	<0.00002	7.10	0.164	19.8	<0.00001	<0.005	<0.005	0.00084	<0.005	<0.005	<0.0001	7.7
RSEM-R6E-EOP	11/4/2022 11:00	BGJ738	M	C287756	<0.0005	<0.01	<0.0002	0.0043	13.3	0.0017	<0.0000019	0.0026	<0.001	<0.01	2.06	0.00064	4.12	<0.00002	6.87	0.166	19.6	<0.00001	<0.005	<0.005	0.00076	<0.005	<0.005	<0.0001	3.8
RSEM-R6E-EOP	11/5/2022 13:30	BGO362	M	C288361	<0.0005	<0.01	<0.0002	0.0045	13.3	0.009	<0.0000019	0.0027	<0.001	<0.01	2.03	0.00063	3.64	<0.00002	6.85	0.156	17.5	<0.00001	<0.005	<0.005	0.0008	<0.005	<0.005	<0.0001	2.9
RSEM-R6E-EOP	11/6/2022 14:15	BGO251	M	C288323	<0.0005	<0.01	<0.0002	0.0045	13.5	0.0076	<0.0000019	0.0026	<0.001	<0.01	2.06	0.00068	3.62	<0.00002	7.09	0.153	18.6	<0.00001	<0.005	<0.005	0.00084	<0.005	<0.005	<0.0001	7.6
RSEM-R6E-EOP	11/6/2022 14:30	BGO253	D	C288323	<0.0005	<0.01	<0.0002	0.0046	13.4	0.0084	<0.0000019	0.0027	<0.001	<0.01	2.08	0.00069	3.66	<0.00002	6.92	0.156	18.4	<0.00001	<0.005	<0.005	0.00084	<0.005	<0.005	<0.0001	6.5
RSEM-R6E-EOP	11/7/2022 10:00	BGO319	M	C288345	<0.0005	<0.01	<0.0002	0.0046	13.6	0.0099	<0.0000019	0.0027	<0.001	<0.01	2.09	0.00071	3.7	<0.00002	7.21	0.158	18.2	<0.00001	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	6.2
RSEM-R6E-EOP	11/8/2022 10:30	BGT300	M	C289111	0.00053	<0.005	<0.0002	0.0053	13.3	0.0107	<0.0000019	0.0027	<0.001	<0.01	2.21	0.0008	3.54	<0.00002	7.09	0.133	21.0	<0.00001	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	4.7
RSEM-R6E-EOP	11/9/2022 10:40	BGW281	M	C289508	<0.0005	<0.01	<0.0002	0.005	14.3	0.0084	<0.0000019	0.0028	<0.001	<0.01	2.22	0.00079	3.84	<0.00002	7.25	0.152	18.4	<0.00001	<0.005	<0.005	0.00081	<0.005	<0.005	<0.0001	4.3
RSEM-R6E-EOP	11/9/2022 10:50	BGW282	D	C289508	<0.0005	<0.01	<0.0002	0.0049	14.7	0.0086	<0.0000019	0.0027	<0.001	<0.01	2.24	0.00076	3.89	<0.00002	7.46	0.151	20.1	<0.00001	<0.005	<0.005	0.00085	<0.005	<0.005	<0.0001	3.3
RSEM-R6E-EOP	11/10/2022 10:50	BGV715	M	C289423	0.00027	<0.005	<0.0002	0.0053	12.4	0.0078	<0.0000019	0.0025	<0.001	<0.01	2.18	0.00077	3.46	<0.00002	6.54	0.131	18.3	<0.00001	<0.005	<0.005	0.00073	<0.005	<0.005	<0.0001	3.2
RSEM-R6E-EOP	11/11/2022 10:50	BHA031	M	C290104	0.00023	<0.005	<0.0002	0.0047	11.8	0.0092	<0.0000019	0.0024	<0.001	<0.01	2.22	0.00078	3.44	<0.00002	6.38	0.137	18.0	<0.00001	<0.005	<0.005	0.00078	<0.005	<0.005	<0.0001	5.4
RSEM-R6E-EOP	11/11/2022 11:00	BHA032	D	C290104	0.00026	<0.005	<0.0002	0.0046	12.2	0.0093	<0.0000019	0.0024	<0.001	<0.01	2.27	0.00076	3.39	<0.00002	6.57	0.139	18.0	<0.00001	<0.005	<0.005	0.0008	<0.005	<0.005	<0.0001	5.2
RSEM-R6E-EOP	11/12/2022 10:30	BHA061	M	C290112	0.00023	<0.005	<0.0002	0.0046	12.0	0.0097	<0.0000019	0.0024	<0.001	<0.01	2.20	0.00075	3.33	<0.00002	6.60	0.138	19.0	<0.00001	<0.005	<0.005	0.00083	<0.005	<0.005	<0.0001	4.8
RSEM-R6E-EOP	11/13/2022 11:10	BHA077	M	C290117	0.00022	<0.005	<0.0002	0.0046	11.8	0.0106	<0.0000019	0.0023	<0.001	<0.01	2.15	0.00075	3.37	<0.00002	6.61	0.135	17.8	<0.00001	<0.005	<0.005	0.00088	<0.005	<0.005	<0.0001	2.6
RSEM-R6E-EOP	11/14/2022 10:50	BHC286	M	C290544	<0.0005	<0.01	<0.0002	0.0047	12.0	0.0128	<0.0000019	0.0024	<0.001	<0.01	1.83	0.00093	3.25	<0.00002	7.59	0.136	16.7	<0.00001	<0.005	<0.005	0.00084	<0.005	<0.005	<0.0001	2.2
RSEM-R6E-EOP	11/15/2022 10:50	BHD949	M	C290817	<0.0005	<0.01	<0.0002	0.0048	12.5	0.0154	<0.0000019	0.0024	<0.001	<0.01	1.91	0.00099	3.44	<0.00002	8.73	0.142	16.9	<0.00001	<0.005	<0.005	0.00088	<0.005	<0.005	<0.0001	2.3
RSEM-R6E-EOP	11/15/2022 11:00	BHD950	D	C290817	<0.0005	<0.01	<0.0002	0.0048	12.5	0.0155	<0.0000019	0.0024	<0.001	<0.01	1.91	0.00101	3.53	<0.00002	8.74	0.143	17.8	<0.00001	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	2.2
RSEM-R6E-EOP	11/16/2022 12:10	BHF925	M	C291159	0.00031	<0.005	<0.0002	0.0046	14.2	0.0166	<0.0000019	0.0024	<0.001	<0.01	1.90	0.00098	3.48	<0.00002	8.96	0.146	17.9	<0.00001	<0.005	<0.005	0.0009	<0.005	<0.005	<0.0001	2.4
RSEM-R6E-EOP	11/17/2022 12:00	BHH895	M	C291494	<0.0005	<0.01	<0.0002	0.0048	12.4	0.0145	<0.0000019	0.0024	<0.001	<0.01	1.77	0.00097	3.45	<0.00002	8.80	0.137	17.6	<0.00001	<0.005	<0.005	0.00088	<0.005	<0.005	<0.0001	2.6
RSEM-R6E-EOP	11/18/2022 11:00	BHI799	M	C291574	<0.0005	<0.01	<0.0002	0.0051	12.4	0.0125	<0.0000019	0.0023	<0.001	<0.01	1.72	0.00104	3.52	<0.00002	8.33	0.133	16.4	<0.00001	<0.005	<0.005	0.00087	<0.005	<0.005	<0.0001	3.1
RSEM-R6E-EOP	11/19/2022 12:00	BHL409	M	C291899	0.00027	<0.005	<0.0002	0.0051	12.2	0.0116	<0.0000019	0.0024	<0.001	<0.01	1.95	0.00099	3.53	<0.00002	7.89	0.144	17.6	<0.00001	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	3.5
RSEM-R6E-EOP	11/19/2022 12:10	BHL410	D	C291899	0.00029	<0.005	<0.0002	0.005	11.6	0.0108	<0.0000019	0.0023	<0.001	<0.01	1.84	0.00106	3.62	<0.00002	7.50	0.134	17.8	<0.00001	<0.005	<0.005	0.0009	<0.005	<0.005	<0.0001	3.6
RSEM-R6E-EOP	11/20/2022 11:30	BHL416	M	C291901	0.00028	<0.005	<0.0002	0.0051	12.1	0.0115	<0.0000019	0.0024	<0.001	<0.01	1.93	0.001	3.57	<0.00002	7.95	0.141	18.5	<0.00001	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	2.5
RSEM-R6E-EOP	11/21/2022 11:15	BHL420	M	C291903	0.0003	<0.005	<0.0002	0.0052	12.0	0.0121	<0.0000019	0.0025	<0.001	<0.01	1.89	0.00102	3.49	<0.00002	8.08	0.142	17.6	<0.00001	<0.005	<0.005	0.00092	<0.005	<0.005	<0.0001	2.9
RSEM-R6E-EOP	11/22/2022 12:15	BHR288	M	C292931	<0.0005	<0.01	<0.0002	0.005	12.4	0.0104	<0.0000019	0.0026	<0.001	<0.01	1.91	0.0009	3.37	<0.00002	9.76	0.15	16.9	<0.00001	<0.005	<0.005	0.00092	<0.005	<0.005	<0.0001	2.5
RSEM-R6E-EOP	11/23/2022 15:15	BHR239	M	C292918	<0.0005	<0.01	<0.0002	0.0049	12.0	0.0096	<0.0000019	0.0026	<0.001	<0.01	1.86	0.00078	3.32	<0.00002	8.64	0.146	18.7	<0.00001	<0.005	<0.005	0.0009	<0.005	<0.005	<0.0001	2.9
RSEM-R6E-EOP	11/24/2022 13:30	BHS968	M	C293245	<0.0005	<0.01	<0.0002	0.0048	12.3	0.0086	<0.0000019	0.0025	<0.001	<0.01	1.87	0.00091	3.18	<0.00002	8.90	0.139	17.5	<0.00001	<0.005	<0.005	0.00098	<0.005	<0.005	<0.0001	2.6
RSEM-R6E-EOP	11/24/2022 13:45	BHS970	D	C293245	<0.0005	<0.01	<0.0002	0.0047	13.0	0.0087	<0.0000019	0.0026	<0.001	<0.01	1.95	0.00093	3.26	<0.00002	9.45	0.145	17.7	<0.00001	<0.005	<0.005	0.00102	<0.005	<0.005	<0.0001	2.5
RSEM-R6E-EOP	11/25/2022 10:30	BHS972	M	C293246	<0.0005	<0.01	<0.0002	0.0049	12.5	0.008	<0.0000019	0.0025	<0.001	<0.01	1.86	0.00094	3.25	<0.00002	9.14	0.14	17.3	<0.00001	<0.005	<0.005	0.00098	<0.005	<0.005	<0.0001	2.4
RSEM-R6E-EOP	11/26/2022 12:00	BHX191	M	C293769	0.00035	<0.005	<0.0002	0.0053	13.5	0.0083	<0.0000019	0.0026	<0.001	<0.01	2.02	0.00086	3.26	<0.00002	9.81	0.15	17.5	<0.00001	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	3.3
RSEM-R6E-EOP	11/27/2022 13:30	BHX163	M	C293759	0.00037	<0.005	<0.0002	0.0055	13.6	0.0127	<0.0000019	0.0026	<0.001	<0.01	2.08	0.00083	3.34	<0.00002	10.5	0.148	16.4	<0.00001	<0.005	<0.005	0.00086	<0.005	0.0071	<0.0001	3.3
RSEM-R6E-EOP	11/28/2022 10:00	BHX165	M	C293760	0.00037	<0.005	<0.0002	0.0055	13.6	0.0084	<0.0000019	0.0026	<0.001	<0.01	2.09	0.00091	3.24	<0.00002	10.6	0.152	18.1	<0.00001	<0.005	<0.005	0.00087	<0.005	<0.005	<0.0001	2.8
RSEM-R6-EP-US-SD	2/9/2022 13:55	AOK262	M	C208577	0.00093	<0.01	<0.0002	0.007	4.66	0.0184	0.0000025	0.0042	0.0013	0.022	2.56	0.00043	2.17	<0.00002	17.7	0.117	8.4	0.000011	<0.005	<0.005	0.00055	<0.005	<0.005	<0.0001	3900
RSEM-R6-EP-US-SD	4/22/2022 12:15	ARX723	M	C226550	0.00084	<0.01	<0.0002	0.0273	21.7	0.139	<0.0000019	0.0045	0.0165	0.013	3.47	0.00115	2.76	<0.00002	47.1	0.473	65.5	0.000021	<0.005	<0.005	0.00185	<0.005	<0.005	<0.0001	280
RSEM-R6-EP-US-SD	4/27/2022 16:30	ASH199	M	C228648	0.0014	<0.01	<0.0002	0.0259	24.5	0.0929	<0.0000019	0.011	0.005	0.019	8.88	0.00235	3.33	<0.00002	38.4	0.784	62.6	0.000036	<0.005	<0.005	0.0023	<0.005	<0.005	<0.0001	>4000
RSEM-R6-EP-US-SD	5/10/2022 11:55	ASX006	M	C231638	0.00115	0.053	<0.0002	0.089	35.7	0.659	<0.0000019	0.0039	0.126	<0.01	3.34	0.0018	2.49	<0.00002	59.5	0.536	127	0.000025	<0.005	<0.005	0.00404	<0.005	0.0359	<0.0001	150
RSEM-R6E-SP	1/1/2022 13:00	FJ2200029-001	M	FJ2200029	0.00066	0.012	<0.000050	0.0394	44.3	0.0626	<0.0000050	0.00678	0.0143	<0.050	6.48	0.00214	5.39	<0.000010	80.3	0.707	85.6	<0.000010	0.00011	<0.00030	0.00379	<0.00050	0.0105	<0.00020	1.84
RSEM-R6E-SP	1/7/2022 12:30	FJ2200035-001	M	FJ2200035	0.00056	0.021	<0.000050	0.0407	49.5	0.301	<0.0000050	0.00701	0.0172	<0.050	6.81	0.00181	5.58	<0.000010	84.3	0.816	83.0	<0.000010	0.00011	<0.00030	0.00405	<0.00050	0.0103	<0.00020	2.00
RSEM-R6E-SP	1/7/2022 12:40	FJ2200035-002	D	FJ2200035	0.00061	0.018	<0.000050	0.0424	51.0	0.272	<0.0000050	0.00810	0.0169	<0.050	7.09	0.00177	5.77	<0.000010	88.9	0.860	85.6	<0.000010	0.00014	<0.00030	0.00424	<0.00050	0.0127	<0.00020	2.06
RSEM-R6E-SP	1/11/2022 16:00	FJ2200088-002	M	FJ2200088	0.00029	0.121	<0.000050	0.0419	45.5	1.00	<0.0000050	0.00650	0.0211	<0.050	7.34	0.00111	5.61	<0.000010	82.8	0.785	89.2	<0.000010	<0.00010	<0.00030	0.00400	<0.00050	0.0072	<0.00020	1.02
RSEM-R6E-SP	1/16/2022 12:00	FJ2200109-001	M	FJ2200109	0.00207	0.017	<0.000050	0.0438	41.5	0.253	<0.0000050	0.00786	0.0169	<0.050	6.10	0.00195	5.91	<0.000010	87.1	0.681	82.0	<0.000010	0.00014	<0.00030	0.00378	<0.00050	0.0054	<0.00020	1.01
RSEM-R6E-SP	1/20/2022 12:00	FJ2200187-002	M	FJ2200187	0.00060	0.096	<0.000050	0.0431	43.3	0.950	<0.0000050	0.00689	0.0233	<0.050	6.87	0.00128	6.01	<0.000010	87.1	0.715	86.1	<0.000010	0.00014	<0.00030	0.00378	<0.00050	0.0061	<0.00020	2.27
RSEM-R6E-SP	1/22/2022 16:20	FJ2200193-004	M	FJ2200193	0.00065	<0.010	<0.000050	0.0241	28.5	0.275	<0.0000050	0.00484	0.0100	<0.050	4.44	0.00124	3.96	<0.000010	51.2	0.400	51.5	<0.000010	0.00050	<0.00030	0.00190	<0.00050	0.0033	<0.00020	24.8
RSEM-R6E-SP	1/24/2022 13:05	FJ2200237-002	M	FJ2200237	0.00443	<0.010	<0.000050	0.0074	8.21	0.0590	<0.0000050	0.00279	0.0052	<0.050	2.79	0.000492	1.58	<0.000010	15.6	0.155	15.6	<0.000010	0.00041	<0.00030	0.000621	<0.00050	0.0031	<0.00020	35.5
RSEM-R6E-SP	1/25/2022 15:50	ANP163	M	C204905	0.00838	<0.01	<0.0002	0.0077	8.30	0.0725	<0.0000019	0.0029	0.0073	<0.01	2.98	0.00054	1.33	<0.00002	13.1	0.158	8.9	<0.00001	<0.005	<0.005	0.00068	<0.005	<0.005	<0.0001	27
RSEM-R6E-SP	2/3/2022 11:00	AOC176	M	C207302	0.00214	<0.01	<0.0002	0.0177	16.0	0.105	<0.0000019	0.0044	0.0088	0.016	3.98	0.00118	2.94	<0.00002	30.4	0.271	21.6	<0.00001	<0.005	<0.005	0.00114	<0.005	0.006	<0.0001	7.6
RSEM-R6E-SP	2/7/2022 5:30	AOE527	M	C207636	0.00261	<0.01	<0.0002	0.0206	19.7	0.118	0.0000021	0.0046	0.0099	0.032	4.60	0.00127	3.43	0.000053	36.9	0.29	38.1	<0.00001	<0.005	<0.005	0.00124	<0.005	0.0077	<0.0001	4.4
RSEM-R6E-SP	2/9/2022 13:35	AOK258	M	C208577	0.00068	<0.01	<0.0002	0.0172	15.1	0.142	<0.0000019	0.0055	0.0098	<0.01	3.90	0.00106	3.23	<0.00002	34.0	0.244	27.8	<0.00001	<0.005	<0.005	0.00095	<0.005	<0.005	<0.0001	52
RSEM-R6E-SP	2/10/2022 18:00	AOM661	M	C208923	0.00087	<0.01	<0.0002	0.0108	5.39	0.0336	<0.0000019	0.0043	0.003	<0.01	3.07	0.00041	1.8	<0.00002	15.9	0.164	12.8	<0.00001	<0.005	<0.005	0.00063	<0.005	<0.005	<0.0001	35
RSEM-R6E-SP	2/17/2022 15:45	AOW645	M	C210704	0.00121	<0.01	<0.0002	0.0143	9.18	0.0542	<0.0000019	0.006	0.005	0.011	4.31	0.00049	1.86	<0.00002	22.9	0.293	20.2	<0.00001	<0.005	<0.005	0.00092	<0.005	0.007	<0.0001	11
RSEM-R6E-SP	2/19/2022 11:55	AOX370	M	C210838	0.00086	<0.01	<0.0002	0.0172	10.6	0.0557	<0.0000019	0.0063	0.0054	0.012	4.64	0.00054	2.29	<0.00002	26.1	0.301	26.1	<0.00001	<0.005	<0.005	0.00105	<0.005	<0.005	<0.0001	2.6
RSEM-R6E-SP	2/26/2022 11:00	API826	M	C212869	0.00065	<0.01	<0.0002	0.0221	11.1	0.0886	<0.0000019	0.0059	0.0052	<0.01	5.43	0.00054	2.2	<0.00002	28.8	0.351	35.9	<0.00001	<0.005	<0.005	0.00105	<0.005	0.0063	<0.0001	5.7
RSEM-R6E-SP	3/3/2022 15:15	APQ572	M	C214168	0.00071	<0.01	<0.0002	0.022	13.8	0.133	<0.0000019	0.0066	0.0071	<0.01	4.59	0.00066	2.48	<0.00002	31.6	0.36	26.9	<0.00001	<0.005	<0.005	0.00102	<0.005	0.0077	<0.0001	4.3
RSEM-R6E-SP	3/5/2022 14:45	APS819	M	C214509	0.00054	<0.01	<0.0002	0.0215	14.0	0.137	<0.0000019	0.0066	0.0076	<0.01	4.92	0.00066	2.41	<0.00002	32.0	0.375	26.6	<0.00001	<0.005	<0.005	0.00104	<0.005	0.0191	<0.0001	5.2
RSEM-R6E-SP	3/7/2022 12:05	APU817	M	C214856	<0.0005	<0.01	<0.0002	0.0215	12.6	0.118	<0.0000019	0.0061	0.0068	<0.01	5.05	0.00075	2.38	<0.00002	29.3	0.346	25.8	<0.00001	<0.005	<0.005	0.001	<0.005	0.0154	<0.0001	4.5
RSEM-R6E-SP	3/11/2022 11:45	APZ041	M	C215890	<0.0005	<0.01	<0.0002	0.021	14.5	0.188	<0.0000019	0.0077	0.0074	<0.01	6.35	0.00069	2.63	<0.00002	31.7	0.455	33.2	<0.00001	<0.005	<0.005	0.00128	<0.005	<0.005	<0.0001	4.5
RSEM-R6E-SP	3/14/2022 11:40	AQB611	M	C216399	0.00053	<0.01	<0.0002	0.0245	15.2	0.25	<0.0000019	0.0078	0.0079	<0.01	6.20	0.0005	2.52	<0.00002	33.5	0.437	36.5	<0.00001	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	6.0
RSEM-R6E-SP	3/19/2022 13:50	AQJ970	M	C218236	0.00079	<0.01	<0.0002	0.0182	13.0	0.103	<0.0000019	0.0054	0.0084	<0.01	4.12	0.00081	2.12	<0.00002	23.3	0.352	29.6	0.000012	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	73
RSEM-R6E-SP	3/28/2022 11:10	AQU417	M	C220399	0.00092	<0.01	<0.0002	0.0145	10.2	0.0713	<0.0000019	0.005	0.0063	<0.01	3.20	0.00097	2.01	<0.00002	18.7	0.232	25.8	0.00001	<0.005	<0.005	0.00116	<0.005	<0.005	<0.0001	34
RSEM-R6E-SP	11/29/2022 10:50	BIA657	M	C294441	<0.0005	<0.01	<0.0002	0.006	12.9	0.0122	<0.0000019	0.0027	<0.001	<0.01	2.11	0.00099	3.21	<0.00002	10.8	0.158	19.7	0.00001	<0.005	<0.005	0.00093	<0.005	<0.005	<0.0001	3.7
RSEM-R6E-SP	12/3/2022 11:50	BII771	M	C295634	0.00044	0.011	<0.0002	0.0062	14.9	0.0348	<0.0000019	0.0029	0.0013	<0.01	2.39	0.00112	3.25	<0.00002	13.2	0.183	21.9	0.000012	<0.005	<0.005	0.00096	<0.005	<0.005	<0.0001	2.3
RSEM-R6E-SP	12/7/2022 12:30	BIR867	M	C297052	0.0005	0.012	<0.0002	0.0067	15.4	0.0193	<0.0000019	0.0028	0.0013	<0.01	2.79	0.00143	3.34	<0.00002	14.7	0.191	21.8	0.000014	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	2.5
RSEM-R6E-SP	12/9/2022 11:45	BIT657	M	C297341	<0.0005	<0.01	<0.0002	0.0065	15.0	0.0165	<0.0000019	0.0029	0.0013	<0.01	2.75	0.00153	3.42	<0.00002	14.8	0.189	23.5	0.000014	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0001	2.1
RSEM-R6E-SP	12/15/2022 12:45	BJJ046	M	C299557	0.00044	0.01	<0.0002	0.0078	17.2	0.0368	<0.0000019	0.0032	0.0016	<0.01	3.27	0.00172	3.96	<0.00002	15.7	0.221	24.9	0.000016	<0.005	<0.005	0.00121	<0.005	0.0055	<0.0001	2.0

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
RSEM-R6E-SP	12/18/2022 12:45	BJL803	M	C299943	<0.0005	0.012	<0.0002	0.0074	15.4	0.0273	<0.0000019	0.0031	0.0015	<0.01	3.15	0.00076	4.16	<0.00002	16.4	0.223	25.0	0.000017	<0.005	<0.005	0.00106	<0.005	<0.005	<0.0001	1.8
RSEM-R6E-SP	12/20/2022 10:30	BJP133	M	C2A0603	0.00051	0.011	<0.0002	0.0082	17.5	0.0335	0.000002	0.0034	0.0017	<0.01	3.42	0.00195	4.34	<0.00002	16.8	0.232	26.2	0.000019	<0.005	<0.005	0.00122	<0.005	<0.005	<0.0001	1.6
RSEM-R6E-SP	12/23/2022 12:15	BJQ105	M	C2A0819	<0.0005	0.012	<0.0002	0.0089	18.2	0.0523	0.0000025	0.0034	0.0019	<0.01	3.51	0.00239	4.12	<0.00002	17.7	0.251	25.1	0.00002	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	2.0
RSEM-R6E-SP	12/27/2022 12:30	BJS996	M	C2A1469	0.00058	0.018	<0.0002	0.01	20.5	0.0622	<0.0000019	0.0034	0.002	<0.01	4.12	0.00071	4.47	<0.00002	21.3	0.284	29.7	0.00002	<0.005	<0.005	0.00129	<0.005	0.0054	<0.0001	2.0
RSEM-R6E-SP	12/31/2022 12:45	BJU300	M	C300112	0.00053	0.014	<0.0002	0.009	22.2	0.107	<0.0000019	0.0035	0.0023	<0.01	4.34	0.00055	5.85	<0.00002	24.7	0.31	28.1	0.000019	<0.005	<0.005	0.00134	<0.005	0.0184	<0.0001	1.4
RSEM-R6E-SP-US	4/10/2022 13:00	ARK080	M	C223661	0.00103	0.018	<0.0002	0.0454	26.4	0.311	<0.0000019	0.0056	0.0574	<0.01	3.84	0.00187	3.23	<0.00002	52.1	0.592	90.1	0.000021	<0.005	<0.005	0.00211	<0.005	0.0619	<0.0001	46
RSEM-R6W-EOP	1/4/2022 12:00	FJ2200037-001	M	FJ2200037	0.00106	0.012	<0.000050	0.0716	30.0	0.0413	<0.0000050	0.00836	0.0032	<0.050	4.61	0.00239	6.22	<0.000010	112	0.210	62.9	<0.000010	0.00048	0.00035	0.00290	0.00251	0.0880	<0.00020	2.58
RSEM-R6W-EOP	1/20/2022 10:45	FJ2200187-001	M	FJ2200187	0.00036	<0.010	<0.000050	0.0715	28.6	0.0295	<0.0000050	0.00749	0.0025	<0.050	4.33	0.00165	6.47	<0.000010	104	0.137	65.9	<0.000010	0.00091	<0.00030	0.00290	0.00162	0.0019	<0.00020	5.12
RSEM-R6W-EOP	1/21/2022 10:20	FJ2200183-001	M	FJ2200183	0.00037	<0.010	<0.000050	0.0717	29.7	0.0292	<0.0000050	0.00729	0.0025	<0.050	4.32	0.00184	6.54	<0.000010	106	0.139	65.6	<0.000010	0.00090	<0.00030	0.00290	0.00160	0.0025	<0.00020	4.66
RSEM-R6W-EOP	1/22/2022 14:50	FJ2200193-001	M	FJ2200193	0.00047	<0.010	<0.000050	0.0675	30.2	0.0272	<0.0000050	0.00741	0.0024	<0.050	4.24	0.00181	6.23	<0.000010	103	0.137	65.4	<0.000010	0.00082	<0.00030	0.00296	0.00158	0.0025	<0.00020	4.02
RSEM-R6W-EOP	1/23/2022 10:55	FJ2200194-001	M	FJ2200194	0.00050	<0.010	<0.000050	0.0652	29.8	0.0120	<0.0000050	0.00721	0.0023	<0.050	4.33	0.00180	6.06	<0.000010	101	0.140	63.6	<0.000010	0.00087	<0.00030	0.00283	0.00148	0.0018	<0.00020	5.12
RSEM-R6W-EOP	1/24/2022 12:00	FJ2200237-001	M	FJ2200237	0.00051	<0.010	<0.000050	0.0470	23.6	0.0471	<0.0000050	0.00589	0.003	<0.050	3.87	0.00125	4.71	<0.000010	77.6	0.162	49.2	<0.000010	0.00087	<0.00030	0.00218	0.00115	0.0020	<0.00020	5.29
RSEM-R6W-EOP	1/25/2022 16:00	ANP164	M	C204905	0.0007	<0.01	<0.0002	0.0407	20.5	0.0588	<0.0000019	0.0054	0.0032	<0.01	3.68	0.00124	3.67	<0.00002	56.8	0.16	25.5	<0.00001	<0.005	<0.005	0.00206	<0.005	<0.005	<0.0001	6.9
RSEM-R6W-EOP	1/26/2022 13:55	ANQ893	M	C205279	0.00078	<0.01	<0.0002	0.0447	20.7	0.0579	<0.0000019	0.0054	0.0033	<0.01	3.71	0.00131	4.31	<0.00002	66.5	0.163	38.2	<0.00001	<0.005	<0.005	0.00209	<0.005	<0.005	<0.0001	8.3
RSEM-R6W-EOP	1/26/2022 14:05	ANQ894	D	C205279	0.00083	<0.01	<0.0002	0.0458	21.1	0.0581	0.0000036	0.0054	0.0033	<0.01	3.71	0.00132	4.27	<0.00002	67.5	0.162	33.5	<0.00001	<0.005	<0.005	0.00205	<0.005	<0.005	<0.0001	11
RSEM-R6W-EOP	1/27/2022 15:50	ANS643	M	C205612	0.0008	<0.01	<0.0002	0.051	22.3	0.0488	<0.0000019	0.0056	0.0032	<0.01	3.84	0.00141	4.58	<0.00002	75.0	0.153	37.1	<0.00001	<0.005	<0.005	0.00219	<0.005	<0.005	<0.0001	10
RSEM-R6W-EOP	1/27/2022 16:00	ANS644	D	C205612	0.00082	<0.01	<0.0002	0.0496	21.8	0.0484	<0.0000019	0.0056	0.0032	<0.01	3.81	0.00136	4.6	<0.00002	72.9	0.154	37.0	<0.00001	<0.005	<0.005	0.0022	<0.005	<0.005	<0.0001	10
RSEM-R6W-EOP	1/29/2022 10:55	ANV925	M	C206078	0.00095	<0.01	<0.0002	0.0468	21.1	0.0474	<0.0000019	0.0056	0.0031	<0.01	3.74	0.00137	4.46	<0.00002	69.1	0.151	36.5	<0.00001	<0.005	<0.005	0.00212	<0.005	<0.005	<0.0001	8.4
RSEM-R6W-EOP	1/30/2022 11:20	ANV924	M	C206077	0.00103	<0.01	<0.0002	0.0535	21.7	0.0367	<0.0000019	0.0056	0.0031	<0.01	3.81	0.00164	4.47	<0.00002	74.1	0.14	48.5	<0.00001	<0.005	<0.005	0.00218	<0.005	0.0118	<0.0001	13
RSEM-R6W-EOP	1/31/2022 10:35	ANV920	M	C206074	0.00177	<0.01	<0.0002	0.0566	22.3	0.0381	<0.0000019	0.0058	0.0033	<0.01	3.95	0.00157	4.54	<0.00002	76.2	0.147	43.4	<0.00001	<0.005	<0.005	0.0022	<0.005	0.0068	<0.0001	9.7
RSEM-R6W-EOP	2/7/2022 5:00	AOE528	M	C207636	0.0012	<0.01	<0.0002	0.0737	27.3	0.0288	0.0000029	0.006	0.0036	<0.01	4.40	0.00196	5.1	<0.00002	87.0	0.145	71.6	<0.00001	<0.005	<0.005	0.00218	<0.005	<0.005	<0.0001	5.5
RSEM-R6W-EOP	2/8/2022 11:45	AOI290	M	C208265	0.00129	<0.01	<0.0002	0.0632	24.3	0.0223	<0.0000019	0.0061	0.0043	<0.01	4.39	0.00212	4.9	<0.00002	71.3	0.142	60.2	<0.00001	<0.005	<0.005	0.00202	<0.005	<0.005	<0.0001	9.5
RSEM-R6W-EOP	2/9/2022 11:10	AOK259	M	C208577	0.00063	<0.01	<0.0002	0.0385	24.1	0.147	<0.0000019	0.0054	0.0071	<0.01	4.36	0.00191	4.28	<0.00002	56.4	0.262	53.8	<0.00001	<0.005	<0.005	0.00171	<0.005	<0.005	<0.0001	15
RSEM-R6W-EOP	2/10/2022 10:30	AOM663	D	C208923	0.00094	<0.01	<0.0002	0.022	14.8	0.119	0.000002	0.0061	0.006	<0.01	4.60	0.00108	3.3	<0.00002	37.4	0.29	38.3	<0.00001	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	46
RSEM-R6W-EOP	2/10/2022 22:20	AOM662	M	C208923	0.00097	<0.01	<0.0002	0.0241	15.5	0.12	0.0000024	0.0134	0.006	<0.01	4.77	0.00127	3.34	<0.00002	38.8	0.305	39.0	0.00001	<0.005	<0.005	0.00114	<0.005	<0.005	<0.0001	47
RSEM-R6W-EOP	2/11/2022 11:25	AOM648	M	C208915	0.00103	<0.01	<0.0002	0.0249	12.5	0.071	<0.0000019	0.0044	0.0053	<0.01	3.67	0.00202	2.5	<0.00002	28.8	0.202	43.4	<0.00001	<0.005	<0.005	0.00057	<0.005	<0.005	<0.0001	19
RSEM-R6W-EOP	2/12/2022 13:30	AOP214	M	C209346	0.00161	<0.01	<0.0002	0.0278	15.8	0.0453	<0.0000019	0.0048	0.0056	<0.01	3.87	0.00282	2.62	<0.00002	32.4	0.2	56.1	<0.00001	<0.005	<0.005	0.00063	<0.005	<0.005	<0.0001	8.5
RSEM-R6W-EOP	2/12/2022 13:40	AOP215	D	C209346	0.00149	<0.01	<0.0002	0.0274	15.4	0.0458	<0.0000019	0.0046	0.0056	<0.01	3.91	0.00273	2.6	<0.00002	31.6	0.199	55.4	<0.00001	<0.005	<0.005	0.00061	<0.005	<0.005	<0.0001	5.8
RSEM-R6W-EOP	2/13/2022 10:45	AOP246	M	C209355	0.00157	<0.01	<0.0002	0.0265	14.6	0.0291	0.0000034	0.0047	0.005	<0.01	3.70	0.00297	2.49	<0.00002	30.4	0.184	56.3	<0.00001	<0.005	<0.005	0.00067	<0.005	<0.005	<0.0001	6.5
RSEM-R6W-EOP	2/14/2022 12:50	AOQ979	M	C209670	0.00152	<0.01	<0.0002	0.0244	12.8	0.0234	<0.0000019	0.0048	0.0062	<0.01	3.37	0.00317	2.22	<0.00002	26.7	0.166	50.2	<0.00001	<0.005	<0.005	0.00089	<0.005	<0.005	<0.0001	7.6
RSEM-R6W-EOP	2/15/2022 15:35	AOS724	M	C210043	0.00192	<0.01	<0.0002	0.0214	15.2	0.0349	0.0000032	0.0067	0.0075	0.013	4.33	0.00318	2.54	<0.00002	32.5	0.253	62.0	<0.00001	<0.005	<0.005	0.0012	<0.005	<0.005	<0.0001	7.2
RSEM-R6W-EOP	2/16/2022 10:40	AOU840	M	C210450	0.00192	0.077	<0.0002	0.0243	14.8	0.035	<0.0000019	0.0061	0.0085	0.017	4.01	0.00322	2.46	<0.00002	31.0	0.225	56.1	<0.00001	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	6.5
RSEM-R6W-EOP	2/17/2022 14:15	AOW646	M	C210704	0.00202	<0.01	<0.0002	0.0243	15.0	0.0348	<0.0000019	0.0058	0.0074	0.011	4.02	0.0035	2.36	<0.00002	31.5	0.222	55.2	<0.00001	<0.005	<0.005	0.00116	<0.005	0.008	<0.0001	8.2
RSEM-R6W-EOP	2/17/2022 14:25	AOW647	D	C210704	0.00211	<0.01	<0.0002	0.0265	14.8	0.0337	<0.0000019	0.0062	0.0073	0.011	3.87	0.00349	2.32	<0.00002	31.0	0.211	54.0	<0.00001	<0.005	<0.005	0.0012	<0.005	0.0141	<0.0001	7.7
RSEM-R6W-EOP	2/18/2022 13:20	AOW653	M	C210707	0.00202	<0.01	<0.0002	0.0293	18.8	0.0358	<0.0000019	0.0059	0.0074	<0.01	4.01	0.00391	2.51	<0.00002	38.3	0.209	61.7	<0.00001	<0.005	<0.005	0.00123	<0.005	0.0076	<0.0001	7.4
RSEM-R6W-EOP	2/19/2022 10:30	AOX371	M	C210838	0.00197	<0.01	<0.0002	0.027	16.9	0.0341	<0.0000019	0.0054	0.0082	<0.01	3.91	0.00366	2.67	<0.00002	35.3	0.208	62.9	<0.00001	<0.005	<0.005	0.0013	<0.005	<0.005	<0.0001	3.3
RSEM-R6W-EOP	2/20/2022 15:20	AOY870	M	C211049	0.00195	<0.01	<0.0002	0.027	17.5	0.0332	<0.0000019	0.0051	0.0091	<0.01	4.12	0.00355	3	<0.00002	37.4	0.21	65.1	<0.00001	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	5.7
RSEM-R6W-EOP	2/20/2022 15:30	AOY871	D	C211049	0.00198	<0.01	<0.0002	0.0271	17.3	0.0331	<0.0000019	0.0051	0.0092	<0.01	4.07	0.00356	3.03	<0.00002	37.3	0.21	64.9	<0.00001	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	5.7
RSEM-R6W-EOP	2/21/2022 11:00	AOY875	M	C211051	0.00211	<0.01	<0.0002	0.0251	17.5	0.0332	<0.0000019	0.0052	0.0095	<0.01	4.02	0.00358	2.78	<0.00002	38.2	0.191	62.3	0.00001	<0.005	<0.005	0.00135	<0.005	<0.005	<0.0001	5.7
RSEM-R6W-EOP	2/22/2022 10:30	APE539	M	C211930	0.00205	<0.01	<0.0002	0.0269	17.1	0.0285	<0.0000019	0.0054	0.0094	<0.01	3.95	0.00326	2.98	<0.00002	40.0	0.203	61.6	<0.00001	<0.005	<0.005	0.00145	<0.005	<0.005	<0.0001	4.7
RSEM-R6W-EOP	2/23/2022 14:00	APE585	M	C211939	0.00232	<0.01	<0.0002	0.0287	16.5	0.0239	<0.0000019	0.0052	0.0086	<0.01	3.83	0.00297	3.09	<0.00002	41.1	0.186	58.3	<0.00001	<0.005	<0.005	0.00152	<0.005	<0.005	<0.0001	4.6
RSEM-R6W-EOP	2/24/2022 13:10	APF947	M	C212235	0.00208	<0.01	<0.0002	0.0279	16.6	0.0212	<0.0000019	0.005	0.0073	<0.01	3.75	0.00275	3.1	<0.00002	42.1	0.179	55.7	<0.00001	<0.005	<0.005	0.00142	<0.005	<0.005	<0.0001	5.9
RSEM-R6W-EOP	2/25/2022 10:00	APF955	M	C212240	0.00182	<0.01	<0.0002	0.0289	16.2	0.0163	0.000002	0.0048	0.0057	<0.01	3.64	0.00257	3.15	<0.00002	44.2	0.168	53.7	<0.00001	<0.005	<0.005	0.00123	<0.005	0.0108	<0.0001	4.0
RSEM-R6W-EOP	2/26/2022 13:00	API827	M	C212869	0.0015	<0.01	<0.0002	0.0326	14.1	0.0139	<0.0000019	0.004	0.0039	0.013	3.53	0.00267	2.65	<0.00002	42.9	0.158	61.7	0.00001	<0.005	<0.005	0.00094	<0.005	0.0094	<0.0001	2.8
RSEM-R6W-EOP	2/27/2022 11:00	API844	M	C212877	0.00158	<0.01	<0.0002	0.0327	13.8	0.0133	<0.0000019	0.0038	0.0033	<0.01	3.57	0.00266	2.61	<0.00002	43.2	0.158	61.8	<0.00001	<0.005	<0.005	0.00076	<0.005	0.0055	<0.0001	3.1
RSEM-R6W-EOP	2/28/2022 10:00	API841	M	C212874	0.00158	<0.01	<0.0002	0.0318	13.7	0.0132	<0.0000019	0.0037	0.0029	<0.01	3.52	0.00263	2.61	<0.00002	42.0	0.155	60.1	<0.00001	<0.005	<0.005	0.00065	<0.005	0.0074	<0.0001	3.6
RSEM-R6W-EOP	3/1/2022 11:45	APN031	M	C213536	0.00159	<0.01	<0.0002	0.0326	15.1	0.0119	<0.0000019	0.0036	0.0028	<0.01	3.97	0.00265	2.56	<0.00002	43.8	0.156	62.5	<0.00001	<0.005	<0.005	0.0006	<0.005	<0.005	<0.0001	3.0
RSEM-R6W-EOP	3/1/2022 11:55	APN032	D	C213536	0.00159	<0.01	<0.0002	0.0322	15.4	0.0118	<0.0000019	0.0036	0.0027	<0.01	3.98	0.00266	2.51	<0.00002	44.6	0.161	67.5	<0.00001	<0.005	<0.005	0.00059	<0.005	<0.005	<0.0001	4.2
RSEM-R6W-EOP	3/4/2022 11:15	APQ571	M	C214167	0.00189	<0.01	<0.0002	0.0345	17.2	0.0144	<0.0000019	0.004	0.0033	<0.01	3.08	0.00301	3.18	<0.00002	45.8	0.159	46.5	<0.00001	<0.005	<0.005	0.00058	<0.005	<0.005	<0.0001	2.2
RSEM-R6W-EOP	3/5/2022 13:20	APS820	M	C214509	0.00183	<0.01	<0.0002	0.0315	16.9	0.0148	<0.0000019	0.0041	0.0034	<0.01	3.17	0.00282	3.11	<0.00002	46.2	0.156	44.7	<0.00001	<0.005	<0.005	0.00064	<0.005	0.0133	<0.0001	3.9
RSEM-R6W-EOP	3/5/2022 13:30	APS821	D	C214509	0.00182	<0.01	<0.0002	0.0312	16.7	0.0145	<0.0000019	0.004	0.0033	<0.01	3.13	0.00283	3.09	<0.00002	45.8	0.154	44.0	<0.00001	<0.005	<0.005	0.00063	<0.005	0.0087	<0.0001	3.7
RSEM-R6W-EOP	3/6/2022 10:30	APS817	M	C214508	0.00178	<0.01	<0.0002	0.0335	16.9	0.0129	<0.0000019	0.0042	0.0029	<0.01	3.09	0.00266	3.38	<0.00002	49.3	0.147	42.6	<0.00001	<0.005	<0.005	0.00072	<0.005	0.0105	<0.0001	4.6
RSEM-R6W-EOP	3/7/2022 10:55	APU818	M	C214856	0.00165	<0.01	<0.0002	0.034	16.4	0.0131	<0.0000019	0.0042	0.0029	<0.01	3.49	0.00247	3.45	<0.00002	49.6	0.145	40.9	<0.00001	<0.005	<0.005	0.0008	<0.005	0.0113	<0.0001	4.9
RSEM-R6W-EOP	3/8/2022 18:30	APV994	M	C215206	0.00149	<0.01	<0.0002	0.0454	18.2	0.0096	0.0000021	0.0063	0.0021	<0.01	4.35	0.00219	5.18	<0.00002	64.4	0.154	51.7	<0.00001	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	6.0
RSEM-R6W-EOP	3/9/2022 11:00	APZ007	M	C215885	0.00129	<0.01	<0.0002	0.037	17.6	0.0079	<0.0000019	0.0062	0.0017	<0.01	3.90	0.00215	4.69	<0.00002	60.4	0.14	45.4	<0.00001	<0.005	<0.005	0.00155	<0.005	<0.005	<0.0001	5.9
RSEM-R6W-EOP	3/10/2022 10:00	APZ000	M	C215884	0.00158	<0.01	<0.0002	0.0379	17.2	0.0066	<0.0000019	0.0062	0.0017	<0.01	3.67	0.0021	4.89	<0.00002	61.8	0.122	44.0	<0.00001	<0.005	<0.005	0.00157	<0.005	0.0132	<0.0001	6.2
RSEM-R6W-EOP	3/11/2022 10:50	APZ042	M	C215890	0.00093	<0.01	<0.0002	0.0424	17.7	0.0048	0.0000021	0.0067	0.0012	<0.01	3.76	0.00184	5.51	<0.00002	67.7	0.117	40.0	<0.00001	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	6.7
RSEM-R6W-EOP	3/12/2022 14:30	AQB294	M	C216354	0.00126	<0.01	<0.0002	0.0441	17.9	0.0088	0.0000032	0.0063	0.002	<0.01	3.62	0.00213	4.28	<0.00002	64.0	0.128	46.9	<0.00001	<0.005	<0.005	0.00162	<0.005	<0.005	<0.0001	7.2
RSEM-R6W-EOP	3/12/2022 14:40	AQB295	D	C216354	0.00132	<0.01	<0.0002	0.0439	18.4	0.0091	<0.0000019	0.0062	0.002	<0.01	3.73	0.00217	4.33	<0.00002	65.6	0.131	48.1	<0.00001	<0.005	<0.005	0.00164	<0.005	<0.005	<0.0001	6.3
RSEM-R6W-EOP	3/13/2022 11:15	AQB251	M	C216350	0.00115	<0.01	<0.0002	0.0471	17.7	0.0066	<0.0000019	0.0064	0.0014	<0.01	3.37	0.00178	4.68	<0.00002	68.7	0.107	39.9	<0.00001	<0.005	<0.005	0.00183	<0.005	0.0066	<0.0001	8.4
RSEM-R6W-EOP	3/14/2022 10:55	AQB612	M	C216399	0.00104	<0.01	<0.0002	0.0498	19.1	0.0084	<0.0000019	0.0066	0.0015	<0.01	3.62	0.00193	4.78	<0.00002	72.7	0.115	44.3	<0.00001	<0.005	<0.005	0.0019	<0.005	<0.005	<0.0001	5.9
RSEM-R6W-EOP	3/15/2022 7:00	AQE813	M	C217150	0.00122	<0.01	<0.0002	0.0467	18.0	0.0089	<0.0000019	0.0062	0.0016	<0.01	3.53	0.00196	4.36	<0.00002	67.3	0.118	42.8	<0.00001	<0.005	<0.005	0.00178	<0.005	0.0083	<0.0001	8.8
RSEM-R6W-EOP	3/17/2022 11:00	AQH797	M	C217776	0.00112	<0.01	<0.0002	0.0431	19.1	0.0193	<0.0000019	0.006	0.0027	<0.01	3.58	0.00207	5	<0.00002	64.1	0.136	46.5	<0.00001	<0.005	<0.005	0.00167	<0.005	0.0125	<0.0001	8.4
RSEM-R6W-EOP	3/18/2022 6:00	AQH794	M	C217775	0.00085	<0.01	<0.0002	0.0373	17.5	0.0605	<0.0000019	0.0062	0.0039	<0.01	3.80	0.00134	4.31	<0.00002	53.4	0.202	41.9	<0.00001	<0.005	<0.005	0.00162	<0.005	<0.005	<0.0001	8.7
RSEM-R6W-EOP	3/19/2022 14:05	AQJ971	M	C218236	0.00087	<0.01	<0.0002	0.03	16.5	0.0951	<0.0000019	0.0066	0.0072	<0.01	4.09	0.00131	3.59	<0.00002	45.0	0.253	38.9	<0.00001	<0.005	<0.005	0.00158	<0.005	<0.005	<0.0001	25
RSEM-R6W-EOP	3/20/2022 14:35	AQJ912	M	C218219	0.0026	<0.01	<0.0002	0.0222	13.4	0.0862	<0.0000019	0.0064	0.007	<0.01	3.79	0.00125	2.84	<0.00002	33.9	0.257	32.6	<0.00001	<0.005	<0.005	0.00104	<0.005	<0.005	<0.0001	5.1
RSEM-R6W-EOP	3/21/2022 12:40	AQL265	M	C218465	0.00076	<0.01	<0.0002	0.022	12.7	0.077	<0.0000019	0.0067	0.0071	<0.01	3.58	0.00143	2.78	<0.00002	32.0	0.266	35.3	<0.00001	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	47
RSEM-R6W-EOP	3/22/2022 14:15	AQN715	M	C218958	0.00079	<0.01	<0.0002	0.0223	12.7	0.0746	<0.0000019	0.0068	0.0067	<0.01	3.56	0.00131	2.74	<0.00002	32.7	0.263	37.0	<0.00001	<0.005	<0.005	0.00098	<0.005	<0.005	<0.0001	25

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
RSEM-R6W-EOP	3/23/2022 12:00	AQP257	M	C219363	0.00092	<0.01	<0.0002	0.0205	12.7	0.0762	<0.0000019	0.0066	0.0072	<0.01	3.42	0.00146	2.58	<0.00002	32.7	0.264	36.0	<0.00001	<0.005	<0.005	0.00101	<0.005	<0.005	<0.0001	20
RSEM-R6W-EOP	3/24/2022 10:30	AQP981	M	C219524	0.00098	<0.01	<0.0002	0.0219	13.1	0.0687	<0.0000019	0.0067	0.007	<0.01	3.41	0.00166	2.62	<0.00002	34.5	0.249	39.7	<0.00001	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	16
RSEM-R6W-EOP	3/25/2022 11:30	AQP914	M	C219519	0.00106	<0.01	<0.0002	0.025	14.7	0.0739	<0.0000019	0.0068	0.0079	<0.01	3.59	0.002	2.76	<0.00002	38.3	0.251	45.4	<0.00001	<0.005	<0.005	0.00134	<0.005	<0.005	<0.0001	13
RSEM-R6W-EOP	3/25/2022 11:40	AQP915	D	C219519	0.00101	<0.01	<0.0002	0.0245	14.7	0.0721	<0.0000019	0.0068	0.0078	<0.01	3.58	0.00179	2.73	<0.00002	38.3	0.25	45.5	<0.00001	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	13
RSEM-R6W-EOP	3/26/2022 10:50	AQS235	M	C219944	0.00091	<0.01	<0.0002	0.0283	15.7	0.0905	<0.0000019	0.007	0.0087	<0.01	3.76	0.0022	2.77	<0.00002	42.3	0.262	52.9	<0.00001	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	12
RSEM-R6W-EOP	3/26/2022 11:05	AQS236	D	C219944	0.00091	<0.01	<0.0002	0.0281	15.7	0.0892	<0.0000019	0.007	0.0087	<0.01	3.74	0.00213	2.76	<0.00002	42.3	0.258	53.7	<0.00001	<0.005	<0.005	0.00091	<0.005	<0.005	<0.0001	12
RSEM-R6W-EOP	3/27/2022 11:50	AQS345	M	C219976	0.00102	<0.01	<0.0002	0.0329	16.6	0.1	<0.0000019	0.0075	0.0098	<0.01	4.19	0.00244	2.81	<0.00002	48.7	0.266	58.5	0.000011	<0.005	<0.005	0.00073	<0.005	<0.005	<0.0001	6.9
RSEM-R6W-EOP	3/28/2022 10:40	AQU418	M	C220399	0.00094	<0.01	<0.0002	0.0373	15.1	0.0701	<0.0000019	0.008	0.0079	<0.01	4.10	0.00281	2.97	<0.00002	53.7	0.235	60.6	<0.00001	<0.005	<0.005	0.0006	<0.005	<0.005	<0.0001	5.4
RSEM-R6W-EOP	3/29/2022 10:20	AQV263	M	C220606	0.00112	<0.01	<0.0002	0.0409	15.4	0.0473	<0.0000019	0.0084	0.0072	<0.01	4.09	0.0033	3.18	<0.00002	60.0	0.212	64.2	0.00001	<0.005	<0.005	0.00083	<0.005	0.0067	<0.0001	6.8
RSEM-R6W-EOP	3/30/2022 11:10	AQX832	M	C221206	0.00129	<0.01	<0.0002	0.0424	12.3	0.0314	<0.0000019	0.0076	0.0064	<0.01	3.55	0.0028	3.01	<0.00002	48.3	0.161	49.5	<0.00001	<0.005	<0.005	0.00116	<0.005	0.0101	<0.0001	6.5
RSEM-R6W-EOP	3/31/2022 9:25	AQY795	M	C221428	0.00099	<0.01	<0.0002	0.0451	14.2	0.0513	<0.0000019	0.0063	0.0067	<0.01	3.29	0.00287	2.95	<0.00002	49.7	0.165	62.6	<0.00001	<0.005	<0.005	0.00084	<0.005	0.0065	<0.0001	11
RSEM-R6W-EOP	4/1/2022 11:20	AQY727	M	C221415	0.00099	<0.01	<0.0002	0.0355	16.3	0.0757	<0.0000019	0.0063	0.0082	<0.01	3.58	0.00232	2.62	<0.00002	50.6	0.206	53.8	<0.00001	<0.005	<0.005	0.00086	<0.005	0.0074	<0.0001	6.9
RSEM-R6W-EOP	4/2/2022 16:55	ARB520	M	C222000	0.00088	<0.01	<0.0002	0.0256	11.5	0.0596	<0.0000019	0.0059	0.0069	<0.01	3.01	0.00208	2.39	<0.00002	35.8	0.18	45.3	<0.00001	<0.005	<0.005	0.00063	<0.005	<0.005	<0.0001	5.5
RSEM-R6W-EOP	4/3/2022 12:00	ARB459	M	C221989	0.00086	<0.01	<0.0002	0.0382	11.5	0.0561	<0.0000019	0.0049	0.0067	<0.01	2.78	0.00185	2.39	<0.00002	36.0	0.162	39.2	<0.00001	<0.005	<0.005	0.00058	<0.005	<0.005	<0.0001	5.5
RSEM-R6W-EOP	4/4/2022 11:45	ARB188	M	C221904	0.001	<0.01	<0.0002	0.033	12.5	0.0504	<0.0000019	0.005	0.0077	<0.01	2.80	0.00198	2.42	<0.00002	39.4	0.16	42.7	<0.00001	<0.005	<0.005	0.00073	<0.005	0.0075	<0.0001	6.1
RSEM-R6W-EOP	4/5/2022 11:00	ARE598	M	C222522	0.00115	<0.01	<0.0002	0.0254	10.9	0.0405	<0.0000019	0.0049	0.0068	<0.01	2.57	0.00193	2.3	<0.00002	35.5	0.141	43.0	<0.00001	<0.005	<0.005	0.00078	<0.005	0.0269	<0.0001	4.9
RSEM-R6W-EOP	4/6/2022 12:00	ARI188	M	C223269	0.00112	<0.01	<0.0002	0.0312	12.1	0.0373	<0.0000019	0.0048	0.0075	<0.01	2.64	0.00206	2.53	<0.00002	38.9	0.14	46.5	<0.00001	<0.005	<0.005	0.00093	<0.005	0.025	0.0001	5.4
RSEM-R6W-EOP	4/7/2022 16:40	ARI195	M	C223271	0.00112	<0.01	<0.0002	0.0281	10.6	0.0313	<0.0000019	0.0042	0.0064	<0.01	2.28	0.00184	2.44	<0.00002	34.8	0.118	40.8	<0.00001	<0.005	<0.005	0.00088	<0.005	0.024	<0.0001	6.2
RSEM-R6W-EOP	4/8/2022 12:00	ARI199	M	C223273	0.00172	<0.01	<0.0002	0.0166	6.45	0.0267	<0.0000019	0.0024	0.0035	<0.01	1.44	0.00107	1.52	<0.00002	20.9	0.0738	22.3	<0.00001	<0.005	<0.005	0.00053	<0.005	0.0066	0.0001	12
RSEM-R6W-EOP	4/9/2022 12:30	ARK006	M	C223638	0.00076	<0.01	<0.0002	0.0294	11.4	0.04	<0.0000019	0.0039	0.0057	<0.01	2.53	0.00158	2.07	<0.00002	37.3	0.118	37.1	<0.00001	<0.005	<0.005	0.00091	<0.005	0.0099	0.00011	15
RSEM-R6W-EOP	4/10/2022 12:00	ARK077	M	C223661	0.00088	<0.01	<0.0002	0.0307	12.4	0.0557	<0.0000019	0.0048	0.0067	<0.01	2.81	0.00184	2.43	<0.00002	39.3	0.16	42.5	<0.00001	<0.005	<0.005	0.00104	<0.005	0.0101	<0.0001	12
RSEM-R6W-EOP	4/11/2022 10:00	ARK112	M	C223675	0.00088	<0.01	<0.0002	0.0299	13.0	0.0653	<0.0000019	0.0052	0.0068	<0.01	3.04	0.00191	2.49	<0.00002	40.2	0.184	46.5	<0.00001	<0.005	<0.005	0.00104	<0.005	0.0085	<0.0001	11
RSEM-R6W-EOP	4/12/2022 10:30	ARN334	M	C224402	0.00077	<0.01	<0.0002	0.0307	13.1	0.0658	<0.0000019	0.0048	0.0062	<0.01	2.72	0.00214	2.46	<0.00002	37.9	0.169	43.5	<0.00001	<0.005	<0.005	0.00087	<0.005	0.0074	<0.0001	5.1
RSEM-R6W-EOP	4/13/2022 12:10	ARP726	M	C224775	0.00076	<0.01	<0.0002	0.0305	13.3	0.0692	<0.0000019	0.0049	0.0062	<0.01	2.74	0.00233	2.49	<0.00002	37.9	0.177	44.6	<0.00001	<0.005	<0.005	0.00086	<0.005	0.0064	<0.0001	4.7
RSEM-R6W-EOP	4/14/2022 9:35	ARQ065	M	C224815	0.00083	<0.01	<0.0002	0.0299	13.6	0.0722	<0.0000019	0.0051	0.0066	<0.01	2.99	0.00193	2.54	<0.00002	39.3	0.19	46.0	<0.00001	<0.005	<0.005	0.0009	<0.005	0.0069	0.00026	4.8
RSEM-R6W-EOP	4/15/2022 13:55	ARQ200	M	C224832	0.0009	<0.01	<0.0002	0.0293	14.4	0.0652	<0.0000019	0.0055	0.0062	<0.01	3.10	0.00172	2.57	<0.00002	43.7	0.21	50.0	<0.00001	<0.005	<0.005	0.00107	<0.005	0.0071	<0.0001	2.2
RSEM-R6W-EOP	4/16/2022 13:45	ARR879	M	C225206	0.00095	<0.01	<0.0002	0.026	13.4	0.0574	<0.0000019	0.0048	0.006	<0.01	3.05	0.00182	2.16	<0.00002	42.3	0.177	46.0	<0.00001	<0.005	<0.005	0.00111	<0.005	0.0108	<0.0001	2.5
RSEM-R6W-EOP	4/18/2022 13:55	ARU248	M	C225693	0.00086	<0.01	<0.0002	0.0265	11.0	0.0415	<0.0000019	0.0043	0.0045	<0.01	2.49	0.00173	2.01	<0.00002	32.1	0.154	37.9	<0.00001	<0.005	<0.005	0.00098	<0.005	0.011	<0.0001	3.8
RSEM-R6W-EOP	4/19/2022 13:40	ARV035	M	C225905	0.00093	<0.01	<0.0002	0.0267	11.5	0.0494	<0.0000019	0.0045	0.0049	<0.01	2.53	0.0017	2.03	<0.00002	33.3	0.159	38.8	<0.00001	<0.005	<0.005	0.00099	<0.005	0.0084	<0.0001	2.9
RSEM-R6W-EOP	4/20/2022 12:35	ARW668	M	C226267	0.00123	<0.01	<0.0002	0.0253	13.1	0.0503	<0.0000019	0.0048	0.0051	<0.01	2.90	0.00224	2.04	<0.00002	41.2	0.165	45.1	<0.00001	<0.005	<0.005	0.00115	<0.005	0.0094	<0.0001	1.9
RSEM-R6W-EOP	4/21/2022 13:25	ARX707	M	C226546	0.00118	<0.01	<0.0002	0.0282	14.3	0.0747	<0.0000019	0.0061	0.0073	<0.01	3.52	0.00129	2.46	<0.00002	44.2	0.195	50.4	<0.00001	<0.005	<0.005	0.00131	<0.005	0.0087	<0.0001	2.1
RSEM-R6W-EOP	4/22/2022 11:45	ARX721	M	C226550	0.00118	<0.01	<0.0002	0.0316	16.4	0.0776	<0.0000019	0.0071	0.0074	<0.01	4.01	0.00173	2.77	<0.00002	54.2	0.21	59.7	0.000011	<0.005	<0.005	0.00168	<0.005	0.0112	<0.0001	3.3
RSEM-R6W-EOP	4/23/2022 15:30	ARZ186	M	C226855	0.001	<0.01	<0.0002	0.0337	17.0	0.0566	<0.0000019	0.0073	0.0055	<0.01	3.70	0.00279	2.75	<0.00002	62.0	0.177	61.3	<0.00001	<0.005	<0.005	0.00185	<0.005	0.0133	<0.0001	4.6
RSEM-R6W-EOP	4/24/2022 11:30	ASA417	M	C227083	0.001	<0.01	<0.0002	0.0309	17.3	0.0369	<0.0000019	0.0084	0.0044	<0.01	3.84	0.00313	3.08	<0.00002	66.3	0.159	62.9	<0.00001	<0.005	<0.005	0.00211	<0.005	0.0157	<0.0001	6.6
RSEM-R6W-EOP	4/25/2022 11:20	ASA413	M	C227083	0.00106	<0.01	<0.0002	0.0259	15.3	0.0281	<0.0000019	0.0077	0.0035	<0.01	3.48	0.00304	2.89	<0.00002	58.7	0.138	53.4	<0.00001	<0.005	<0.005	0.00197	<0.005	0.013	<0.0001	6.4
RSEM-R6W-EOP	4/26/2022 11:00	ASD457	M	C227799	0.001	<0.01	<0.0002	0.0272	15.0	0.0246	<0.0000019	0.0077	0.0034	<0.01	3.49	0.00317	2.97	<0.00002	58.2	0.131	55.0	<0.00001	<0.005	<0.005	0.00194	<0.005	0.0184	<0.0001	6.0
RSEM-R6W-EOP	4/27/2022 12:00	ASH197	M	C228648	0.00136	<0.01	<0.0002	0.0283	15.8	0.0281	<0.0000019	0.0081	0.0034	<0.01	3.63	0.00332	3.12	<0.00002	60.8	0.138	57.6	<0.00001	<0.005	<0.005	0.00204	<0.005	0.0175	<0.0001	8.2
RSEM-R6W-EOP	4/28/2022 12:30	ASH217	M	C228650	0.00126	<0.01	<0.0002	0.0276	15.7	0.0305	<0.0000019	0.008	0.0035	<0.01	3.61	0.00336	3.17	<0.00002	60.0	0.137	56.8	<0.00001	<0.005	<0.005	0.00207	<0.005	0.0154	<0.0001	12
RSEM-R6W-EOP	4/29/2022 10:00	ASH017	M	C228622	0.00095	<0.01	<0.0002	0.0259	14.7	0.0265	<0.0000019	0.0078	0.0029	<0.01	3.46	0.00336	3.14	<0.00002	55.8	0.131	51.2	<0.00001	<0.005	<0.005	0.00202	<0.005	0.0093	<0.0001	17
RSEM-R6W-EOP	4/30/2022 12:00	ASL380	M	C229488	0.00075	<0.01	<0.0002	0.0226	14.7	0.0292	<0.0000019	0.0079	0.0025	<0.01	3.49	0.00311	3.38	<0.00002	55.5	0.135	51.0	<0.00001	<0.005	<0.005	0.00203	<0.005	0.0055	<0.0001	12
RSEM-R6W-EOP	5/1/2022 11:00	ASL427	M	C229493	0.00094	<0.01	<0.0002	0.0221	15.4	0.0295	<0.0000019	0.0086	0.0025	<0.01	3.61	0.00284	3.53	<0.00002	57.5	0.141	51.2	<0.00001	<0.005	<0.005	0.00218	<0.005	<0.005	<0.0001	11
RSEM-R6W-EOP	5/2/2022 11:00	ASL340	M	C229475	0.00077	<0.01	<0.0002	0.0249	16.4	0.0282	<0.0000019	0.0084	0.0036	<0.01	3.65	0.00351	3.66	<0.00002	60.6	0.147	57.9	<0.00001	<0.005	<0.005	0.00218	<0.005	<0.005	<0.0001	6.1
RSEM-R6W-EOP	5/3/2022 14:25	ASO448	M	C230063	0.00099	<0.01	<0.0002	0.0322	18.1	0.0299	<0.0000019	0.0088	0.006	<0.01	3.73	0.00423	3.3	<0.00002	66.4	0.183	67.5	<0.00001	<0.005	<0.005	0.0023	<0.005	<0.005	<0.0001	6.2
RSEM-R6W-EOP	5/4/2022 12:20	ASP676	M	C230320	0.00101	<0.01	<0.0002	0.0395	19.1	0.0294	<0.0000019	0.009	0.0068	<0.01	3.78	0.00509	3.19	<0.00002	71.7	0.199	75.7	0.00001	<0.005	<0.005	0.00238	<0.005	0.0057	<0.0001	4.5
RSEM-R6W-EOP	5/5/2022 11:25	ASR005	M	C230531	0.00098	<0.01	<0.0002	0.0447	20.0	0.025	<0.0000019	0.0095	0.0072	<0.01	3.94	0.00546	3.06	<0.00002	77.6	0.21	80.0	0.000011	<0.005	<0.005	0.00243	<0.005	0.0065	<0.0001	4.5
RSEM-R6W-EOP	5/6/2022 10:30	ASR072	M	C230545	0.00107	<0.01	<0.0002	0.0422	22.5	0.021	<0.0000019	0.0084	0.007	0.014	4.52	0.00466	2.93	<0.00002	85.1	0.194	85.4	0.000013	<0.005	<0.005	0.00226	<0.005	0.0074	<0.0001	3.6
RSEM-R6W-EOP	5/7/2022 11:25	ASS943	M	C230886	0.00097	<0.01	<0.0002	0.0423	21.1	0.0214	<0.0000019	0.0096	0.0075	0.016	4.54	0.00445	2.86	<0.00002	80.9	0.198	88.7	0.000014	<0.005	<0.005	0.00236	<0.005	0.0106	<0.0001	2.8
RSEM-R6W-EOP	5/8/2022 14:15	ASS885	M	C230861	0.00075	<0.01	<0.0002	0.0437	21.4	0.0185	<0.0000019	0.0099	0.0065	0.013	4.45	0.00476	2.87	<0.00002	84.9	0.2	92.0	0.000013	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	5.3
RSEM-R6W-EOP	5/8/2022 14:25	ASS884	D	C230861	0.00076	<0.01	<0.0002	0.043	20.6	0.0194	<0.0000019	0.0096	0.0065	0.016	4.51	0.00456	2.79	<0.00002	82.4	0.199	89.4	0.000012	<0.005	<0.005	0.00241	<0.005	<0.005	<0.0001	5.4
RSEM-R6W-EOP	5/9/2022 13:50	ASV292	M	C231306	0.00096	0.061	<0.0002	0.0479	22.4	0.026	<0.0000019	0.0098	0.0073	0.02	4.55	0.00521	2.88	<0.00002	93.0	0.213	99.5	0.000017	<0.005	<0.005	0.00234	<0.005	0.0069	<0.0001	6.7
RSEM-R6W-EOP	5/10/2022 11:00	ASX004	M	C231638	0.00061	<0.01	<0.0002	0.048	21.1	0.0182	<0.0000019	0.0098	0.0058	0.011	3.85	0.00781	2.99	<0.00002	87.2	0.217	109	<0.00001	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	6.8
RSEM-R6W-EOP	5/11/2022 12:25	ASZ424	M	C232133	0.00072	<0.01	<0.0002	0.0596	24.8	0.0212	<0.0000019	0.0114	0.0075	0.012	4.79	0.00817	3.17	<0.00002	125	0.253	123	0.000014	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	6.0
RSEM-R6W-EOP	5/12/2022 14:05	ATA814	M	C232369	0.00073	<0.01	<0.0002	0.0639	23.1	0.016	<0.0000019	0.0112	0.0071	<0.01	4.49		2.93	<0.00002	122	0.259	120	0.000013	<0.005	<0.005	0.00235	<0.005	<0.005	<0.0001	5.4
RSEM-R6W-EOP	5/13/2022 11:10	ATB012	M	C232410	0.00073	<0.01	<0.0002	0.0696	23.8	0.0147	<0.0000019	0.0112	0.0076	<0.01	4.62	0.00915	3	<0.00002	131	0.257	130	0.000013	<0.005	<0.005	0.00235	<0.005	<0.005	<0.0001	5.1
RSEM-R6W-EOP	5/13/2022 11:20	ATB013	D	C232410	0.00066	<0.01	<0.0002	0.0649	25.0	0.0136	<0.0000019	0.0122	0.0077	<0.01	4.81	0.00949	3.6	<0.00002	138	0.268	149	0.000016	<0.005	<0.005	0.00249	<0.005	<0.005	<0.0001	5.1
RSEM-R6W-EOP	5/14/2022 14:35	ATD059	M	C232817	0.0006	<0.01	<0.0002	0.0696	23.0	0.0138	<0.0000019	0.0117	0.0072	<0.01	4.44	0.00967	3.31	<0.00002	140	0.254	147	0.000017	<0.005	<0.005	0.00233	<0.005	<0.005	<0.0001	3.6
RSEM-R6W-EOP	5/15/2022 11:40	ATD051	M	C232812	0.00052	<0.01	<0.0002	0.0742	22.0	0.0163	<0.0000019	0.0119	0.0075	<0.01	4.17	0.0102	3.28	<0.00002	139	0.263	144	0.000014	<0.005	<0.005	0.00233	<0.005	<0.005	<0.0001	3.5
RSEM-R6W-EOP	5/16/2022 10:10	ATC672	M	C232726	0.00059	<0.01	<0.0002	0.0672	23.6	0.0159	<0.0000019	0.0126	0.0078	0.01	4.58	0.0106	3.47	<0.00002	159	0.273	162	0.000014	<0.005	<0.005	0.00245	<0.005	<0.005	<0.0001	3.1
RSEM-R6W-EOP	5/17/2022 12:00	ATH851	M	C233625	0.00063	<0.01	<0.0002	0.08	21.8	0.0137	<0.0000019	0.0124	0.006	<0.01	4.14	0.00969	2.99	<0.00002	142	0.27	120	0.000011	<0.005	<0.005	0.0022	<0.005	<0.005	<0.0001	3.2
RSEM-R6W-EOP	5/18/2022 12:00	ATJ925	M	C234012	0.00086	<0.01	<0.0002	0.0977	24.8	0.0131	<0.0000019	0.0142	0.0064	0.011	4.71	0.0107	3.44	<0.00002	177	0.284	169	0.000018	<0.005	<0.005	0.00249	<0.005	0.0078	<0.0001	3.5
RSEM-R6W-EOP	5/19/2022 13:00	ATL911	M	C234314	0.00068	<0.01	<0.0002	0.0926	22.7	0.0096	<0.0000019	0.0131	0.0054	<0.01	4.51	0.00934	3.03	<0.00002	170	0.274	150	0.000016	<0.005	<0.005	0.00215	<0.005	0.0081	<0.0001	3.2
RSEM-R6W-EOP	5/20/2022 10:30	ATL359	M	C234241	0.00094	<0.01	<0.0002	0.0934	23.3	0.0094	<0.0000019	0.0146	0.0056	<0.01	4.43	0.0103	3.28	<0.00002	179	0.286	168	0.000016	<0.005	<0.005	0.00227	<0.005	0.01	<0.0001	2.9
RSEM-R6W-EOP	5/21/2022 10:30	ATN138	M	C234510	0.00064	<0.01	<0.0002	0.0855	22.4	0.0072	<0.0000019	0.0134	0.005	<0.01	4.38	0.0109	3.18	<0.00002	174	0.286	157	0.000016	<0.005	<0.005	0.0021	<0.005	0.0094	<0.0001	1.6
RSEM-R6W-EOP	5/22/2022 15:00	ATO535	M	C234788	0.00062	<0.01	<0.0002	0.0955	21.4	0.0051	<0.0000019	0.0129	0.0048	<0.01	4.53	0.00757	3.09	<0.00002	174	0.266	142	0.000016	<0.005	<0.005	0.00218	<0.005	0.0097	<0.0001	3.2
RSEM-R6W-EOP	5/23/2022 11:00	ATO584	M	C234797	0.00064	<0.01	<0.0002	0.097	21.7	0.0048	<0.0000019	0.0135	0.0047	<0.01	4.48	0.00838	3.24	<0.00002	178	0.272	145	0.000015	<0.005	<0.005	0.00227	<0.005	0.0098	<0.0001	4.1
RSEM-R6W-EOP	5/24/2022 10:40	ATR510	M	C235358	0.00064	<0.01	<0.0002	0.0782	20.9	0.0039	<0.0000019	0.0119	0.0044	<0.01	4.57	0.00983	3.42	<0.00002	175	0.266	159	0.000015	<0.005	<0.005	0.00216	<0.005	0.01	<0.0001	2.7
RSEM-R6W-EOP	5/25/2022 15:25	ATT369	M	C235730	0.00065	<0.01	<0.0002	0.0685	22.9	0.003	<0.0000019	0.0133	0.0049	<0.01	5.17	0.00935	3.42	<0.00002	194	0.283	161	0.00002	<0.005	<0.005	0.00196	<0.005	0.0079	<0.0001	2.3
RSEM-R6W-EOP	5/26/2022 15:30	ATV285	M	C236083	0.00058	<0.01	<0.0002	0.0473	20.8	0.002	0.0000022	0.0128	0.0057	<0.01	4.82	0.00886	3.42	<0.00002	181	0.286	168	0.000017	<0.005	<0.005	0.00193	<0.005	0.0069	<0.0001	2.3

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
RSEM-R6W-EOP	5/27/2022 13:35	ATV301	M	C236089	0.0006	<0.01	<0.0002	0.0537	20.1	0.0022	<0.0000019	0.0129	0.0039	<0.01	4.79	0.00875	3.3	<0.00002	180	0.284	167	0.000015	<0.005	<0.005	0.00188	<0.005	0.0056	<0.0001	3.3
RSEM-R6W-EOP	5/28/2022 16:30	ATX747	M	C236620	0.00075	<0.01	<0.0002	0.0921	19.5	0.0037	<0.0000019	0.0133	0.0034	<0.01	4.56	0.00833	3.08	<0.00002	181	0.349	156	0.000016	<0.005	<0.005	0.002	<0.005	0.0063	<0.0001	6.3
RSEM-R6W-EOP	5/29/2022 17:40	ATW969	M	C236421	0.00053	<0.01	<0.0002	0.0864	19.1	0.0102	<0.0000019	0.0116	0.0034	<0.01	4.37	0.00803	2.95	<0.00002	177	0.431	141	0.000015	<0.005	<0.005	0.00175	<0.005	<0.005	<0.0001	12
RSEM-R6W-EOP	5/30/2022 16:25	ATZ466	M	C236894	0.00073	<0.01	<0.0002	0.1	19.7	0.0266	<0.0000019	0.0133	0.0077	<0.01	4.96	0.0091	3.4	<0.00002	192	0.482	161	0.00002	<0.005	<0.005	0.00241	<0.005	<0.005	<0.0001	12
RSEM-R6W-EOP	5/31/2022 11:30	AUC336	M	C237377	0.00075	0.062	<0.0002	0.104	18.5	0.0349	<0.0000019	0.0124	0.0083	0.012	4.98	0.00842	3.56	<0.00002	181	0.455	157	0.000022	<0.005	<0.005	0.0023	<0.005	0.005	0.00019	11
RSEM-R6W-EOP	6/1/2022 11:30	AUE681	M	C237797	0.00074	<0.01	<0.0002	0.0895	19.0	0.0193	<0.0000019	0.0123	0.0084	0.013	4.97	0.00892	3.3	<0.00002	187	0.436	159	0.000019	<0.005	<0.005	0.00221	<0.005	0.0062	<0.0001	6.1
RSEM-R6W-EOP	6/2/2022 10:40	AUH701	M	C238258	0.00055	<0.01	<0.0002	0.0923	14.9	0.0126	<0.0000019	0.0118	0.0068	<0.01	4.24	0.00912	3.22	<0.00002	166	0.373	135	0.000017	<0.005	<0.005	0.00177	<0.005	0.0054	<0.0001	3.9
RSEM-R6W-EOP	6/3/2022 13:10	AUH662	M	C238247	0.00062	<0.01	<0.0002	0.0962	15.2	0.0074	<0.0000019	0.0116	0.0066	<0.01	4.27	0.00919	3.05	<0.00002	165	0.361	136	0.00002	<0.005	<0.005	0.00166	<0.005	<0.005	<0.0001	3.6
RSEM-R6W-EOP	6/4/2022 10:25	AUL721	M	C238905	0.00067	<0.01	<0.0002	0.104	18.6	0.0049	<0.0000019	0.0121	0.0069	<0.01	4.73	0.00865	2.72	<0.00002	187	0.41	136	0.00002	<0.005	<0.005	0.00167	<0.005	0.008	<0.0001	2.5
RSEM-R6W-EOP	6/5/2022 11:55	AUM441	M	C238986	0.0007	<0.01	<0.0002	0.109	18.9	0.0034	<0.0000019	0.0122	0.0066	<0.01	4.81	0.00888	2.55	<0.00002	187	0.403	140	0.000021	<0.005	<0.005	0.00159	<0.005	0.0069	<0.0001	2.2
RSEM-R6W-EOP	6/6/2022 10:50	AUO790	M	C239365	0.00076	<0.01	<0.0002	0.112	20.0	0.0052	<0.0000019	0.0121	0.0066	<0.01	5.07	0.00858	2.53	<0.00002	194	0.391	136	0.000022	<0.005	<0.005	0.00148	<0.005	0.0086	0.00011	1.1
RSEM-R6W-EOP	6/7/2022 12:00	AUT413	M	C240162	0.00085	<0.01	<0.0002	0.106	19.6	0.0074	<0.0000019	0.0123	0.0063	<0.01	5.30	0.00906	2.52	<0.00002	188	0.37	1980	0.000022	<0.005	<0.005	0.00139	<0.005	0.0166	0.0002	1.3
RSEM-R6W-EOP	6/8/2022 13:00	AUT295	M	C240147	0.00095	<0.01	<0.0002	0.101	19.8	0.0072	<0.0000019	0.0123	0.006	<0.01	5.34	0.00897	2.36	<0.00002	189	0.362	1910	0.00002	<0.005	<0.005	0.00135	<0.005	0.0158	0.00019	1.0
RSEM-R6W-EOP	6/9/2022 13:30	AUV206	M	C240504	0.00089	<0.01	<0.0002	0.105	21.6	0.0051	<0.0000019	0.0142	0.0057	<0.01	5.60	0.0111	2.22	<0.00002	204	0.397	185	0.000024	<0.005	<0.005	0.00152	<0.005	<0.005	<0.0001	1.1
RSEM-R6W-EOP	6/10/2022 11:00	AUV211	M	C240508	0.00101	<0.01	<0.0002	0.111	20.7	0.0069	<0.0000019	0.0137	0.0056	<0.01	5.82	0.0108	1.92	<0.00002	196	0.394	171	0.000023	<0.005	<0.005	0.00143	<0.005	0.0051	0.00011	1.2
RSEM-R6W-EOP	6/11/2022 10:00	AUY735	M	C241062	0.00066	<0.01	<0.0002	0.111	20.8	0.0021	<0.0000019	0.013	0.0047	<0.01	5.74	0.00942	1.88	<0.00002	217	0.351	170	0.000019	<0.005	<0.005	0.00143	<0.005	<0.005	0.0001	1.4
RSEM-R6W-EOP	6/12/2022 10:30	AUY703	M	C241043	0.00093	<0.01	<0.0002	0.12	22.5	0.0031	<0.0000019	0.016	0.0051	<0.01	6.37	0.00869	1.76	<0.00002	226	0.401	191	0.000025	<0.005	<0.005	0.00162	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	6/13/2022 12:00	AVD504	M	C241814	0.00089	<0.01	<0.0002	0.116	22.2	0.0029	<0.0000019	0.0162	0.0046	<0.01	6.43	0.0084	1.5	<0.00002	224	0.383	194	0.000023	<0.005	<0.005	0.00155	<0.005	<0.005	0.00015	1.0
RSEM-R6W-EOP	6/14/2022 10:30	AVD543	M	C241829	0.00095	<0.01	<0.0002	0.114	22.1	0.0033	<0.0000019	0.0169	0.0044	<0.01	6.60	0.00812	1.44	<0.00002	226	0.384	195	0.000026	<0.005	<0.005	0.0016	<0.005	<0.005	0.00013	1.3
RSEM-R6W-EOP	6/15/2022 11:55	AVG248	M	C242252	0.00095	<0.01	<0.0002	0.118	22.2	0.0031	<0.0000019	0.0165	0.0042	<0.01	6.74	0.00837	1.34	<0.00002	229	0.371	201	0.000025	<0.005	<0.005	0.0016	<0.005	<0.005	0.00021	1.2
RSEM-R6W-EOP	6/16/2022 12:45	AVK123	M	C242788	0.00073	<0.01	<0.0002	0.114	20.9	0.0018	<0.0000019	0.0155	0.0034	<0.01	6.20	0.00878	1.28	<0.00002	238	0.354	171	0.000019	<0.005	<0.005	0.00153	<0.005	<0.005	0.00014	1.4
RSEM-R6W-EOP	6/17/2022 11:35	AVK724	M	C242942	0.00113	<0.01	<0.0002	0.0914	22.3	0.0027	<0.0000019	0.0178	0.004	<0.01	6.41	0.00744	1	<0.00002	222	0.352	184	0.000022	<0.005	<0.005	0.0017	<0.005	<0.005	<0.0001	1.7
RSEM-R6W-EOP	6/18/2022 12:45	AVL989	M	C243162	0.00093	<0.01	<0.0002	0.102	19.3	0.001	<0.0000019	0.0143	0.003	<0.01	5.58	0.009	1.25	<0.00002	232	0.312	162	0.000017	<0.005	<0.005	0.00155	<0.005	<0.005	<0.0001	2.2
RSEM-R6W-EOP	6/19/2022 11:50	AVM019	M	C243177	0.00076	<0.01	<0.0002	0.0993	19.5	<0.001	<0.0000019	0.0145	0.0028	<0.01	5.83	0.00869	1.23	<0.00002	228	0.314	156	0.000018	<0.005	<0.005	0.00155	<0.005	<0.005	<0.0001	2.2
RSEM-R6W-EOP	6/20/2022 10:50	AVO965	M	C243664	0.00135	<0.01	<0.0002	0.101	19.7	<0.001	<0.0000019	0.0156	0.0032	<0.01	6.18	0.00665	1.09	<0.00002	204	0.313	160	0.000021	<0.005	<0.005	0.00155	<0.005	<0.005	<0.0001	2.5
RSEM-R6W-EOP	6/21/2022 11:35	AVQ611	M	C244010	0.00115	<0.01	<0.0002	0.103	22.6	<0.001	<0.0000019	0.0165	0.0034	<0.01	6.96	0.00704	1.09	<0.00002	213	0.344	157	0.000019	<0.005	<0.005	0.0017	<0.005	<0.005	<0.0001	1.8
RSEM-R6W-EOP	6/22/2022 11:05	AVT153	M	C244412	0.00107	<0.01	<0.0002	0.0909	23.2	<0.001	<0.0000019	0.0149	0.0033	<0.01	6.27	0.00628	1.1	<0.00002	188	0.328	190	0.000017	<0.005	<0.005	0.00174	<0.005	<0.005	0.00014	2.7
RSEM-R6W-EOP	6/23/2022 11:15	AVV597	M	C244839	0.00103	<0.01	<0.0002	0.0905	26.8	<0.001	<0.0000019	0.0143	0.0036	<0.01	6.92	0.00617	0.992	<0.00002	193	0.331	161	0.000019	<0.005	<0.005	0.00174	<0.005	<0.005	<0.0001	2.8
RSEM-R6W-EOP	6/24/2022 11:10	AVV588	M	C244835	0.00097	<0.01	<0.0002	0.0873	28.8	<0.001	<0.0000019	0.0145	0.0039	<0.01	6.90	0.00582	1.08	<0.00002	187	0.339	173	0.00002	<0.005	<0.005	0.0018	<0.005	<0.005	0.00013	2.3
RSEM-R6W-EOP	6/25/2022 10:40	AVZ707	M	C245512	0.00084	<0.01	<0.0002	0.0815	29.1	<0.001	<0.0000019	0.0142	0.005	<0.01	6.53	0.00795	1.1	<0.00002	176	0.323	177	0.000017	<0.005	<0.005	0.00177	<0.005	<0.005	<0.0001	1.9
RSEM-R6W-EOP	6/26/2022 10:15	AVZ580	M	C245500	0.00251	<0.01	<0.0002	0.0795	31.2	<0.001	<0.0000019	0.0146	0.0054	<0.01	6.82	0.00785	1.18	<0.00002	176	0.333	183	0.000018	<0.005	<0.005	0.0018	<0.005	<0.005	0.00011	1.6
RSEM-R6W-EOP	6/27/2022 10:25	AVY533	M	C245274	0.00107	<0.01	<0.0002	0.0732	30.0	0.0034	<0.0000019	0.0137	0.0042	<0.01	6.46	0.00797	1.2	<0.00002	171	0.311	171	0.000019	<0.005	<0.005	0.00166	<0.005	0.0051	<0.0001	2.0
RSEM-R6W-EOP	6/28/2022 13:00	AWH753	M	C246896	0.00097	<0.01	<0.0002	0.0673	27.3	0.0054	<0.0000019	0.0132	0.0036	<0.01	6.25	0.00734	1.04	<0.00002	149	0.314	166	0.000018	<0.005	<0.005	0.00156	<0.005	0.0059	<0.0001	1.8
RSEM-R6W-EOP	6/29/2022 15:00	AWH758	M	C246898	0.00102	<0.01	<0.0002	0.0659	27.8	0.0084	<0.0000019	0.0127	0.0047	<0.01	6.49	0.0073	0.987	<0.00002	148	0.32	162	0.000018	<0.005	<0.005	0.00142	<0.005	0.0144	<0.0001	1.3
RSEM-R6W-EOP	6/30/2022 13:00	AWH756	M	C246897	0.00097	<0.01	<0.0002	0.0636	27.5	0.0069	<0.0000019	0.0129	0.0035	<0.01	6.28	0.00732	0.897	<0.00002	144	0.308	167	0.000018	<0.005	<0.005	0.00151	<0.005	0.0057	<0.0001	1.3
RSEM-R6W-EOP	7/1/2022 13:00	AWJ894	M	C247203	0.00108	<0.01	<0.0002	0.0616	32.5	0.0061	<0.0000019	0.0154	0.0036	<0.01	6.50	0.00577	0.838	<0.00002	165	0.336	172	0.000019	<0.005	<0.005	0.00178	<0.005	<0.005	<0.0001	0.71
RSEM-R6W-EOP	7/2/2022 12:30	AWJ849	M	C247196	0.00106	<0.01	<0.0002	0.0602	31.4	0.0064	<0.0000019	0.0152	0.0035	<0.01	6.29	0.00569	0.72	<0.00002	159	0.324	164	0.000019	<0.005	<0.005	0.00168	<0.005	<0.005	<0.0001	0.73
RSEM-R6W-EOP	7/3/2022 11:30	AWM046	M	C247492	0.00098	<0.01	<0.0002	0.0619	27.0	0.0056	<0.0000019	0.0129	0.003	<0.01	6.18	0.00628	0.697	<0.00002	149	0.295	160	0.000017	<0.005	<0.005	0.00152	<0.005	<0.005	0.00025	1.3
RSEM-R6W-EOP	7/4/2022 10:30	AWM516	M	C247552	0.00095	<0.01	<0.0002	0.071	31.6	0.0068	0.0000022	0.0151	0.0031	<0.01	7.44	0.0061	0.646	<0.00002	163	0.333	157	0.00002	<0.005	<0.005	0.00173	<0.005	<0.005	<0.0001	1.9
RSEM-R6W-EOP	7/5/2022 10:10	AWR507	M	C248315	0.00188	<0.01	<0.0002	0.0622	28.3	0.0058	<0.0000019	0.0129	0.0029	<0.01	6.15	0.00499	0.564	<0.00002	150	0.295	151	0.000017	<0.005	<0.005	0.0015	<0.005	<0.005	<0.0001	1.6
RSEM-R6W-EOP	7/6/2022 14:25	AWV910	M	C249077	0.00106	<0.01	<0.0002	0.0561	28.3	0.0016	<0.0000019	0.0139	0.0027	<0.01	6.32	0.00693	0.596	<0.00002	157	0.286	148	0.000017	<0.005	<0.005	0.00156	<0.005	<0.005	0.00011	2.4
RSEM-R6W-EOP	7/7/2022 11:55	AWW343	M	C249139	0.00104	<0.01	<0.0002	0.0549	27.1	0.006	<0.0000019	0.0134	0.0027	<0.01	6.20	0.00649	0.623	<0.00002	152	0.273	141	0.000017	<0.005	<0.005	0.00144	<0.005	<0.005	0.00012	1.3
RSEM-R6W-EOP	7/8/2022 11:45	AWW522	M	C249170	0.00135	<0.01	<0.0002	0.0589	31.6	0.0072	<0.0000019	0.0162	0.0039	<0.01	7.07	0.00533	0.608	<0.00002	170	0.331	162	0.000016	<0.005	<0.005	0.0018	<0.005	0.0059	<0.0001	1.6
RSEM-R6W-EOP	7/9/2022 10:50	AWZ517	M	C249625	0.00153	0.029	<0.0002	0.0659	33.8	0.0101	<0.0000019	0.0171	0.0037	0.012	7.66	0.00526	0.671	<0.00002	181	0.345	174	0.000018	<0.005	<0.005	0.00176	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	7/10/2022 14:20	AWZ487	M	C249617	0.00124	<0.01	<0.0002	0.0621	30.4	0.0077	<0.0000019	0.0168	0.003	<0.01	6.92	0.00486	0.537	<0.00002	168	0.317	156	0.000013	<0.005	<0.005	0.00166	<0.005	<0.005	<0.0001	1.9
RSEM-R6W-EOP	7/11/2022 12:45	AXC658	M	C250105	0.00191	0.011	<0.0002	0.056	30.5	0.0027	<0.0000019	0.0169	0.0025	0.013	7.36	0.00495	0.591	<0.00002	174	0.303	167	0.000017	<0.005	<0.005	0.00171	<0.005	<0.005	<0.0001	3.0
RSEM-R6W-EOP	7/12/2022 12:25	AXE618	M	C250400	0.00183	0.01	<0.0002	0.0532	29.5	0.0023	<0.0000019	0.0167	0.0024	0.014	7.33	0.0047	0.706	<0.00002	170	0.295	164	0.000013	<0.005	<0.005	0.00165	<0.005	<0.005	<0.0001	2.4
RSEM-R6W-EOP	7/13/2022 11:35	AXH415	M	C250934	0.00119	<0.01	<0.0002	0.0558	30.0	0.0024	<0.0000019	0.0168	0.0023	<0.01	7.16	0.00464	0.855	<0.00002	168	0.303	151	0.000013	<0.005	<0.005	0.00174	<0.005	<0.005	<0.0001	2.3
RSEM-R6W-EOP	7/14/2022 12:30	AXJ119	M	C251290	0.00121	0.012	<0.0002	0.0557	30.5	0.0039	<0.0000019	0.0167	0.0025	<0.01	7.41	0.00448	1.09	<0.00002	178	0.298	153	0.000014	<0.005	<0.005	0.00181	<0.005	<0.005	<0.0001	2.9
RSEM-R6W-EOP	7/15/2022 13:20	AXJ365	M	C251330	0.00103	<0.01	<0.0002	0.0532	28.2	0.0014	<0.0000019	0.0158	0.0022	<0.01	7.21	0.00432	1.35	<0.00002	163	0.278	151	0.000012	<0.005	<0.005	0.00176	<0.005	<0.005	<0.0001	2.8
RSEM-R6W-EOP	7/16/2022 11:40	AXN331	M	C251927	0.00104	<0.01	<0.0002	0.0554	30.0	0.0018	<0.0000019	0.0163	0.0022	0.01	7.63	0.00411	1.74	<0.00002	169	0.292	158	0.000016	<0.005	<0.005	0.00193	<0.005	<0.005	<0.0001	2.8
RSEM-R6W-EOP	7/17/2022 10:50	AXN589	M	C251966	0.00096	<0.01	<0.0002	0.0497	28.8	0.0013	<0.0000019	0.016	0.0021	<0.01	7.36	0.00436	1.85	<0.00002	167	0.275	149	0.000012	<0.005	<0.005	0.00197	<0.005	<0.005	<0.0001	1.8
RSEM-R6W-EOP	7/18/2022 14:30	AXQ724	M	C252515	0.00098	<0.01	<0.0002	0.0419	29.2	0.0017	<0.0000019	0.0153	0.002	0.011	7.52	0.00396	2.16	<0.00002	166	0.258	148	0.000014	<0.005	<0.005	0.00212	<0.005	<0.005	<0.0001	3.0
RSEM-R6W-EOP	7/19/2022 12:30	AXQ709	M	C252510	0.00096	<0.01	<0.0002	0.0426	29.3	0.0016	<0.0000019	0.0159	0.0022	0.012	7.64	0.00397	2.31	<0.00002	170	0.26	150	0.000013	<0.005	<0.005	0.00223	<0.005	<0.005	<0.0001	1.0
RSEM-R6W-EOP	7/20/2022 14:30	AXX166	M	C253451	0.00104	<0.01	<0.0002	0.0412	28.0	<0.001	<0.0000019	0.0165	0.0021	<0.01	7.42	0.00399	2.95	<0.00002	166	0.255	143	0.000013	<0.005	<0.005	0.00245	<0.005	<0.005	<0.0001	2.3
RSEM-R6W-EOP	7/21/2022 13:30	AXX155	M	C253447	0.00101	<0.01	<0.0002	0.0406	28.1	0.0036	<0.0000019	0.0165	0.0021	0.01	7.76	0.00399	2.94	<0.00002	171	0.245	149	0.000013	<0.005	<0.005	0.00251	<0.005	<0.005	<0.0001	2.3
RSEM-R6W-EOP	7/22/2022 10:30	AXX134	M	C253442	0.00102	<0.01	<0.0002	0.0394	28.2	<0.001	<0.0000019	0.0172	0.0022	0.012	7.83	0.00397	2.84	<0.00002	173	0.256	151	0.000013	<0.005	<0.005	0.00276	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	7/23/2022 10:00	AYB214	M	C254120	0.00095	<0.01	<0.0002	0.0408	27.1	<0.001	<0.0000019	0.0157	0.002	<0.01	7.27	0.00378	2.5	<0.00002	175	0.231	136	0.000011	<0.005	<0.005	0.00256	<0.005	<0.005	<0.0001	1.7
RSEM-R6W-EOP	7/24/2022 13:30	AYC677	M	C254290	0.00091	<0.01	<0.0002	0.0392	26.0	<0.001	<0.0000019	0.0158	0.0018	<0.01	7.26	0.00355	2.5	<0.00002	169	0.227	132	0.00001	<0.005	<0.005	0.00251	<0.005	<0.005	<0.0001	2.4
RSEM-R6W-EOP	7/25/2022 9:30	AYC675	M	C254289	0.00094	<0.01	<0.0002	0.0396	26.0	0.0018	<0.0000019	0.0159	0.0018	<0.01	7.39	0.00374	2.5	<0.00002	171	0.229	133	0.000011	<0.005	<0.005	0.00254	<0.005	<0.005	<0.0001	1.9
RSEM-R6W-EOP	7/26/2022 11:25	AYG702	M	C254966	0.00106	<0.01	<0.0002	0.0417	26.4	0.0031	<0.0000019	0.0161	0.0018	<0.01	7.62	0.00373	2.43	<0.00002	172	0.251	135	0.000012	<0.005	<0.005	0.00247	<0.005	<0.005	<0.0001	1.1
RSEM-R6W-EOP	7/28/2022 12:50	AYM153	M	C255903	0.00101	<0.01	<0.0002	0.0385	25.3	<0.001	<0.0000019	0.015	0.0017	<0.01	6.95	0.00398	2.17	<0.00002	162	0.227	120	0.000012	<0.005	<0.005	0.0025	<0.005	<0.005	<0.0001	1.8
RSEM-R6W-EOP	7/29/2022 12:30	AYM048	M	C255900	0.00103	<0.01	<0.0002	0.0384	25.7	<0.001	<0.0000019	0.0154	0.0017	<0.01	7.32	0.00339	2.15	<0.00002	166	0.231	125	0.000013	<0.005	<0.005	0.00258	<0.005	<0.005	<0.0001	1.4
RSEM-R6W-EOP	7/30/2022 12:15	AYP672	M	C256352	0.00109	<0.01	<0.0002	0.0369	24.4	<0.001	<0.0000019	0.0145	0.0016	<0.01	6.88	0.00341	2.2	<0.00002	161	0.22	116	0.000014	<0.005	<0.005	0.00247	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	7/31/2022 12:05	AYO874	M	C256301	0.00094	<0.01	<0.0002	0.029	23.4	<0.001	<0.0000019	0.0142	0.0015	<0.01	6.70	0.00287	2.36	<0.00002	150	0.204	109	0.000012	<0.005	<0.005	0.00243	<0.005	<0.005	<0.0001	1.0
RSEM-R6W-EOP	8/1/2022 12:05	AYR822	M	C256691	0.00112	0.034	<0.0002	0.0327	22.3	0.0066	<0.0000019	0.0138	0.0016	<0.01	6.53	0.00358	2.25	<0.00002	155	0.192	100	0.000012	<0.005	<0.005	0.00232	<0.005	<0.005	<0.0001	1.6
RSEM-R6W-EOP	8/2/2022 11:55	AYU378	M	C257067	0.00106	<0.01	<0.0002	0.0285	22.8	<0.001	<0.0000019	0.0134	0.0015	<0.01	6.77	0.0027	2.29	<0.00002	156	0.218	101	0.000011	<0.005	<0.005	0.00238	<0.005	<0.005	<0.0001	2.0
RSEM-R6W-EOP	8/3/2022 12:00	AYX381	M	C257672	0.00095	<0.01	<0.0002	0.0303	21.2	<0.001	<0.0000019	0.0139	0.0014	<0.01	6.73	0.00254	2.76	<0.00002	144	0.258	98.1	0.000015	<0.005	<0.005	0.00243	<0.005	<0.005	<0.0001	1.3

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
RSEM-R6W-EOP	8/4/2022 11:20	AYY904	M	C257848	0.00099	<0.01	<0.0002	0.029	19.7	<0.001	<0.0000019	0.0144	0.0013	<0.01	6.72	0.00249	2.77	<0.00002	145	0.261	91.5	0.000012	<0.005	<0.005	0.00237	<0.005	<0.005	<0.0001	0.99
RSEM-R6W-EOP	8/5/2022 10:20	AYY784	M	C257846	0.00095	<0.01	<0.0002	0.0292	20.7	<0.001	<0.0000019	0.0143	0.0014	<0.01	6.85	0.00265	2.63	<0.00002	147	0.241	95.2	0.000014	<0.005	<0.005	0.00243	<0.005	<0.005	<0.0001	0.60
RSEM-R6W-EOP	8/6/2022 11:30	AZA356	M	C258076	0.00092	<0.01	<0.0002	0.0273	18.9	<0.001	<0.0000019	0.0138	0.0013	<0.01	6.70	0.00247	2.51	<0.00002	142	0.247	86.4	0.000013	<0.005	<0.005	0.00229	<0.005	<0.005	<0.0001	1.0
RSEM-R6W-EOP	8/7/2022 12:20	AZC301	M	C258444	0.00093	<0.01	<0.0002	0.0257	17.8	<0.001	<0.0000019	0.0138	0.0014	<0.01	6.38	0.00243	2.82	<0.00002	132	0.221	81.5	0.000011	<0.005	<0.005	0.00232	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	8/8/2022 16:30	AZK278	M	C259762	0.00081	<0.01	<0.0002	0.025	16.9	<0.001	<0.0000019	0.0137	0.0015	<0.01	6.11	0.00268	2.57	<0.00002	124	0.21	74.5	0.000011	<0.005	<0.005	0.00224	<0.005	<0.005	<0.0001	0.94
RSEM-R6W-EOP	8/9/2022 13:30	AZK374	M	C259776	0.00077	<0.01	<0.0002	0.0247	16.5	<0.001	<0.0000019	0.0135	0.0015	<0.01	5.88	0.00258	2.26	<0.00002	119	0.209	71.7	0.000012	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	0.77
RSEM-R6W-EOP	8/10/2022 15:30	AZL948	M	C259983	0.00083	<0.01	<0.0002	0.0235	17.5	<0.001	<0.0000019	0.0129	0.0014	<0.01	5.69	0.00252	1.91	<0.00002	119	0.209	75.1	0.000011	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	0.91
RSEM-R6W-EOP	8/11/2022 14:00	AZL944	M	C259981	0.00083	<0.01	<0.0002	0.0234	17.9	<0.001	<0.0000019	0.0134	0.0015	<0.01	5.80	0.00257	1.7	<0.00002	119	0.216	78.4	0.000012	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	1.1
RSEM-R6W-EOP	8/12/2022 12:30	AZL946	M	C259982	0.00188	<0.01	<0.0002	0.021	17.5	<0.001	<0.0000019	0.0127	0.0014	<0.01	5.60	0.00246	1.41	<0.00002	114	0.213	72.3	<0.00001	<0.005	<0.005	0.00233	<0.005	<0.005	<0.0001	1.6
RSEM-R6W-EOP	8/13/2022 10:30	AZR091	M	C260796	0.00081	<0.01	<0.0002	0.026	18.8	<0.001	<0.0000019	0.0136	0.0014	<0.01	5.80	0.00243	1.16	<0.00002	119	0.217	75.2	0.000012	<0.005	<0.005	0.0024	<0.005	<0.005	<0.0001	1.4
RSEM-R6W-EOP	8/14/2022 15:00	AZR293	M	C260829	0.00087	<0.01	<0.0002	0.0207	18.8	<0.001	<0.0000019	0.0124	0.0015	<0.01	5.98	0.00222	1.17	<0.00002	119	0.221	73.1	0.000011	<0.005	<0.005	0.00208	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	8/15/2022 15:00	AZW325	M	C261663	0.00087	<0.01	<0.0002	0.0241	18.5	<0.001	<0.0000019	0.0133	0.0014	<0.01	5.70	0.00239	1	<0.00002	115	0.214	73.3	0.000012	<0.005	<0.005	0.00256	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	8/16/2022 13:30	AZW501	M	C261690	0.00089	<0.01	<0.0002	0.0236	18.8	<0.001	<0.0000019	0.0135	0.0014	<0.01	5.57	0.00241	0.877	<0.00002	114	0.213	72.3	0.000012	<0.005	<0.005	0.00278	<0.005	<0.005	<0.0001	1.2
RSEM-R6W-EOP	8/17/2022 14:00	BAA264	M	C262437	0.00084	<0.01	<0.0002	0.0214	18.4	<0.001	<0.0000019	0.0129	0.0013	0.013	5.70	0.00236	1.06	<0.00002	113	0.214	73.8	<0.00001	<0.005	<0.005	0.00264	<0.005	<0.005	<0.0001	0.95
RSEM-R6W-EOP	8/18/2022 13:30	BAA275	M	C262439	0.00086	<0.01	<0.0002	0.0222	18.5	<0.001	<0.0000019	0.013	0.0013	<0.01	5.65	0.0023	0.944	<0.00002	108	0.219	74.3	0.000012	<0.005	<0.005	0.00249	<0.005	<0.005	<0.0001	1.6
RSEM-R6W-EOP	8/19/2022 10:30	BAA261	M	C262436	0.00081	<0.01	<0.0002	0.0216	17.9	<0.001	<0.0000019	0.0126	0.0013	<0.01	5.37	0.00218	0.974	<0.00002	110	0.212	72.3	0.000011	<0.005	<0.005	0.00241	<0.005	<0.005	<0.0001	1.6
RSEM-R6W-EOP	8/20/2022 12:00	BAD641	M	C262969	0.00096	<0.01	<0.0002	0.0222	17.9	<0.001	<0.0000019	0.0134	0.0015	<0.01	5.73	0.00214	1.03	<0.00002	111	0.226	77.5	0.000013	<0.005	<0.005	0.00255	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	8/21/2022 11:30	BAD602	M	C262959	0.00094	<0.01	<0.0002	0.0226	18.3	<0.001	<0.0000019	0.0138	0.0016	<0.01	5.70	0.00217	1.06	<0.00002	112	0.221	77.5	0.000015	<0.005	<0.005	0.00257	<0.005	<0.005	<0.0001	0.94
RSEM-R6W-EOP	8/22/2022 14:00	BAG919	M	C263407	0.00097	<0.01	<0.0002	0.0234	17.7	<0.001	0.0000023	0.0139	0.0015	<0.01	5.81	0.00231	0.943	<0.00002	119	0.195	79.5	0.000012	<0.005	<0.005	0.00244	<0.005	<0.005	<0.0001	0.88
RSEM-R6W-EOP	8/23/2022 14:30	BAM965	M	C264451	<0.0025	<0.05	<0.001	0.03	18.4	<0.005	<0.0000019	0.0133	<0.005	<0.05	6.07	0.00243	1.57	<0.0001	129	0.169	68	<0.00005	<0.025	<0.025	0.00252	<0.025	<0.025	<0.0005	0.82
RSEM-R6W-EOP	8/24/2022 14:00	BAM916	M	C264441	0.00075	<0.01	<0.0002	0.0328	17.3	<0.001	<0.0000019	0.0147	0.0013	<0.01	6.19	0.00245	1.85	<0.00002	135	0.162	81.0	<0.00001	<0.005	<0.005	0.00045	<0.005	<0.005	<0.0001	0.81
RSEM-R6W-EOP	8/25/2022 15:20	BAO145	M	C264632	0.00098	<0.01	<0.0002	0.0267	18.2	<0.001	<0.0000019	0.0154	0.0014	<0.01	6.11	0.00225	1.74	<0.00002	143	0.163	78.7	<0.00001	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	0.62
RSEM-R6W-EOP	8/26/2022 7:00	BAO138	M	C264629	0.00094	<0.01	<0.0002	0.0272	18.1	<0.001	<0.0000019	0.0154	0.0013	<0.01	6.19	0.00222	1.8	<0.00002	147	0.16	78.9	<0.00001	<0.005	<0.005	0.00233	<0.005	<0.005	<0.0001	0.91
RSEM-R6W-EOP	8/27/2022 13:00	BAR926	M	C265307	0.00103	<0.01	<0.0002	0.0235	16.3	0.003	<0.0000019	0.0149	0.0016	<0.01	6.06	0.0023	1.47	<0.00002	139	0.153	79.2	0.000012	<0.005	<0.005	0.00222	<0.005	<0.005	<0.0001	1.0
RSEM-R6W-EOP	8/28/2022 14:30	BAR947	M	C265316	0.00096	<0.01	<0.0002	0.0231	15.7	<0.001	<0.0000019	0.0157	0.0013	<0.01	6.12	0.00229	1.73	<0.00002	136	0.148	75.7	0.000011	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	8/29/2022 14:00	BAU334	M	C265774	0.00093	<0.01	<0.0002	0.024	15.4	0.0018	<0.0000019	0.015	0.0013	<0.01	5.82	0.00214	1.41	<0.00002	135	0.15	74.1	<0.00001	<0.005	<0.005	0.00206	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	8/30/2022 14:00	BBA810	M	C266812	0.001	<0.01	<0.0002	0.0246	15.8	0.0023	<0.0000019	0.0149	0.0013	<0.01	5.99	0.00204	1.65	<0.00002	131	0.163	75.2	0.000011	<0.005	<0.005	0.00218	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	8/31/2022 14:00	BBA807	M	C266810	0.00099	<0.01	<0.0002	0.0244	16.6	0.0035	<0.0000019	0.0145	0.0014	<0.01	6.03	0.00205	1.47	<0.00002	130	0.164	74.4	0.000012	<0.005	<0.005	0.00218	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	9/1/2022 13:30	BBC913	M	C267169	0.00109	<0.01	<0.0002	0.0243	16.5	<0.001	<0.0000019	0.0139	0.0013	<0.01	5.93	0.00209	1.37	<0.00002	128	0.158	71.1	<0.00001	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	1.0
RSEM-R6W-EOP	9/2/2022 9:30	BBC921	M	C267172	0.00097	<0.01	<0.0002	0.022	16.7	<0.001	<0.0000019	0.0137	0.0013	<0.01	6.06	0.00201	1.31	<0.00002	128	0.158	71.9	<0.00001	<0.005	<0.005	0.00226	<0.005	<0.005	<0.0001	1.1
RSEM-R6W-EOP	9/3/2022 15:00	BBE155	M	C267383	0.00094	<0.01	<0.0002	0.0249	16.9	<0.001	0.0000022	0.0139	0.0011	<0.01	5.74	0.00188	1.32	<0.00002	126	0.161	71.9	0.000011	<0.005	<0.005	0.00216	<0.005	<0.005	<0.0001	1.1
RSEM-R6W-EOP	9/4/2022 14:30	BBI405	M	C268301	0.00093	<0.01	<0.0002	0.0249	16.3	<0.001	0.0000022	0.0138	0.0011	<0.01	5.81	0.00194	1.36	<0.00002	125	0.154	69.9	0.000011	<0.005	<0.005	0.00212	<0.005	<0.005	<0.0001	1.6
RSEM-R6W-EOP	9/5/2022 13:30	BBI328	M	C268286	0.00096	<0.01	<0.0002	0.025	16.2	<0.001	<0.0000019	0.0148	0.0011	<0.01	6.01	0.00194	1.62	<0.00002	132	0.15	72.0	0.000011	<0.005	<0.005	0.00214	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	9/6/2022 15:25	BBI319	M	C268280	0.00099	<0.01	<0.0002	0.0249	15.6	<0.001	<0.0000019	0.0155	0.0011	<0.01	6.16	0.00201	1.89	<0.00002	141	0.136	72.6	0.000011	<0.005	<0.005	0.00216	<0.005	<0.005	<0.0001	1.8
RSEM-R6W-EOP	9/7/2022 12:10	BBM324	M	C268788	0.00098	<0.01	<0.0002	0.0238	15.1	<0.001	<0.0000019	0.016	0.0011	<0.01	6.50	0.00205	2.05	<0.00002	147	0.126	75.9	<0.00001	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	9/8/2022 13:40	BBO446	M	C269143	0.00101	<0.01	<0.0002	0.0256	15.1	<0.001	<0.0000019	0.0167	0.0011	<0.01	6.57	0.00208	2.67	<0.00002	150	0.118	74.5	0.00001	<0.005	<0.005	0.00223	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	9/9/2022 10:40	BBS002	M	C269764	0.00099	<0.01	<0.0002	0.026	14.1	<0.001	<0.0000019	0.0165	0.0011	<0.01	6.37	0.00195	2.62	<0.00002	137	0.113	73.1	<0.00001	<0.005	<0.005	0.00222	<0.005	<0.005	<0.0001	1.2
RSEM-R6W-EOP	9/10/2022 12:40	BBR903	M	C269730	0.00102	<0.01	<0.0002	0.0244	14.1	<0.001	<0.0000019	0.0183	0.001	<0.01	6.79	0.00208	3.02	<0.00002	149	0.108	77.8	<0.00001	<0.005	<0.005	0.00227	<0.005	<0.005	<0.0001	1.5
RSEM-R6W-EOP	9/11/2022 14:40	BBR960	M	C269754	0.00101	<0.01	<0.0002	0.0265	14.2	<0.001	<0.0000019	0.0172	0.001	<0.01	6.72	0.00193	3.34	<0.00002	149	0.0993	77.4	<0.00001	<0.005	<0.005	0.0023	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	9/12/2022 12:00	BBU606	M	C270263	0.00097	<0.01	<0.0002	0.0272	14.9	<0.001	<0.0000019	0.0175	0.0011	<0.01	6.91	0.00187	3.33	<0.00002	160	0.102	88.4	<0.00001	<0.005	<0.005	0.00238	<0.005	<0.005	<0.0001	1.0
RSEM-R6W-EOP	9/13/2022 14:20	BBX515	M	C270776	0.00102	<0.01	<0.0002	0.0306	16.0	<0.001	<0.0000019	0.0184	0.0011	<0.01	7.07	0.00204	3.28	<0.00002	170	0.107	96.4	0.000011	<0.005	<0.005	0.00239	<0.005	<0.005	<0.0001	0.91
RSEM-R6W-EOP	9/14/2022 10:25	BBZ916	M	C271275	0.00104	<0.01	<0.0002	0.0311	17.9	0.001	<0.0000019	0.0185	0.0011	<0.01	7.23	0.00203	3.62	<0.00002	198	0.112	106	0.000011	<0.005	<0.005	0.00235	<0.005	<0.005	<0.0001	0.73
RSEM-R6W-EOP	9/15/2022 9:40	BCC125	M	C271667	0.00108	<0.01	<0.0002	0.0308	16.5	0.0019	<0.0000019	0.018	0.0012	<0.01	6.86	0.00211	3.28	<0.00002	177	0.11	106	0.00001	<0.005	<0.005	0.00246	<0.005	<0.005	<0.0001	0.98
RSEM-R6W-EOP	9/16/2022 13:00	BCF680	M	C272242	0.00105	<0.01	<0.0002	0.0294	17.7	0.002	<0.0000019	0.018	0.0011	<0.01	7.00	0.00194	2.92	<0.00002	187	0.115	109	0.00001	<0.005	<0.005	0.00247	<0.005	<0.005	<0.0001	0.74
RSEM-R6W-EOP	9/17/2022 11:30	BCF751	M	C272259	0.00129	<0.01	<0.0002	0.0323	16.8	<0.001	<0.0000019	0.0175	0.0011	<0.01	6.96	0.00199	2.97	<0.00002	180	0.113	110	0.000011	<0.005	<0.005	0.00261	<0.005	<0.005	<0.0001	1.2
RSEM-R6W-EOP	9/18/2022 11:20	BCF723	M	C272251	0.0011	<0.01	<0.0002	0.0314	19.5	<0.001	<0.0000019	0.018	0.0011	<0.01	7.33	0.00198	2.9	<0.00002	194	0.226	119	<0.00001	<0.005	<0.005	0.00264	<0.005	<0.005	<0.0001	0.92
RSEM-R6W-EOP	9/19/2022 9:30	BCI769	M	C272683	0.00107	<0.01	<0.0002	0.035	18.6	0.0011	<0.0000019	0.0174	0.0012	<0.01	7.22	0.00193	3.3	<0.00002	187	0.23	121	0.000011	<0.005	<0.005	0.00281	<0.005	<0.005	<0.0001	0.82
RSEM-R6W-EOP	9/20/2022 15:10	BCL544	M	C273070	0.00099	<0.01	<0.0002	0.036	19.7	0.0011	<0.0000019	0.0176	0.0012	<0.01	7.04	0.00196	2.93	<0.00002	203	0.199	125	0.000012	<0.005	<0.005	0.00268	<0.005	<0.005	<0.0001	0.66
RSEM-R6W-EOP	9/21/2022 13:30	BCR698	M	C273972	0.001	<0.01	<0.0002	0.0343	19.4	<0.001	<0.0000019	0.0172	0.0013	<0.01	7.32	0.00221	2.74	<0.00002	206	0.201	132	0.000011	<0.005	<0.005	0.00262	<0.005	<0.005	<0.0001	0.80
RSEM-R6W-EOP	9/22/2022 15:00	BCR615	M	C273969	0.00099	<0.01	<0.0002	0.0341	20.2	<0.001	<0.0000019	0.017	0.0016	<0.01	7.29	0.00225	2.92	<0.00002	205	0.197	136	0.000011	<0.005	<0.005	0.00264	<0.005	<0.005	<0.0001	0.65
RSEM-R6W-EOP	9/23/2022 11:30	BCR892	M	C273985	0.00098	<0.01	<0.0002	0.0335	21.2	<0.001	<0.0000019	0.0169	0.0017	<0.01	7.40	0.00222	2.85	<0.00002	202	0.2	133	0.000012	<0.005	<0.005	0.00262	<0.005	0.0056	<0.0001	0.55
RSEM-R6W-EOP	9/24/2022 10:15	BCV561	M	C274577	0.00094	<0.01	<0.0002	0.0314	22.7	0.0014	<0.0000019	0.0166	0.002	<0.01	7.48	0.0021	2.85	<0.00002	193	0.205	133	0.000011	<0.005	<0.005	0.00258	<0.005	0.0063	<0.0001	0.44
RSEM-R6W-EOP	9/25/2022 14:30	BCV620	M	C274593	0.00097	<0.01	<0.0002	0.0305	24.0	0.0016	<0.0000019	0.0161	0.0021	<0.01	7.27	0.00204	2.88	<0.00002	183	0.208	139	<0.00001	<0.005	<0.005	0.00259	<0.005	0.0068	<0.0001	0.43
RSEM-R6W-EOP	9/25/2022 14:45	BCV621	D	C274593	0.00098	<0.01	<0.0002	0.0307	24.1	0.0015	<0.0000019	0.0163	0.0021	<0.01	7.44	0.00199	2.88	<0.00002	188	0.206	141	<0.00001	<0.005	<0.005	0.00258	<0.005	0.0069	<0.0001	0.43
RSEM-R6W-EOP	9/26/2022 9:30	BCV505	M	C274562	0.00089	<0.01	<0.0002	0.0314	24.2	0.0016	<0.0000019	0.0167	0.0022	<0.01	7.39	0.00205	3.13	<0.00002	181	0.229	138	<0.00001	<0.005	<0.005	0.0026	<0.005	0.0072	<0.0001	0.66
RSEM-R6W-EOP	9/27/2022 10:30	BDB610	M	C275584	0.00091	<0.01	<0.0002	0.0341	25.6	0.0018	<0.0000019	0.0163	0.0023	<0.01	7.30	0.00184	3.07	<0.00002	175	0.225	143	0.000011	<0.005	<0.005	0.00269	<0.005	0.0081	<0.0001	0.39
RSEM-R6W-EOP	9/28/2022 10:40	BDE181	M	C276033	0.00096	<0.01	<0.0002	0.0328	26.9	0.0024	<0.0000019	0.0165	0.0025	<0.01	7.37	0.00185	2.89	<0.00002	174	0.233	145	0.000012	<0.005	<0.005	0.00274	<0.005	0.0079	0.00014	0.38
RSEM-R6W-EOP	9/29/2022 10:40	BDH541	M	C276348	0.00098	<0.01	<0.0002	0.0289	27.1	0.0028	<0.0000019	0.0157	0.0025	0.01	7.34	0.00206	2.29	<0.00002	177	0.236	145	0.000012	<0.005	<0.005	0.00272	<0.005	0.0072	<0.0001	0.52
RSEM-R6W-EOP	9/30/2022 10:55	BDH544	M	C276348	0.00094	<0.01	<0.0002	0.0295	28.0	0.0019	<0.0000019	0.0158	0.0024	0.011	7.48	0.00206	2.21	<0.00002	178	0.239	147	0.000011	<0.005	<0.005	0.00272	<0.005	0.0065	<0.0001	0.64
RSEM-R6W-EOP	10/1/2022 9:50	BDL249	M	C276877	0.00094	<0.01	<0.0002	0.0284	28.0	0.0023	0.0000021	0.016	0.0024	<0.01	7.45	0.0021	2.18	<0.00002	173	0.234	145	0.000013	<0.005	<0.005	0.00273	<0.005	0.0064	<0.0001	1.2
RSEM-R6W-EOP	10/2/2022 10:25	BDL181	M	C276859	0.00093	<0.01	<0.0002	0.0276	28.2	0.0033	<0.0000019	0.0158	0.0024	0.011	7.51	0.00206	2.51	<0.00002	169	0.225	141	0.000011	<0.005	<0.005	0.00266	<0.005	0.0075	<0.0001	0.67
RSEM-R6W-EOP	10/3/2022 10:30	BDP150	M	C277443	0.00089	<0.01	<0.0002	0.03	28.1	0.002	<0.0000019	0.0163	0.0023	0.01	7.41	0.00211	2.63	<0.00002	164	0.211	133	0.000011	<0.005	<0.005	0.00253	<0.005	0.0072	<0.0001	0.60
RSEM-R6W-EOP	10/4/2022 10:05	BDR436	M	C277814	0.00092	<0.01	<0.0002	0.0288	27.6	0.0026	<0.0000019	0.0161	0.0023	<0.01	7.53	0.00213	2.61	<0.00002	161	0.205	131	0.000011	<0.005	<0.005	0.00247	<0.005	0.0071	<0.0001	0.96
RSEM-R6W-EOP	10/4/2022 10:15	BDR437	D	C277814	0.0009	<0.01	<0.0002	0.028	27.5	0.0028	<0.0000019	0.0163	0.0023	<0.01	7.34	0.00211	2.6	<0.00002	161	0.204	128	0.000011	<0.005	<0.005	0.00245	<0.005	0.007	<0.0001	0.55
RSEM-R6W-EOP	10/5/2022 10:55	BDV021	M	C278393	0.00092	<0.01	<0.0002	0.0275	27.2	0.0022	<0.0000019	0.0164	0.0022	<0.01	7.47	0.00219	2.68	<0.00002	157	0.199	127	<0.00001	<0.005	<0.005	0.00245	<0.005	0.006	<0.0001	0.73
RSEM-R6W-EOP	10/6/2022 10:50	BDZ971	M	C278888	0.00089	<0.01	<0.0002	0.0264	26.5	0.0016	<0.0000019	0.0166	0.0019	0.011	7.51	0.00225	3.78	<0.00002	155	0.205	128	<0.00001	<0.005	<0.005	0.00256	<0.005	0.0054	<0.0001	0.95
RSEM-R6W-EOP	10/6/2022 11:00	BDZ973	D	C278888	0.00091	<0.01	<0.0002	0.0276	26.7	0.002	<0.0000019	0.0164	0.002	0.012	7.48	0.00221	3.76	<0.00002	158	0.201	130	<0.00001	<0.005	<0.005	0.00254	<0.005	0.0053	<0.0001	1.0
RSEM-R6W-EOP	10/7/2022 12:10	BEA026	M	C278893	0.00088	<0.01	<0.0002	0.0249	25.3	0.0023	<0.0000019	0.0163	0.0018	0.012	7.49	0.00237	4.33	<0.00002	150	0.199	124	0.000011	<0.005	<0.005	0.00254	<0.005	<0.005	<0.0001	0.99
RSEM-R6W-EOP	10/8/2022 10:25	BED964	M	C279402	0.00086	<0.01	<0.0002	0.0253	27.1	0.0011	<0.0000019	0.0161	0.0016	0.012	8.00	0.00228	4.4	<0.00002	143	0.188	116	<0.00001	<0.005	<0.005	0.00243	<0.005	<0.005	<0.0001	0.70

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
RSEM-R6W-EOP	10/9/2022 9:45	BED926	M	C279394	0.00085	<0.01	<0.0002	0.0235	26.0	0.0016	<0.0000019	0.0154	0.0015	0.012	7.53	0.00246	4.63	<0.00002	142	0.192	114	0.00001	<0.005	<0.005	0.00248	<0.005	<0.005	<0.0001	0.75
RSEM-R6W-EOP	10/10/2022 10:05	BED793	M	C279368	0.00087	<0.01	<0.0002	0.0231	25.2	0.0011	<0.0000019	0.015	0.0014	0.012	7.39	0.00254	4.84	<0.00002	138	0.198	112	0.00001	<0.005	<0.005	0.00252	<0.005	<0.005	<0.0001	0.99
RSEM-R6W-EOP	10/11/2022 12:30	BEK436	M	C280406	0.00082	<0.01	<0.0002	0.0234	23.3	0.0014	<0.0000019	0.0146	0.0015	0.01	7.32	0.00277	4.57	<0.00002	136	0.206	116	<0.00001	<0.005	<0.005	0.00267	<0.005	<0.005	<0.0001	1.2
RSEM-R6W-EOP	10/12/2022 14:45	BEK646	M	C280448	0.00087	<0.01	<0.0002	0.0241	23.3	0.0012	<0.0000019	0.0148	0.0015	0.011	7.35	0.00272	4.7	<0.00002	137	0.202	115	<0.00001	<0.005	<0.005	0.00264	<0.005	<0.005	<0.0001	0.85
RSEM-R6W-EOP	10/13/2022 13:15	BEN618	M	C280837	0.0008	<0.01	<0.0002	0.0245	24.0	0.0013	<0.0000019	0.0144	0.0014	0.011	7.38	0.00283	4.39	<0.00002	142	0.215	116	<0.00001	<0.005	<0.005	0.00277	<0.005	<0.005	<0.0001	0.80
RSEM-R6W-EOP	10/14/2022 11:45	BEN600	M	C280833	0.00078	<0.01	<0.0002	0.0257	24.3	0.0016	<0.0000019	0.0146	0.0014	0.011	7.40	0.00289	4.23	<0.00002	146	0.219	118	0.00001	<0.005	<0.005	0.00282	<0.005	<0.005	<0.0001	0.69
RSEM-R6W-EOP	10/15/2022 13:45	BER008	M	C281389	0.00079	<0.01	<0.0002	0.0244	25.2	0.0016	<0.0000019	0.0145	0.0014	0.01	7.65	0.00306	4.36	<0.00002	146	0.222	117	<0.00001	<0.005	<0.005	0.00287	<0.005	<0.005	<0.0001	0.60
RSEM-R6W-EOP	10/16/2022 15:45	BER095	M	C281399	0.00076	<0.01	<0.0002	0.0247	25.2	0.0019	<0.0000019	0.0142	0.0014	<0.01	7.56	0.00312	4.15	<0.00002	144	0.222	116	0.000011	<0.005	<0.005	0.0029	<0.005	<0.005	<0.0001	0.77
RSEM-R6W-EOP	10/16/2022 16:00	BER097	D	C281399	0.00077	<0.01	<0.0002	0.0237	25.4	0.0018	<0.0000019	0.0144	0.0015	<0.01	7.46	0.00317	4.2	<0.00002	142	0.22	115	0.000011	<0.005	<0.005	0.00291	<0.005	<0.005	<0.0001	0.74
RSEM-R6W-EOP	10/17/2022 11:30	BER151	M	C281421	0.00077	<0.01	<0.0002	0.0241	25.3	0.0023	0.0000022	0.0139	0.0015	0.01	7.48	0.00318	4.06	<0.00002	142	0.222	117	0.000011	<0.005	<0.005	0.00291	<0.005	<0.005	<0.0001	0.55
RSEM-R6W-EOP	10/18/2022 9:40	BEX620	M	C282315	0.00087	<0.01	<0.0002	0.0258	24.0	0.0029	<0.0000019	0.0141	0.0017	<0.01	7.50	0.00292	3.91	<0.00002	138	0.234	118	<0.00001	<0.005	<0.005	0.00288	<0.005	<0.005	<0.0001	0.84
RSEM-R6W-EOP	10/19/2022 12:50	BFA348	M	C282741	0.00079	<0.01	<0.0002	0.0203	23.8	0.0022	<0.0000019	0.0135	0.0014	<0.01	7.20	0.00325	3.51	<0.00002	134	0.222	112	0.000011	<0.005	<0.005	0.00297	<0.005	<0.005	<0.0001	1.1
RSEM-R6W-EOP	10/20/2022 10:10	BFD237	M	C283174	0.00082	<0.01	<0.0002	0.0252	25.5	0.0024	<0.0000019	0.0136	0.0014	<0.01	7.36	0.00308	3.76	<0.00002	138	0.23	118	0.000012	<0.005	<0.005	0.00312	<0.005	0.007	<0.0001	1.8
RSEM-R6W-EOP	10/21/2022 10:20	BFD224	M	C283172	0.00084	<0.01	<0.0002	0.025	25.7	0.0023	0.0000027	0.0131	0.0014	<0.01	7.51	0.0032	3.77	<0.00002	138	0.234	120	0.000012	<0.005	<0.005	0.00309	<0.005	<0.005	<0.0001	1.2
RSEM-R6W-EOP	10/22/2022 11:40	BFI044	M	C283756	0.00075	<0.01	<0.0002	0.0221	24.5	0.002	<0.0000019	0.013	0.0014	0.01	7.03	0.00327	3.72	<0.00002	129	0.232	111	0.000011	<0.005	<0.005	0.00282	<0.005	<0.005	<0.0001	0.95
RSEM-R6W-EOP	10/23/2022 10:25	BFI229	M	C283774	0.00079	<0.01	<0.0002	0.0225	23.8	0.0019	<0.0000019	0.0123	0.0014	0.01	7.05	0.00343	4.5	<0.00002	117	0.243	103	0.000011	<0.005	<0.005	0.00305	<0.005	<0.005	<0.0001	1.1
RSEM-R6W-EOP	10/24/2022 9:55	BFL670	M	C284145	0.00081	<0.01	<0.0002	0.0215	23.0	0.0017	<0.0000019	0.0123	0.0014	0.011	6.77	0.00344	4.63	<0.00002	111	0.24	101	0.000013	<0.005	<0.005	0.00293	<0.005	<0.005	<0.0001	1.2
RSEM-R6W-EOP	10/25/2022 10:55	BFP708	M	C284665	0.00083	<0.01	<0.0002	0.019	21.9	0.0016	<0.0000019	0.0117	0.0016	<0.01	6.47	0.00372	4.54	<0.00002	102	0.235	92.2	0.000012	<0.005	<0.005	0.00284	<0.005	<0.005	<0.0001	1.3
RSEM-R6W-EOP	10/26/2022 12:40	BFS035	M	C285038	0.0008	<0.01	<0.0002	0.0178	20.8	0.002	<0.0000019	0.0111	0.0015	<0.01	6.03	0.00385	4.59	<0.00002	91.9	0.24	85.7	0.000013	<0.005	<0.005	0.00271	<0.005	<0.005	<0.0001	1.4
RSEM-R6W-EOP	10/27/2022 10:25	BFU907	M	C285466	0.00082	<0.01	<0.0002	0.0171	20.3	0.0021	<0.0000019	0.0108	0.0015	<0.01	6.01	0.00381	4.59	<0.00002	87.4	0.244	81.4	0.000011	<0.005	<0.005	0.00266	<0.005	<0.005	<0.0001	1.4
RSEM-R6W-EOP	10/28/2022 11:40	BFU722	M	C285458	0.00073	<0.01	<0.0002	0.0165	19.5	0.0021	<0.0000019	0.0107	0.0014	<0.01	5.79	0.00385	4.66	<0.00002	77.6	0.258	71.9	0.000011	<0.005	<0.005	0.00258	<0.005	<0.005	<0.0001	1.7
RSEM-R6W-EOP	10/29/2022 9:55	BFZ654	M	C286199	0.00068	<0.01	<0.0002	0.0148	19.6	0.0012	<0.0000019	0.0101	0.0014	0.012	5.63	0.00389	4.88	<0.00002	74.9	0.232	70.1	<0.00001	<0.005	<0.005	0.00228	<0.005	<0.005	<0.0001	1.7
RSEM-R6W-EOP	10/30/2022 11:30	BFZ646	M	C286196	0.00072	<0.01	<0.0002	0.0144	18.7	0.0011	<0.0000019	0.0097	0.0014	0.012	5.52	0.00394	5.02	<0.00002	69.4	0.229	67.1	<0.00001	<0.005	<0.005	0.00218	<0.005	<0.005	<0.0001	1.7
RSEM-R6W-EOP	10/31/2022 11:10	BGA236	M	C286288	0.00066	<0.01	<0.0002	0.0136	18.4	0.0012	<0.0000019	0.0093	0.0014	0.013	5.20	0.00386	5.16	<0.00002	62.4	0.222	61.0	<0.00001	<0.005	<0.005	0.00206	<0.005	<0.005	<0.0001	2.0
RSEM-R6W-EOP	11/1/2022 15:35	BGE764	M	C286877	0.00071	<0.01	<0.0002	0.0132	18.7	0.0011	<0.0000019	0.0088	0.0014	<0.01	5.07	0.00425	5.13	<0.00002	61.3	0.231	54.6	<0.00001	<0.005	<0.005	0.0021	<0.005	<0.005	<0.0001	1.8
RSEM-R6W-EOP	11/1/2022 15:55	BGE765	D	C286877	0.0007	<0.01	<0.0002	0.013	18.7	0.0013	<0.0000019	0.0088	0.0015	<0.01	5.10	0.00425	4.97	<0.00002	61.5	0.229	55.8	<0.00001	<0.005	<0.005	0.00213	<0.005	<0.005	<0.0001	2.0
RSEM-R6W-EOP	11/2/2022 12:45	BGJ736	M	C287754	0.00061	<0.01	<0.0002	0.0119	17.5	0.0017	<0.0000019	0.0087	0.0014	<0.01	4.97	0.00384	5.47	<0.00002	54.5	0.225	55.4	<0.00001	<0.005	<0.005	0.00212	<0.005	<0.005	<0.0001	3.0
RSEM-R6W-EOP	11/3/2022 14:15	BGJ744	M	C287759	0.00065	<0.01	<0.0002	0.012	17.8	<0.001	<0.0000019	0.0084	0.0014	0.01	4.85	0.00403	5.65	<0.00002	53.6	0.24	54.5	<0.00001	<0.005	<0.005	0.00207	<0.005	<0.005	<0.0001	2.5
RSEM-R6W-EOP	11/4/2022 11:15	BGJ739	M	C287756	0.0006	<0.01	<0.0002	0.0113	17.6	<0.001	<0.0000019	0.0079	0.0013	0.01	4.66	0.00389	5.65	<0.00002	50.2	0.238	51.6	0.000011	<0.005	<0.005	0.00202	<0.005	<0.005	<0.0001	2.7
RSEM-R6W-EOP	11/5/2022 13:45	BGO363	M	C288361	0.0006	<0.01	<0.0002	0.0105	16.5	0.0038	<0.0000019	0.0067	0.0014	<0.01	4.17	0.00341	5.13	<0.00002	43.1	0.21	44.2	<0.00001	<0.005	<0.005	0.00191	<0.005	<0.005	<0.0001	2.3
RSEM-R6W-EOP	11/6/2022 14:45	BGO252	M	C288323	0.00109	<0.01	<0.0002	0.0097	15.4	0.0048	<0.0000019	0.0057	0.0013	<0.01	3.77	0.00318	4.99	<0.00002	37.5	0.201	38.5	<0.00001	<0.005	<0.005	0.0018	<0.005	<0.005	<0.0001	2.6
RSEM-R6W-EOP	11/7/2022 10:15	BGO320	M	C288345	0.00054	<0.01	<0.0002	0.0094	15.3	0.0051	<0.0000019	0.0053	0.0013	<0.01	3.61	0.00304	4.94	<0.00002	35.0	0.202	38.1	<0.00001	<0.005	<0.005	0.00174	<0.005	<0.005	<0.0001	3.2
RSEM-R6W-EOP	11/8/2022 10:40	BGT301	M	C289111	0.00052	<0.005	<0.0002	0.0098	14.2	0.0049	<0.0000019	0.0045	0.0013	<0.01	3.26	0.00286	4.47	<0.00002	30.6	0.161	36.4	<0.00001	<0.005	<0.005	0.00166	<0.005	<0.005	<0.0001	4.1
RSEM-R6W-EOP	11/9/2022 11:00	BGW284	M	C289508	0.00052	<0.01	<0.0002	0.0084	14.7	0.0039	<0.0000019	0.0044	0.0011	<0.01	3.22	0.00276	4.77	<0.00002	30.0	0.184	34.3	<0.00001	<0.005	<0.005	0.00163	<0.005	<0.005	<0.0001	4.8
RSEM-R6W-EOP	11/10/2022 11:00	BGV716	M	C289423	0.00069	<0.005	<0.0002	0.0089	13.3	0.0036	<0.0000019	0.0039	0.0011	<0.01	2.99	0.00254	4.41	<0.00002	25.8	0.159	32.5	<0.00001	<0.005	<0.005	0.00153	<0.005	<0.005	<0.0001	4.2
RSEM-R6W-EOP	11/11/2022 11:10	BHA034	M	C290104	0.0005	<0.005	<0.0002	0.0078	12.7	0.0044	<0.0000019	0.0038	0.0012	<0.01	2.89	0.00244	4.13	<0.00002	24.0	0.165	32.1	<0.00001	<0.005	<0.005	0.00149	<0.005	<0.005	<0.0001	6.2
RSEM-R6W-EOP	11/12/2022 10:40	BHA062	M	C290112	0.00045	<0.005	<0.0002	0.0075	12.1	0.0042	<0.0000019	0.0034	0.0011	<0.01	2.65	0.0023	3.99	<0.00002	21.7	0.16	30.1	<0.00001	<0.005	<0.005	0.00141	<0.005	<0.005	<0.0001	4.9
RSEM-R6W-EOP	11/13/2022 11:20	BHA078	M	C290117	0.00044	<0.005	<0.0002	0.0072	12.0	0.0042	<0.0000019	0.0031	0.0012	<0.01	2.83	0.00215	3.78	<0.00002	20.9	0.153	28.6	<0.00001	<0.005	<0.005	0.00137	<0.005	<0.005	<0.0001	3.1
RSEM-R6W-EOP	11/14/2022 11:00	BHC287	M	C290544	0.00067	<0.01	<0.0002	0.0073	12.2	0.0043	<0.0000019	0.0031	0.0012	<0.01	2.35	0.00253	3.77	<0.00002	21.7	0.158	26.1	<0.00001	<0.005	<0.005	0.00125	<0.005	<0.005	<0.0001	3.0
RSEM-R6W-EOP	11/15/2022 11:10	BHD952	M	C290817	<0.0005	<0.01	<0.0002	0.0077	12.5	0.0051	<0.0000019	0.0032	0.0014	<0.01	2.41	0.00242	3.81	<0.00002	22.0	0.159	27.7	<0.00001	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	4.8
RSEM-R6W-EOP	11/16/2022 12:20	BHF926	M	C291159	0.00052	<0.005	<0.0002	0.0075	13.8	0.0049	<0.0000019	0.0033	0.0014	<0.01	2.42	0.00249	3.84	<0.00002	23.3	0.168	28.7	<0.00001	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	5.1
RSEM-R6W-EOP	11/17/2022 12:10	BHH896	M	C291494	0.0005	<0.01	<0.0002	0.008	12.6	0.0042	<0.0000019	0.0033	0.0015	<0.01	2.28	0.00256	3.7	<0.00002	23.8	0.159	26.1	<0.00001	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	4.6
RSEM-R6W-EOP	11/18/2022 11:10	BHI800	M	C291574	0.00051	<0.01	<0.0002	0.0085	12.2	0.0038	<0.0000019	0.0032	0.0014	<0.01	2.18	0.00253	3.81	<0.00002	23.4	0.149	25.1	<0.00001	<0.005	<0.005	0.00116	<0.005	<0.005	<0.0001	5.7
RSEM-R6W-EOP	11/19/2022 12:20	BHL412	M	C291899	0.00048	<0.005	<0.0002	0.0082	11.5	0.0037	0.0000029	0.0031	0.0013	<0.01	2.34	0.00246	3.77	<0.00002	20.7	0.153	26.7	<0.00001	<0.005	<0.005	0.00121	<0.005	<0.005	<0.0001	6.5
RSEM-R6W-EOP	11/20/2022 11:40	BHL417	M	C291901	0.00046	<0.005	<0.0002	0.008	11.1	0.0034	<0.0000019	0.0029	0.0012	<0.01	2.19	0.00243	3.76	<0.00002	19.3	0.146	24.0	<0.00001	<0.005	<0.005	0.00116	<0.005	<0.005	<0.0001	7.2
RSEM-R6W-EOP	11/21/2022 11:25	BHL421	M	C291903	0.00076	<0.005	<0.0002	0.0076	10.9	0.0035	<0.0000019	0.0028	0.0011	<0.01	2.11	0.00237	3.78	<0.00002	17.9	0.142	24.3	<0.00001	<0.005	<0.005	0.00112	<0.005	<0.005	<0.0001	11
RSEM-R6W-EOP	11/22/2022 12:39	BHR289	M	C292931	<0.0005	<0.01	<0.0002	0.007	11.1	0.0031	<0.0000019	0.0029	0.0012	<0.01	2.08	0.00219	3.52	<0.00002	19.9	0.147	23.1	<0.00001	<0.005	<0.005	0.00115	<0.005	<0.005	<0.0001	10
RSEM-R6W-EOP	11/23/2022 15:30	BHR240	M	C292918	0.00059	<0.01	<0.0002	0.0069	10.9	0.0038	<0.0000019	0.0032	0.0012	<0.01	2.15	0.0021	3.54	<0.00002	20.0	0.148	22.0	<0.00001	<0.005	<0.005	0.00113	<0.005	<0.005	<0.0001	7.5
RSEM-R6W-EOP	11/24/2022 14:00	BHS969	M	C293245	0.00132	<0.01	<0.0002	0.0069	11.6	0.0036	<0.0000019	0.0034	0.0012	<0.01	2.35	0.00214	3.58	<0.00002	19.2	0.146	23.3	<0.00001	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	7.9
RSEM-R6W-EOP	11/25/2022 10:45	BHS973	M	C293246	0.00059	<0.01	<0.0002	0.0067	11.3	0.0041	<0.0000019	0.0034	0.0012	<0.01	2.30	0.00201	3.65	<0.00002	18.7	0.144	21.9	<0.00001	<0.005	<0.005	0.00124	<0.005	<0.005	<0.0001	7.2
RSEM-R6W-EOP	11/26/2022 12:15	BHX192	M	C293769	0.00054	<0.005	<0.0002	0.007	11.6	0.0054	<0.0000019	0.0032	0.0011	<0.01	2.30	0.00187	3.6	<0.00002	18.5	0.142	19.8	<0.00001	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0001	9.9
RSEM-R6W-EOP	11/27/2022 13:45	BHX164	M	C293759	0.00049	<0.005	<0.0002	0.0072	11.4	0.0063	<0.0000019	0.003	0.0011	<0.01	2.17	0.00183	3.73	<0.00002	18.0	0.143	21.5	<0.00001	<0.005	<0.005	0.00107	<0.005	<0.005	<0.0001	11
RSEM-R6W-EOP	11/28/2022 10:15	BHX166	M	C293760	0.00044	<0.005	<0.0002	0.0072	10.9	0.0061	<0.0000019	0.0028	0.0011	<0.01	2.01	0.00185	3.64	<0.00002	16.9	0.135	20.4	<0.00001	<0.005	<0.005	0.00103	<0.005	<0.005	<0.0001	9.2
RSEM-R6W-EOP	11/28/2022 10:30	BHX167	D	C293760	0.00045	<0.005	<0.0002	0.0073	11.1	0.0062	<0.0000019	0.0028	0.0011	<0.01	2.05	0.00191	3.71	<0.00002	17.1	0.138	19.5	<0.00001	<0.005	<0.005	0.00103	<0.005	<0.005	<0.0001	9.5
RSEM-R6W-EOP	11/29/2022 10:05	BIA658	M	C294441	<0.0005	<0.01	<0.0002	0.0076	11.6	0.0058	<0.0000019	0.0031	0.0013	<0.01	2.12	0.00187	3.67	<0.00002	17.9	0.157	22.2	<0.00001	<0.005	<0.005	0.0012	<0.005	<0.005	<0.0001	8.8
RSEM-R6W-EOP	11/30/2022 10:50	BID442	M	C294835	0.00045	<0.005	<0.0002	0.0079	11.2	0.0049	<0.0000019	0.0029	0.0014	<0.01	2.21	0.00231	3.66	<0.00002	17.8	0.159	24.4	<0.00001	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	6.5
RSEM-R6W-EOP	11/30/2022 11:00	BID443	D	C294835	0.00045	<0.005	<0.0002	0.0078	11.1	0.0049	<0.0000019	0.0029	0.0014	<0.01	2.18	0.00235	3.65	<0.00002	17.5	0.157	24.3	<0.00001	<0.005	<0.005	0.0012	<0.005	<0.005	<0.0001	6.9
RSEM-R6W-EOP	12/1/2022 11:20	BIF877	M	C295196	0.00043	<0.005	<0.0002	0.0067	12.2	0.0036	<0.0000019	0.0027	0.0013	<0.01	1.83	0.00187	3.86	<0.00002	17.2	0.143	22.3	<0.00001	<0.005	<0.005	0.00109	<0.005	<0.005	<0.0001	6.2
RSEM-R6W-EOP	12/2/2022 10:50	BIF818	M	C295193	0.00044	<0.005	<0.0002	0.0065	12.9	0.0034	<0.0000019	0.0027	0.0013	<0.01	1.88	0.00194	3.96	<0.00002	17.8	0.148	22.7	<0.00001	<0.005	<0.005	0.00113	<0.005	<0.005	<0.0001	7.4
RSEM-R6W-EOP	12/3/2022 10:45	BII772	M	C295634	0.00043	<0.005	<0.0002	0.0068	11.5	0.0031	<0.0000019	0.0027	0.0013	<0.01	1.93	0.00193	3.78	<0.00002	15.5	0.144	21.8	<0.00001	<0.005	<0.005	0.00111	<0.005	<0.005	<0.0001	7.1
RSEM-R6W-EOP	12/3/2022 10:55	BII773	D	C295634	0.00043	<0.005	<0.0002	0.0068	11.2	0.0031	<0.0000019	0.0026	0.0012	<0.01	1.86	0.00184	3.75	<0.00002	15.0	0.141	21.9	<0.00001	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	7.1
RSEM-R6W-EOP	12/4/2022 10:45	BII770	M	C295633	0.00044	<0.005	<0.0002	0.0066	11.3	0.0033	<0.0000019	0.0026	0.0012	<0.01	1.88	0.00179	3.78	<0.00002	14.9	0.14	21.9	<0.00001	<0.005	<0.005	0.00108	<0.005	<0.005	<0.0001	7.2
RSEM-R6W-EOP	12/5/2022 12:30	BIL940	M	C296047	0.00043	<0.005	<0.0002	0.0067	11.9	0.0039	<0.0000019	0.0028	0.0013	<0.01	1.99	0.0019	3.86	<0.00002	15.4	0.146	25.0	<0.00001	<0.005	<0.005	0.00114	<0.005	<0.005	<0.0001	6.8
RSEM-R6W-EOP	12/6/2022 10:30	BIO857	M	C296487	0.00059	<0.005	<0.0002	0.0067	12.0	0.0032	<0.0000019	0.0027	0.0013	<0.01	2.13	0.00211	3.72	<0.00002	16.7	0.148	23.1	<0.00001	<0.005	<0.005	0.00121	<0.005	<0.005	<0.0001	7.9
RSEM-R6W-EOP	12/7/2022 11:35	BIR864	M	C297052	0.00055	<0.005	<0.0002	0.0067	12.2	0.0037	<0.0000019	0.0027	0.0015	<0.01	2.15	0.00231	3.8	<0.00002	16.6	0.148	23.7	<0.00001	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	7.3
RSEM-R6W-EOP	12/7/2022 11:45	BIR865	D	C297052	0.00062	<0.005	<0.0002	0.0068	12.3	0.0037	<0.0000019	0.0027	0.0015	<0.01	2.16	0.00217	3.82	<0.00002	16.7	0.15	24.0	<0.00001	<0.005	<0.005	0.00126	<0.005	<0.005	<0.0001	7.0
RSEM-R6W-EOP	12/8/2022 16:10	BIT646	M	C297337	<0.0005	<0.01	<0.0002	0.0075	12.5	0.0035	<0.0000019	0.0028	0.0015	<0.01	2.22	0.00194	3.98	<0.00002	17.1	0.154	26.8	<0.00001	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	5.9
RSEM-R6W-EOP	12/9/2022 11:10	BIT658	M	C297341	<0.0005	<0.01	<0.0002	0.0067	12.3	0.004	<0.0000019	0.0027	0.0016	<0.01	2.16	0.0025	4.01	<0.00002	16.6	0.149	25.5	<0.00001	<0.005	<0.005	0.00132	<0.005	<0.005	<0.0001	6.4

Appendix 3-C: 2022 Analytical Sample and Field Duplicate Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	Sample Class	Lab Report Id	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr	Turbidity-lab
					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	NTU
RSEM-R6W-EOP	12/10/2022 11:50	BIX265	M	C297760	0.00045	<0.005	<0.0002	0.0078	11.5	0.0049	<0.0000019	0.0028	0.0017	<0.01	2.18	0.00226	4.09	<0.00002	15.4	0.149	24.5	<0.00001	<0.005	<0.005	0.00126	<0.005	0.0053	<0.0001	6.9
RSEM-R6W-EOP	12/10/2022 12:00	BIX266	D	C297760	0.00044	<0.005	<0.0002	0.0077	11.9	0.0052	<0.0000019	0.0029	0.0017	<0.01	2.23	0.00227	4.04	<0.00002	15.8	0.152	25.1	<0.00001	<0.005	<0.005	0.00128	<0.005	0.0053	<0.0001	6.9
RSEM-R6W-EOP	12/11/2022 15:30	BIX268	M	C297761	0.00049	<0.005	<0.0002	0.0075	12.0	0.0053	<0.0000019	0.0031	0.0018	<0.01	2.29	0.00221	4.1	<0.00002	15.9	0.157	26.0	<0.00001	<0.005	<0.005	0.00129	<0.005	0.0059	<0.0001	7.9
RSEM-R6W-EOP	12/12/2022 10:15	BIX294	M	C297767	0.00048	<0.005	<0.0002	0.0075	12.0	0.006	<0.0000019	0.003	0.0019	<0.01	2.25	0.00223	4.05	<0.00002	15.5	0.155	24.8	<0.00001	<0.005	<0.005	0.00129	<0.005	0.0064	<0.0001	6.4
RSEM-R6W-EOP	12/13/2022 12:30	BJH803	M	C299400	0.00044	<0.005	<0.0002	0.0075	12.2	0.0061	<0.0000019	0.0028	0.0018	<0.01	2.17	0.00244	4.11	<0.00002	13.9	0.146	23.7	<0.00001	<0.005	<0.005	0.00127	<0.005	0.0051	<0.0001	9.5
RSEM-R6W-EOP	12/14/2022 13:15	BJH809	M	C299405	0.00043	<0.005	<0.0002	0.0072	12.2	0.0054	<0.0000019	0.0028	0.0017	<0.01	2.18	0.00237	3.99	<0.00002	13.6	0.147	23.0	<0.00001	<0.005	<0.005	0.00121	<0.005	<0.005	<0.0001	8.0
RSEM-R6W-EOP	12/14/2022 13:30	BJH810	D	C299405	0.00045	<0.005	<0.0002	0.0073	12.5	0.0055	<0.0000019	0.0028	0.0017	<0.01	2.20	0.00228	4.01	<0.00002	13.8	0.149	22.7	<0.00001	<0.005	<0.005	0.00123	<0.005	<0.005	<0.0001	8.2
RSEM-R6W-EOP	12/15/2022 13:00	BJJ047	M	C299557	0.00045	<0.005	<0.0002	0.0073	12.2	0.0057	<0.0000019	0.0027	0.0015	<0.01	2.16	0.00237	4.05	<0.00002	13.6	0.138	22.6	<0.00001	<0.005	<0.005	0.00122	<0.005	<0.005	<0.0001	7.4
RSEM-R6W-EOP	12/16/2022 10:30	BJJ051	M	C299559	0.00042	<0.005	<0.0002	0.007	11.6	0.0049	<0.0000019	0.0027	0.0015	<0.01	2.04	0.00214	3.98	<0.00002	13.0	0.134	21.4	<0.00001	<0.005	<0.005	0.00117	<0.005	0.0058	<0.0001	5.0
RSEM-R6W-EOP	12/17/2022 13:00	BJL794	M	C299939	<0.0005	<0.01	<0.0002	0.0064	10.9	0.006	<0.0000019	0.0028	0.0015	<0.01	2.01	0.00243	3.92	<0.00002	14.1	0.14	22.4	<0.00001	<0.005	<0.005	0.0011	<0.005	0.0062	<0.0001	5.3
RSEM-R6W-EOP	12/18/2022 13:15	BJL804	M	C299943	<0.0005	<0.01	<0.0002	0.0065	10.9	0.0067	<0.0000019	0.0027	0.0015	<0.01	2.00	0.00235	4.03	<0.00002	14.1	0.143	22.7	<0.00001	<0.005	<0.005	0.00115	<0.005	0.0059	<0.0001	4.9
RSEM-R6W-EOP	12/19/2022 11:00	BJL813	M	C299950	<0.0005	<0.01	<0.0002	0.0065	11.0	0.006	<0.0000019	0.0028	0.0014	<0.01	2.02	0.00228	4.04	<0.00002	14.6	0.143	22.7	<0.00001	<0.005	<0.005	0.00114	<0.005	0.0051	<0.0001	5.4
RSEM-R6W-EOP	12/20/2022 10:00	BJP134	M	C2A0603	0.00051	<0.01	<0.0002	0.0072	12.7	0.0057	<0.0000019	0.003	0.0016	<0.01	2.23	0.00221	4.24	<0.00002	15.3	0.148	24.3	<0.00001	<0.005	<0.005	0.00133	<0.005	0.005	<0.0001	5.1
RSEM-R6W-EOP	12/21/2022 10:30	BJP447	M	C2A0675	0.00056	<0.01	<0.0002	0.0072	13.3	0.0058	0.0000026	0.0031	0.0017	<0.01	2.26	0.00225	4.31	<0.00002	15.1	0.151	24.6	<0.00001	<0.005	<0.005	0.00137	<0.005	0.0062	<0.0001	5.4
RSEM-R6W-EOP	12/21/2022 10:40	BJP448	D	C2A0675	0.00052	<0.01	<0.0002	0.0072	13.2	0.0059	<0.0000019	0.0031	0.0016	<0.01	2.26	0.00234	4.27	<0.00002	15.4	0.15	24.1	<0.00001	<0.005	<0.005	0.00135	<0.005	0.0059	<0.0001	5.9
RSEM-R6W-EOP	12/22/2022 12:35	BJQ104	M	C2A0818	0.00051	<0.01	<0.0002	0.0073	12.3	0.0045	<0.0000019	0.0031	0.0015	<0.01	2.17	0.0025	3.91	<0.00002	14.5	0.151	23.4	<0.00001	<0.005	<0.005	0.00136	<0.005	0.0052	<0.0001	6.1
RSEM-R6W-EOP	12/23/2022 11:25	BJQ106	M	C2A0819	<0.0005	<0.01	<0.0002	0.0079	11.8	0.0034	<0.0000019	0.0033	0.0012	<0.01	2.23	0.00212	4.02	<0.00002	15.6	0.14	22.7	<0.00001	<0.005	<0.005	0.00129	<0.005	<0.005	<0.0001	6.5
RSEM-R6W-EOP	12/24/2022 12:30	BJR122	M	C2A1052	<0.0005	<0.01	<0.0002	0.0065	13.3	0.0048	<0.0000019	0.004	0.0012	<0.01	2.65	0.00146	5.3	<0.00002	20.8	0.162	24.0	<0.00001	<0.005	<0.005	0.00139	<0.005	0.0054	<0.0001	3.1
RSEM-R6W-EOP	12/24/2022 12:40	BJR121	D	C2A1052	<0.0005	<0.01	<0.0002	0.0063	13.5	0.004	<0.0000019	0.0037	0.0013	<0.01	2.51	0.00144	5.43	<0.00002	19.6	0.164	24.3	<0.00001	<0.005	<0.005	0.00139	<0.005	<0.005	<0.0001	2.6
RSEM-R6W-EOP	12/25/2022 10:55	BJR129	M	C2A1055	<0.0005	<0.01	<0.0002	0.0063	13.3	0.0039	<0.0000019	0.0037	0.0013	<0.01	2.49	0.00152	5.38	<0.00002	19.3	0.169	23.0	<0.00001	<0.005	<0.005	0.00138	<0.005	<0.005	<0.0001	2.4
RSEM-R6W-EOP	12/26/2022 8:05	BJR178	M	C2A1058	<0.0005	<0.01	<0.0002	0.0064	13.4	0.0046	<0.0000019	0.0038	0.0013	<0.01	2.56	0.00145	5.44	<0.00002	20.2	0.167	23.3	<0.00001	<0.005	<0.005	0.00139	<0.005	<0.005	<0.0001	2.7
RSEM-R6W-EOP	12/27/2022 13:00	BJS997	M	C2A1469	<0.0005	<0.01	<0.0002	0.0089	13.0	0.0054	<0.0000019	0.0039	0.0011	<0.01	2.64	0.00237	4.29	<0.00002	19.8	0.141	23.9	<0.00001	<0.005	<0.005	0.00133	<0.005	0.0063	<0.0001	4.8
RSEM-R6W-EOP	12/28/2022 12:00	BJS998	M	C2A1470	<0.0005	<0.01	<0.0002	0.009	13.3	0.0072	<0.0000019	0.004	0.0011	0.013	2.70	0.00228	4.27	<0.00002	20.6	0.144	25.3	<0.00001	<0.005	<0.005	0.00136	<0.005	0.0063	<0.0001	4.4
RSEM-R6W-EOP	12/29/2022 14:00	BJT907	M	C2A1753	<0.0005	<0.01	<0.0002	0.0097	13.3	0.0136	<0.0000019	0.0037	0.0011	<0.01	2.50	0.00183	4.49	<0.00002	22.2	0.125	22.2	<0.00001	<0.005	<0.005	0.00133	<0.005	<0.005	<0.0001	5.8
RSEM-R6W-EOP	12/29/2022 14:15	BJT908	D	C2A1753	<0.0005	<0.01	<0.0002	0.0098	14.1	0.0159	<0.0000019	0.0039	0.0011	<0.01	2.62	0.00174	4.46	<0.00002	23.3	0.13	23.5	<0.00001	<0.005	<0.005	0.00138	<0.005	0.0052	<0.0001	5.8
RSEM-R6W-EOP	12/30/2022 10:30	BJT902	M	C2A1751	<0.0005	<0.01	<0.0002	0.0107	15.7	0.0145	<0.0000019	0.0041	0.0011	<0.01	2.66	0.00195	4.4	<0.00002	24.4	0.133	23.2	<0.00001	<0.005	<0.005	0.00143	<0.005	0.0051	<0.0001	5.1
RSEM-R6W-EOP	12/31/2022 13:00	BJU301	M	C300112	0.00053	<0.01	<0.0002	0.0101	15.1	0.0112	<0.0000019	0.0049	0.0013	<0.01	3.01	0.00144	5.55	<0.00002	30.3	0.167	24.4	<0.00001	<0.005	<0.005	0.00151	<0.005	0.0057	<0.0001	1.9
RSEM-R6-WP-IN	1/10/2022 9:50	FJ2200044-002	M	FJ2200044	0.00103	0.014	<0.000050	0.0610	28.0	0.00928	<0.0000050	0.00622	0.0017	<0.050	4.09	0.00269	5.99	<0.000010	84.1	0.158	55.2	<0.000010	0.00041	<0.00030	0.00280	0.00278	0.375	<0.00020	4.46
RSEM-R6-WP-IN	5/13/2022 11:50	ATB015	M	C232410	0.00067	<0.01	<0.0002	0.0627	23.4	0.0123	<0.0000019	0.0115	0.0053	<0.01	4.45	0.00916	2.88	<0.00002	128	0.262	138	0.000012	<0.005	<0.005	0.00243	<0.005	0.0633	<0.0001	6.2
RSEM-R6W-SP	1/7/2022 13:15	FJ2200035-003	M	FJ2200035	0.00188	0.012	<0.000050	0.0745	31.1	0.0476	<0.0000050	0.00834	0.0034	<0.050	5.09	0.00248	6.38	<0.000010	108	0.210	63.1	<0.000010	0.00044	<0.00030	0.00301	0.00275	0.0914	<0.00020	11.0
RSEM-R6W-SP	1/10/2022 10:30	FJ2200044-003	M	FJ2200044	0.00190	0.016	<0.000050	0.0692	28.2	0.0456	<0.0000050	0.00795	0.00280	<0.050	4.59	0.00275	6.51	<0.000010	102	0.182	66.9	<0.000010	0.00045	<0.00030	0.00280	0.00262	0.0767	<0.00020	5.60
RSEM-R6W-SP	1/11/2022 17:00	FJ2200088-001	M	FJ2200088	0.00457	0.041	<0.000050	0.0684	26.4	0.0738	<0.0000050	0.00694	0.0031	<0.050	4.10	0.00187	5.68	<0.000010	98.2	0.180	58.7	<0.000010	0.00039	0.00064	0.00267	0.00202	0.0819	<0.00020	7.03
RSEM-R6W-SP	1/18/2022 11:20	FJ2200122-001	M	FJ2200122	0.00026	<0.010	<0.000050	0.0679	26.4	0.0254	<0.0000050	0.00712	0.002	<0.050	3.98	0.00178	6.29	<0.000010	100	0.127	66.1	<0.000010	0.00091	<0.00030	0.00265	0.00173	0.0037	<0.00020	10.4
RSEM-R6W-SP	1/19/2022 12:00	FJ2200185-001	M	FJ2200185	0.00024	<0.010	<0.000050	0.0651	29.0	0.0260	<0.0000050	0.00716	0.0024	<0.050	4.26	0.00165	6.01	<0.000010	102	0.128	65.0	<0.000010	0.00083	<0.00030	0.00279	0.00162	0.0020	<0.00020	7.33
RSEM-R6W-SP	2/1/2022 16:00	AOB116	M	C207120	0.00124	<0.01	<0.0002	0.0635	22.7	0.0298	0.0000023	0.0057	0.0043	0.03	4.34	0.00168	4.15	<0.00002	74.3	0.145	52.7	0.000016	<0.005	<0.005	0.00214	<0.005	0.0084	<0.0001	14
RSEM-R6W-SP	2/2/2022 12:00	AOB073	M	C207109	0.0016	<0.01	<0.0002	0.072	25.5	0.0296	0.0000024	0.0061	0.0043	0.016	4.22	0.00186	4.63	<0.00002	79.5	0.155	73.8	<0.00001	<0.005	<0.005	0.00217	<0.005	0.0127	<0.0001	13
RSEM-R6W-SP	2/3/2022 12:00	AOC177	M	C207302	0.00125	<0.01	<0.0002	0.0631	22.3	0.0351	0.0000032	0.0056	0.0041	0.017	4.17	0.00184	4.27	<0.00002	71.8	0.148	51.9	<0.00001	<0.005	<0.005	0.00207	<0.005	0.0085	<0.0001	12
RSEM-R6W-SP	2/4/2022 11:00	AOC181	M	C207304	0.00156	<0.01	<0.0002	0.0793	26.2	0.0419	<0.0000019	0.0069	0.0045	0.012	4.62	0.00202	5.01	<0.00002	83.9	0.176	74.1	<0.00001	<0.005	<0.005	0.00238	<0.005	0.0076	<0.0001	8.9
RSEM-R6W-SP	2/5/2022 10:00	AOE502	M	C207630	0.00139	<0.01	<0.0002	0.0716	25.9	0.0383	<0.0000019	0.0056	0.0043	<0.01	4.48	0.00192	4.74	<0.00002	82.4	0.148	64.4	<0.00001	<0.005	<0.005	0.00215	<0.005	0.0079	<0.0001	11
RSEM-R6W-SP	2/6/2022 13:00	AOE484	M	C207624	0.00146	<0.01	<0.0002	0.0729	27.1	0.0387	<0.0000019	0.0058	0.0041	0.017	4.34	0.0019	4.86	<0.00002	86.4	0.152	67.7	<0.00001	<0.005	<0.005	0.00217	<0.005	0.0087	<0.0001	8.3
RSEM-R6W-SP	3/2/2022 13:30	APO714	M	C213881	0.00259	<0.01	<0.0002	0.0317	14.7	0.0113	<0.0000019	0.0035	0.0027	0.012	3.86	0.00268	2.49	<0.00002	42.1	0.153	63.4	<0.00001	<0.005	<0.005	0.00058	<0.005	0.0088	<0.0001	4.4
RSEM-R6W-SP	3/3/2022 15:40	APQ573	M	C214168	0.00319	<0.01	<0.0002	0.0332	17.3	0.0126	<0.0000019	0.0041	0.0034	<0.01	3.29	0.00296	3.05	<0.00002	46.5	0.161	46.5	<0.00001	<0.005	<0.005	0.00053	<0.005	0.0168	<0.0001	2.4
RSEM-R6W-SP	4/17/2022 17:25	ARR904	M	C225213	0.0012	<0.01	<0.0002	0.0254	12.3	0.064	<0.0000019	0.0045	0.0057	<0.01	2.77	0.00159	1.98	<0.00002	38.0	0.168	42.8	<0.00001	<0.005	<0.005	0.00101	<0.005	0.0059	<0.0001	6.2
RSEM-R6W-SP	7/27/2022 12:00	AYK062	M	C255556	0.00104	<0.01	<0.0002	0.0381	26.3	<0.001	<0.0000019	0.0152	0.0019	<0.01	7.15	0.00354	2.35	<0.00002	165	0.227	134	0.000011	<0.005	<0.005	0.00242	<0.005	<0.005	<0.0001	1.3
SeptimusBeaverPond_1	4/2/2022 15:15	ARB522	M	C222000	<0.0005	0.139	<0.0002	<0.002	6.27	1.26	<0.0000019	<0.001	<0.001	0.107	7.52	<0.0001	0.548	<0.00002	0.930	0.189	7.8	<0.00001	<0.005	<0.005	0.00016	<0.005	<0.005	<0.0001	5.6
SeptimusBeaverPond_2	4/2/2022 15:25	ARB523	M	C222000	<0.0005	0.132	<0.0002	<0.002	4.36	0.0965	<0.0000019	<0.001	<0.001	0.146	6.34	<0.0001	0.553	<0.00002	0.547	0.0855	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	5.0
SeptimusBeaverPond_3	4/2/2022 15:35	ARB524	M	C222000	<0.0005	0.26	<0.0002	<0.002	6.10	0.196	0.0000022	<0.001	<0.001	0.232	7.21	<0.0001	0.971	<0.00002	0.789	0.123	7.4	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	5.0
SeptimusBeaverPond_4	4/2/2022 15:50	ARB525	M	C222000	<0.0005	0.202	<0.0002	<0.002	9.19	0.446	<0.0000019	<0.001	<0.001	0.217	5.23	<0.0001	1.34	<0.00002	1.42	0.158	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	5.3
SeptimusBeaverPond_5	4/2/2022 16:00	ARB526	M	C222000	<0.0005	0.384	<0.0002	0.0041	24.2	0.982	<0.0000019	<0.001	0.0012	0.519	8.38	0.00012	3.96	<0.00002	3.55	0.425	6.8	<0.00001	<0.005	<0.005	0.00019	<0.005	<0.005	0.00012	29
SeptimusBeaverPond_6	4/2/2022 16:15	ARB527	M	C222000	<0.0005	0.256	<0.0002	<0.002	11.6	0.605	<0.0000019	0.0014	0.0022	0.017	4.42	<0.0001	1.72	<0.00002	1.87	0.109	<3.0	<0.00001	<0.005	<0.005	0.00044	<0.005	<0.005	<0.0001	6.4
SeptimusBeaverPond_7	4/2/2022 16:20	ARB528	M	C222000	<0.0005	0.4	<0.0002	0.0021	11.3	0.492	<0.0000019	0.0012	0.0022	0.039	3.54	<0.0001	1.95	<0.00002	1.47	0.103	<3.0	<0.00001	<0.005	<0.005	0.00115	<0.005	<0.005	<0.0001	40
SeptimusBeaverPond_8	4/2/2022 16:30	ARB529	M	C222000	<0.0005	0.149	<0.0002	0.0023	10.8	0.613	<0.0000019	<0.001	0.0015	0.015	2.90	<0.0001	0.823	<0.00002	1.81	0.183	12.6	<0.00001	<0.005	<0.005	0.00109	<0.005	<0.005	<0.0001	9.7
SeptimusBeaverPond_1	6/25/2022 14:35	AVZ710	M	C245512	<0.0005	0.057	<0.0002	0.009	46.4	0.0084	0.0000043	0.0017	0.0035	0.011	2.71	0.00067	0.449	<0.00002	6.76	1.1	74.6	<0.00001	<0.005	<0.005	0.00187	<0.005	<0.005	0.00014	10
SeptimusBeaverPond_2	6/25/2022 14:50	AVZ711	M	C245512	<0.0005	0.136	<0.0002	0.0055	29.3	0.0611	0.0000043	<0.001	0.0024	0.097	4.35	0.00018	1.3	<0.00002	4.24	0.686	41.8	<0.00001	<0.005	<0.005	0.00021	<0.005	<0.005	<0.0001	4.2
SeptimusBeaverPond_3	6/25/2022 14:55	AVZ712	M	C245512	<0.0005	0.076	<0.0002	0.005	29.2	0.0065	<0.0000019	<0.001	0.0022	0.016	4.03	0.00011	0.3	<0.00002	3.86	0.511	31.7	<0.00001	<0.005	<0.005	0.00013	<0.005	<0.005	<0.0001	2.5
SeptimusBeaverPond_4	6/25/2022 15:10	AVZ713	M	C245512	<0.0005	0.149	<0.0002	0.0051	28.1	0.0819	0.0000024	<0.001	0.002	0.064	4.42	0.00012	0.685	<0.00002	3.87	0.54	29.6	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	1.7
SeptimusBeaverPond_5	6/25/2022 15:25	AVZ714	M	C245512	<0.0005	0.155	<0.0002	0.0053	28.9	0.244	0.000002	<0.001	0.0022	0.124	5.14	0.00022	0.902	<0.00002	4.16	0.728	43.0	<0.00001	<0.005	<0.005	0.00011	<0.005	<0.005	0.00014	1.8
SeptimusBeaverPond_6	6/25/2022 15:40	AVZ715	M	C245512	<0.0005	0.161	<0.0002	0.0056	30.6	0.12	0.0000024	<0.001	0.002	0.098	4.53	0.00027	0.614	<0.00002	4.36	0.87	49.5	<0.00001	<0.005	<0.005	0.00015	<0.005	<0.005	0.00011	3.7
SeptimusBeaverPond_7	6/25/2022 15:50	AVZ716	M	C245512	<0.0005	0.089	<0.0002	0.0052	29.9	0.0044	0.0000035	<0.001	0.002	0.129	4.21	0.00023	0.649	<0.00002	4.16	0.836	45.4	<0.00001	<0.005	<0.005	0.00013	<0.005	<0.005	<0.0001	5.7
SeptimusBeaverPond_8	6/25/2022 15:55	AVZ717	M	C245512	<0.0005	0.087	<0.0002	0.0056	30.8	0.0361	0.0000034	<0.001	0.002	0.082	4.18	0.00035	0.657	<0.00002	4.30	0.919	53.1	<0.00001	<0.005	<0.005	0.00022	<0.005	<0.005	0.00014	3.0
SeptimusBeaverPond_1	9/17/2022 15:00	BCF762	M	C272259	<0.0005	0.064	<0.0002	0.006	40.7	0.0033	<0.000019	<0.001	<0.001	0.04	6.27	0.00016	3.11	<0.00002	5.34	0.824	37.4	<0.00001	<0.005	<0.005	0.00021	<0.005	<0.005	<0.0001	1.8
SeptimusBeaverPond_2	9/17/2022 15:15	BCF755	M	C272259	<0.0005	0.117	<0.0002	0.0054	35.4	0.589	<0.000019	<0.001	<0.001	0.07	7.06	0.00016	3.67	<0.00002	4.72	0.774	32.3	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0056	<0.0001	6.3
SeptimusBeaverPond_3	9/17/2022 15:25	BCF756	M	C272259	<0.0005	0.076	<0.0002	0.0061	36.0	0.687	<0.000019	<0.001	<0.001	0.085	7.08	0.00016	4.23	<0.00002	4.62	0.816	36.1	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0053	<0.0001	4.2
SeptimusBeaverPond_4	9/17/2022 15:30	BCF757	M	C272259	<0.0005	0.125	<0.0002	0.0058	37.9	0.399	<0.000019	<0.001	<0.001	0.079	7.13	0.00017	4.07	<0.00002	4.86	0.801	34.9	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	3.7
SeptimusBeaverPond_5	9/17/2022 15:45	BCF758	M	C272259	<0.0005	0.11	<0.0002	0.0057	37.7	0.556	<0.000019	<0.001	<0.001	0.075	6.98	0.00015	4.23	<0.00002	4.78	0.803	34.7	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	3.3
SeptimusBeaverPond_6	9/17/2022 15:55	BCF759	M	C272259	<0.0005	0.05	<0.0002	0.0049	34.0	0.0067	<0.000019	<0.001	0.0014	0.021	1.92	0.00012	1.05	<0.00002	3.53	0.35	8.7	<0.00001	<0.005	<0.005	0.0001	<0.005	<0.005	<0.0001	2.4
SeptimusBeaverPond_7	9/17/2022 16:10	BCF760	M	C272259	<0.0005	0.135	<0.0002	0.0036	21.9	0.0129	<0.000019	0.0019	0.0011	0.02	6.17	<0.0001	3.26	<0.00002	1.97	0.205	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	2.4
SeptimusBeaverPond_8	9/17/2022 16:20	BCF761	M	C272259	<0.0005	0.179	<0.0002	0.0057	36.9	0.562	<0.000019	<0.001	<0.001	0.068	7.36	0.00014	4.4	<0.00002	4.81	0.78	33.1	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0076	<0.0001	2.1
USCD-North-Well	2/9/2022 12:00	AOK260	M	C208577	0.00091	<0.01	<0.0002	0.0027	26.0	0.0016	0.0000025	<0.001	<0.001	<0.01	1.23	0.00267	5.04	<0.00002	5.95	0.187	29.1	0.000019	<0.005	<0.005	0.002	<0.005	0.171	<0.0001	4.3
USCD-North-Well	3/30/2022 12:20	AQX835	M	C221206	0.00091	<0.01	<0.0002	0.005	23.4	0.0047	<0.0000019	0.0016	<0.001	<0.01	1.26	0.00262	5.09	<0.00002	8.37	0.19	37.5	0.000029	<0.005	<0.005	0.00246	<0.005	0.247	<0.0001	15
USCD-North-Well	5/18/2022 15:30	ATJ927	M	C234012	<0.0005	<0.01	<0.0002	0.0066	19.0	<0.001	<0.0000019	0.0025	<0.001	0.011	1.62	0.00369	4.57	<0.00002	9.01	0.168	21.8	<0.00001	<0.005	<0.005	0.00237	<0.005	0.0276	<0.0001	6.4
USCD-South-Well	2/9/2022 12:10	AOK261	M	C208577	0.00102	<0.01	<0.0002	0.0035	26.4	0.0036	<0.0000019	0.0019	<0.001	0.025	1.43	0.00297	4.96	<0.00002	5.64	0.195	30.5	0.000053	<0.005	<0.005	0.00193	<0.005	1.03	<0.0001	5.9
USCD-South-Well	3/30/2022 12:45	AQX836	M	C221206	0.00282	<0.01	<0.0002	0.007	25.8	0.0017	<0.0000019	0.0012	<0.001	<0.01	1.33	0.00569	5.28	<0.00002	10.2	0.209	39.7	0.00002	<0.005	<0.005	0.00247	<0.005	0.279	<0.0001	7.6

Notes: Under Sample Class "M" denotes a monitoring sample and "D" denotes a field duplicate sample. "<" = Result not detected and is below the indicated detection limit. Values are absent from the table if a test result was not reported.

Appendix 3-D: 2022 Analytical Field Blank Water Quality Data

PEACE RIVER
HYDRO PARTNERS

Appendix 3-D: 2022 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	pH-lab	Conductivity-lab	Turbidity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4
			pH	uS/cm	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	mg/L
FIELDBLANK	1/7/2022 13:25	FJ2200035-004	5.38	<2.0	<0.10	<10	<1.0	<0.60	<0.60	1.1	<1.0	1.3	<1.0	<1.0	<0.10	<0.020	<0.050	<0.050	<0.0050	<0.0010	<0.0050		<0.0010
FIELDBLANK	1/19/2022 13:50	FJ2200185-005	5.31	<2.0	<0.10	<10	<1.0	<0.60	<0.60	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.020	<0.050	<0.30	<0.0050	<0.0010	<0.0050	<0.0051	<0.0010
FIELDBLANK	1/26/2022 14:15	ANQ895	5.11	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.027	<0.010	0.011	0.011	<0.0030
FIELDBLANK	1/27/2022 16:10	ANS645	4.79	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.025	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	2/10/2022 10:40	AOM664	5.13	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	2/12/2022 14:00	AOP217	4.77	<2.0	<0.10	<10	<0.99	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.021	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	2/17/2022 14:35	AOW648	4.78	<2.0	0.19	<10	1.12	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.017	<0.010	0.011	0.011	<0.0030
FIELDBLANK	2/20/2022 15:40	AOY872	4.81	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	3/1/2022 12:05	APN033	4.78	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	3/5/2022 13:40	APS822	4.81	<2.0	<0.10	<10	<1.0	<0.50	0.63	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.017	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	3/10/2022 10:50	APZ003	4.84	<2.0	<0.10	<10	<0.99	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.017	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	3/12/2022 14:50	AQB296	4.97	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.021	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	3/25/2022 11:50	AQP916	3.73	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.025	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	3/26/2022 11:15	AQS237	5.12	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.035	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	3/31/2022 17:50	AQY799	5.14	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.022	<0.010	<0.010	<0.010	<3.0
FIELDBLANK	4/2/2022 13:00	ARB519	5.12	<2.0	0.16	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.017	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	4/15/2022 14:05	ARQ201	5.92	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	1.8	0.018	<0.0050	<0.020	<0.020	0.0074
FIELDBLANK	4/22/2022 11:55	ARX722	5.04	<2.0	<0.10	<10	2.2	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.061	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	4/24/2022 11:40	ASA418	5.11	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.021	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	5/5/2022 11:35	ASR006	5.05	<2.0	<0.10	<10	<0.97	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.027	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	5/8/2022 14:45	ASS886	5.23	<2.0	<0.10	<10	<0.99	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.134	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	5/13/2022 11:30	ATB014	4.67	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.031	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	5/26/2022 15:40	ATV284	4.69	<2.0	<0.10	12	<0.99	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.028	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	6/19/2022 12:00	AVM021	4.59	<2.0	<0.10	<10	<0.99	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.72	<0.050	<0.010	<1.0	0.025	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	6/24/2022 11:20	AVV589	5.24	<2.0	<0.10	<10	1.04	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.016	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	6/26/2022 10:25	AVZ581	4.65	<2.0	<0.10	<10	<0.98	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.028	<0.010	0.016	0.016	<0.0030
FIELDBLANK	7/6/2022 14:35	AWV911	4.98	<2.0	0.15	<10	<0.96	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	7/9/2022 11:00	AWZ518	4.58	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.034	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	7/12/2022 12:35	AXE619	4.34	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	7/14/2022 11:40	AXJ120	4.88	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	7/17/2022 11:00	AXN590	4.68	<2.0	<0.10	<10	<0.96	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.021	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	7/27/2022 12:10	AYK063	5.41	<2.0	<0.10	12	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.98	<0.050	<0.010	<1.0	<0.015	<0.0050	<0.020	<0.020	<0.0030
FIELDBLANK	7/31/2022 12:15	AYO875	5.45	<2.0	<0.10	10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.93	<0.050	<0.010	<1.0	<0.015	<0.0050	<0.020	<0.020	<0.0030
FIELDBLANK	8/2/2022 12:05	AYU379	6.30	<2.0	<0.10	12	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	0.74	<0.050	<0.010	<1.0	<0.015	<0.0050	<0.020	<0.020	<0.0030
FIELDBLANK	8/6/2022 11:40	AZA357	5.27	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.0050	<0.020	<0.020	<0.0030
FIELDBLANK	9/7/2022 12:20	BBM323	5.10	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.033	<0.0050	<0.020	<0.020	<0.0030
FIELDBLANK	9/10/2022 12:50	BBR904	6.48	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.046	<0.0050	<0.020	<0.020	<0.0030
FIELDBLANK	9/14/2022 10:35	BBZ915	6.21	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.0	<1.0	1.2	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.0050	<0.020	<0.020	<0.0030
FIELDBLANK	9/16/2022 13:10	BCF679	5.00	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.0050	<0.020	<0.020	<0.0030
FIELDBLANK	9/22/2022 12:00	BCR619	6.07	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.0050	<0.020	<0.020	<0.0030
FIELDBLANK	9/28/2022 10:50	BDE180	6.39	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.1	<1.0	1.3	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.016	<0.0050	<0.020	<0.020	<0.0030
FIELDBLANK	10/1/2022 10:00	BDL252	4.67	<2.0	<0.10	<10	<0.96	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	10/4/2022 10:35	BDR438	4.42	<2.0	<0.10	<10	<0.97	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030

Appendix 3-D: 2022 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	pH-lab	Conductivity-lab	Turbidity-lab	TDS	TSS	T-Hard	D-Hard	ALK-T	Alk-PP	HCO3	CO3	OH	Cl	F	Br	D-SO4	N-NH3	N-NO2	N-NO3	N-NO2_NO3	PO4
			pH	uS/cm	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	mg/L
FIELDBLANK	10/6/2022 11:10	BDZ972	4.68	<2.0	<0.10	12	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	10/13/2022 11:00	BEN622	4.53	<2.0	<0.10	<10	1.04	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	10/17/2022 9:00	BER153	4.47	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	0.0031
FIELDBLANK	10/19/2022 13:00	BFA349	4.74	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	10/22/2022 11:50	BFI043	5.02	<2.0	<0.10	<10	<0.99	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.0050	<0.020	<0.020	<0.0030
FIELDBLANK	10/25/2022 11:05	BFP707	5.03	<2.0	<0.10	12	<0.99	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	10/27/2022 10:35	BFU906	4.97	<2.0	<0.10	<10	<0.99	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.014	<0.0030
FIELDBLANK	11/1/2022 9:00	BGE766	5.31	<2.0	<0.10	<10	<0.96	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	11/6/2022 13:00	BGO254	5.29	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	11/9/2022 11:10	BGW283	4.85	<2.0	<0.10	<10	<0.99	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	11/11/2022 11:20	BHA033	4.87	<2.0	0.11	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	11/15/2022 11:20	BHD951	5.32	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	11/19/2022 12:30	BHL411	4.65	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.10	<0.10	<0.0030
FIELDBLANK	11/24/2022 13:00	BHS971	5.29	<2.0	<0.10	<10	<0.98	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	11/28/2022 9:00	BHX168	4.71	<2.0	<0.10	<10	<0.99	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	0.020	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	11/30/2022 11:10	BID444	4.95	<2.0	<0.10	<10	1.5	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	12/3/2022 11:05	BII774	5.31	<2.0	<0.10	12	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	12/7/2022 11:55	BIR866	4.55	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	12/10/2022 12:10	BIX267	4.59	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	12/14/2022 9:00	BJH811	4.87	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	12/21/2022 10:50	BJP449	5.35	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
FIELDBLANK	12/24/2022 12:50	BJR123	6.35	<2.0	<0.10	<10	<1.0	<0.50	<0.50	1.4	<1.0	1.7	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.0050	<0.020	<0.020	<0.0030
FIELDBLANK	12/30/2022 9:00	BJT901	5.25	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.010	<0.010	<0.010	<0.0030
TripBlank	8/14/2022 18:00	AZR296	5.21	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	1.22	<0.050	<0.010	<1.0	<0.015	<0.0050	<0.020	<0.020	<0.0030
TripBlank	8/23/2022 17:00	BAM966	6.17	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.0050	<0.020	<0.020	<0.0030
TripBlank	8/29/2022 16:00	BAU336	5.17	<2.0	<0.10	<10	<1.0	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.050	<0.010	1.1	<0.015	<0.0050	<0.020	<0.020	<0.0030
TripBlank	9/4/2022 18:00	BBI409	6.15	<2.0	0.11	<10	1.2	<0.50	<0.50	1.0	<1.0	1.3	<1.0	<1.0	<0.50	<0.050	<0.010	<1.0	<0.015	<0.0050	<0.020	<0.020	<0.0030

Note: Grey shading denotes values above reported detection limit. "<" = Result not detected and is below the indicated detection limit. No value shown indicates a test result was not reported

Appendix 3-D: 2022 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	TOC	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P
			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
FIELDBLANK	1/7/2022 13:25	FJ2200035-004	<0.50	<0.50	<0.0030	<0.00010	<0.00010	<0.00010	<0.000100	<0.000050	<0.010	<0.0000050	<0.050	<0.00050	<0.00010	<0.00050	<0.010	<0.000050	<0.0010	<0.0050	<0.00010	<0.0000050	<0.000050	<0.00050	<0.050
FIELDBLANK	1/19/2022 13:50	FJ2200185-005	<0.50	0.79	<0.0030	<0.00010	<0.00010	<0.00010	<0.000100	<0.000050	<0.010	<0.0000050	<0.050	<0.00050	<0.00010	<0.00050	<0.010	<0.000050	<0.0010	<0.0050	<0.00010	<0.0000050	<0.000050	<0.00050	<0.050
FIELDBLANK	1/26/2022 14:15	ANQ895	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	0.000021	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	0.0000023	<0.001	<0.001	<0.01
FIELDBLANK	1/27/2022 16:10	ANS645	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	2/10/2022 10:40	AOM664	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	2/12/2022 14:00	AOP217	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	0.011
FIELDBLANK	2/17/2022 14:35	AOW648	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	2/20/2022 15:40	AOY872	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	3/1/2022 12:05	APN033	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.067	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	3/5/2022 13:40	APS822	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	3/10/2022 10:50	APZ003	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	3/12/2022 14:50	AQB296	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	3/25/2022 11:50	AQP916	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	3/26/2022 11:15	AQS237	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	3/31/2022 17:50	AQY799	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	4/2/2022 13:00	ARB519	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	4/15/2022 14:05	ARQ201	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	4/22/2022 11:55	ARX722	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	4/24/2022 11:40	ASA418	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	0.01
FIELDBLANK	5/5/2022 11:35	ASR006	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	5/8/2022 14:45	ASS886	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	0.014
FIELDBLANK	5/13/2022 11:30	ATB014	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	0.000014	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	0.0026	<0.001	0.013
FIELDBLANK	5/26/2022 15:40	ATV284	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	6/19/2022 12:00	AVM021	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	6/24/2022 11:20	AVV589	<0.50	<0.50	0.0039	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.073	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	6/26/2022 10:25	AVZ581	<0.50	<0.50	0.0084	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	7/6/2022 14:35	AWV911	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	0.001	<0.0002	<0.0005	0.094	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	7/9/2022 11:00	AWZ518	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	7/12/2022 12:35	AXE619	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	7/14/2022 11:40	AXJ120	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	7/17/2022 11:00	AXN590	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	0.0000023	<0.001	<0.001	<0.01
FIELDBLANK	7/27/2022 12:10	AYK063	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	7/31/2022 12:15	AYO875	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	8/2/2022 12:05	AYU379	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	8/6/2022 11:40	AZA357	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	0.0011	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	9/7/2022 12:20	BBM323	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	9/10/2022 12:50	BBR904	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	9/14/2022 10:35	BBZ915	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	9/16/2022 13:10	BCF679	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	9/22/2022 12:00	BCR619	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	9/28/2022 10:50	BDE180	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	10/1/2022 10:00	BDL252	0.55	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	10/4/2022 10:35	BDR438	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01

Appendix 3-D: 2022 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	TOC	DOC	T-Al	T-Sb	T-As	T-Ba	T-Be	T-Bi	T-B	T-Cd	T-Ca	T-Cr	T-Co	T-Cu	T-Fe	T-Pb	T-Li	T-Mg	T-Mn	T-Hg	T-Mo	T-Ni	T-P
			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
FIELDBLANK	10/6/2022 11:10	BDZ972	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	10/13/2022 11:00	BEN622	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	10/17/2022 9:00	BER153	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	10/19/2022 13:00	BFA349	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	10/22/2022 11:50	BFI043	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	10/25/2022 11:05	BFP707	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	10/27/2022 10:35	BFU906	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	11/1/2022 9:00	BGE766	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	11/6/2022 13:00	BGO254	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	11/9/2022 11:10	BGW283	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	11/11/2022 11:20	BHA033	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	11/15/2022 11:20	BHD951	<0.50	<0.50	0.0032	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	11/19/2022 12:30	BHL411	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	11/24/2022 13:00	BHS971	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	11/28/2022 9:00	BHX168	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	0.000017	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	11/30/2022 11:10	BID444	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	12/3/2022 11:05	BII774	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	12/7/2022 11:55	BIR866	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	12/10/2022 12:10	BIX267	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	0.000014	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	12/14/2022 9:00	BJH811	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	12/21/2022 10:50	BJP449	<0.50	<0.50	0.006	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0002	0.0118	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	12/24/2022 12:50	BJR123	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
FIELDBLANK	12/30/2022 9:00	BJT901	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	0.0017	<0.001	<0.01
TripBlank	8/14/2022 18:00	AZR296	<0.50	0.69	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	0.00071	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
TripBlank	8/23/2022 17:00	BAM966	<0.50	1.39	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
TripBlank	8/29/2022 16:00	BAU336	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01
TripBlank	9/4/2022 18:00	BBI409	<0.50	<0.50	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01

Note: Grey shading denotes values above reported detection limit. "<" = Result not detected and is below the indicated detection limit. No value shown indicates a test result was not reported

Appendix 3-D: 2022 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	T-K	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr
			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
FIELDBLANK	1/7/2022 13:25	FJ2200035-004	<0.050	<0.000050	<0.10	<0.000010	<0.050	<0.00020	<0.50	<0.000010	<0.00010	<0.00030	<0.000010	<0.00050	<0.0030	<0.00020	<0.0010	<0.00010	<0.00010	<0.00010	<0.000100	<0.000050	<0.010	<0.0000050	<0.050	<0.00050
FIELDBLANK	1/19/2022 13:50	FJ2200185-005	<0.050	<0.000050	<0.10	<0.000010	<0.050	<0.00020	<0.50	<0.000010	<0.00010	<0.00030	<0.000010	<0.00050	<0.0030	<0.00020	<0.0010	<0.00010	<0.00010	<0.00010	<0.000100	<0.000050	<0.010	<0.0000050	<0.050	<0.00050
FIELDBLANK	1/26/2022 14:15	ANQ895	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	1/27/2022 16:10	ANS645	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	2/10/2022 10:40	AOM664	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	2/12/2022 14:00	AOP217	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	2/17/2022 14:35	AOW648	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	0.0041	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	2/20/2022 15:40	AOY872	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	3/1/2022 12:05	APN033	<0.050	<0.0001	<0.1	<0.00002	0.073	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	3/5/2022 13:40	APS822	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.252	<0.001
FIELDBLANK	3/10/2022 10:50	APZ003	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	3/12/2022 14:50	AQB296	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	3/25/2022 11:50	AQP916	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	3/26/2022 11:15	AQS237	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	5.2	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	3/31/2022 17:50	AQY799	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	4/2/2022 13:00	ARB519	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	4/15/2022 14:05	ARQ201	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	4/22/2022 11:55	ARX722	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	4/24/2022 11:40	ASA418	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	5/5/2022 11:35	ASR006	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	5/8/2022 14:45	ASS886	0.062	<0.0001	<0.1	<0.00002	<0.050	<0.001	3.5	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	5/13/2022 11:30	ATB014	0.063	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	5/26/2022 15:40	ATV284	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	6/19/2022 12:00	AVM021	<0.050	<0.0001	<0.1	<0.00002	0.057	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	6/24/2022 11:20	AVV589	<0.050	<0.0001	<0.1	<0.00002	0.100	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	6/26/2022 10:25	AVZ581	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	7/6/2022 14:35	AWV911	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	7/9/2022 11:00	AWZ518	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	0.02	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.073	<0.001
FIELDBLANK	7/12/2022 12:35	AXE619	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	7/14/2022 11:40	AXJ120	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	7/17/2022 11:00	AXN590	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	7/27/2022 12:10	AYK063	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	7/31/2022 12:15	AYO875	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	8/2/2022 12:05	AYU379	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	8/6/2022 11:40	AZA357	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	9/7/2022 12:20	BBM323	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	9/10/2022 12:50	BBR904	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	9/14/2022 10:35	BBZ915	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	9/16/2022 13:10	BCF679	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	9/22/2022 12:00	BCR619	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	9/28/2022 10:50	BDE180	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	10/1/2022 10:00	BDL252	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	10/4/2022 10:35	BDR438	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001

Appendix 3-D: 2022 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	T-K	T-Se	T-Si	T-Ag	T-Na	T-Sr	T-S	T-Tl	T-Sn	T-Ti	T-U	T-V	T-Zn	T-Zr	D-Al	D-Sb	D-As	D-Ba	D-Be	D-Bi	D-B	D-Cd	D-Ca	D-Cr
			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
FIELDBLANK	10/6/2022 11:10	BDZ972	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	10/13/2022 11:00	BEN622	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	10/17/2022 9:00	BER153	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	10/19/2022 13:00	BFA349	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	10/22/2022 11:50	BFI043	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	10/25/2022 11:05	BFP707	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	10/27/2022 10:35	BFU906	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	11/1/2022 9:00	BGE766	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	11/6/2022 13:00	BGO254	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	11/9/2022 11:10	BGW283	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	0.0019
FIELDBLANK	11/11/2022 11:20	BHA033	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	0.061	<0.001
FIELDBLANK	11/15/2022 11:20	BHD951	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	11/19/2022 12:30	BHL411	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	11/24/2022 13:00	BHS971	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	11/28/2022 9:00	BHX168	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	0.000025	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	11/30/2022 11:10	BID444	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	12/3/2022 11:05	BII774	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	12/7/2022 11:55	BIR866	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	12/10/2022 12:10	BIX267	<0.050	<0.0001	<0.1	<0.00002	0.084	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	12/14/2022 9:00	BJH811	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	12/21/2022 10:50	BJP449	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	12/24/2022 12:50	BJR123	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
FIELDBLANK	12/30/2022 9:00	BJT901	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
TripBlank	8/14/2022 18:00	AZR296	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
TripBlank	8/23/2022 17:00	BAM966	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
TripBlank	8/29/2022 16:00	BAU336	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001
TripBlank	9/4/2022 18:00	BBI409	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001	<0.003	<0.0005	<0.0001	<0.001	<0.0001	<0.001	<0.05	<0.00001	<0.050	<0.001

Note: Grey shading denotes values above reported detection limit. "<" = Result not detected and is below the indicated detection limit. No value shown indicates a test result was not reported

Appendix 3-D: 2022 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	D-Co	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr
			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
FIELDBLANK	1/7/2022 13:25	FJ2200035-004	<0.00010	<0.00020	<0.010	<0.000050	<0.0010	<0.0050	<0.00010	<0.0000050	<0.000050	<0.00050	<0.050	<0.050	<0.000050	<0.050	<0.000010	<0.050	<0.00020	<0.50	<0.000010	<0.00010	<0.00030	<0.000010	<0.00050	<0.0010	<0.00020
FIELDBLANK	1/19/2022 13:50	FJ2200185-005	<0.00010	<0.00020	<0.010	<0.000050	<0.0010	<0.0050	<0.00010	<0.0000050	<0.000050	<0.00050	<0.050	<0.050	<0.000050	<0.050	<0.000010	<0.050	<0.00020	<0.50	<0.000010	<0.00010	<0.00030	<0.000010	<0.00050	0.0017	<0.00020
FIELDBLANK	1/26/2022 14:15	ANQ895	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	0.000002	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	1/27/2022 16:10	ANS645	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	2/10/2022 10:40	AOM664	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	2/12/2022 14:00	AOP217	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	2/17/2022 14:35	AOW648	<0.0002	0.00059	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0053	<0.0001
FIELDBLANK	2/20/2022 15:40	AOY872	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	3/1/2022 12:05	APN033	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	3/5/2022 13:40	APS822	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	0.142	0.0013	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0059	<0.0001
FIELDBLANK	3/10/2022 10:50	APZ003	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0227	<0.0001
FIELDBLANK	3/12/2022 14:50	AQB296	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	3/25/2022 11:50	AQP916	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	3/26/2022 11:15	AQS237	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	3/31/2022 17:50	AQY799	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	4/2/2022 13:00	ARB519	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	4/15/2022 14:05	ARQ201	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	4/22/2022 11:55	ARX722	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	4/24/2022 11:40	ASA418	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	5/5/2022 11:35	ASR006	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	0.059	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	5/8/2022 14:45	ASS886	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	0.053	<0.0001	<0.1	<0.00002	0.057	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	5/13/2022 11:30	ATB014	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	0.0025	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	0.078	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	5/26/2022 15:40	ATV284	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	6/19/2022 12:00	AVM021	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	6/24/2022 11:20	AVV589	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	6/26/2022 10:25	AVZ581	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	0.0013	<0.01	<0.050	<0.0001	<0.1	<0.00002	0.061	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	7/6/2022 14:35	AWV911	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	7/9/2022 11:00	AWZ518	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.01	0.011	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	0.0064	<0.0001
FIELDBLANK	7/12/2022 12:35	AXE619	<0.0002	0.00077	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	0.051	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	7/14/2022 11:40	AXJ120	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	7/17/2022 11:00	AXN590	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	7/27/2022 12:10	AYK063	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	7/31/2022 12:15	AYO875	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	8/2/2022 12:05	AYU379	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	8/6/2022 11:40	AZA357	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	9/7/2022 12:20	BBM323	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	9/10/2022 12:50	BBR904	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	9/14/2022 10:35	BBZ915	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	9/16/2022 13:10	BCF679	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	9/22/2022 12:00	BCR619	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	9/28/2022 10:50	BDE180	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	10/1/2022 10:00	BDL252	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	10/4/2022 10:35	BDR438	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001

Appendix 3-D: 2022 Analytical Field Blank Water Quality Data

Stn.Code	Collect Date/Time	Sample No.	D-Co	D-Cu	D-Fe	D-Pb	D-Li	D-Mg	D-Mn	D-Hg	D-Mo	D-Ni	D-P	D-K	D-Se	D-Si	D-Ag	D-Na	D-Sr	D-S	D-Tl	D-Sn	D-Ti	D-U	D-V	D-Zn	D-Zr
			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
FIELDBLANK	10/6/2022 11:10	BDZ972	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	10/13/2022 11:00	BEN622	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	10/17/2022 9:00	BER153	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	10/19/2022 13:00	BFA349	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	10/22/2022 11:50	BFI043	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	10/25/2022 11:05	BFP707	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	10/27/2022 10:35	BFU906	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	11/1/2022 9:00	BGE766	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	11/6/2022 13:00	BGO254	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	11/9/2022 11:10	BGW283	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	11/11/2022 11:20	BHA033	<0.0002	<0.0002	<0.005	<0.0002	<0.002	0.071	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	11/15/2022 11:20	BHD951	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	11/19/2022 12:30	BHL411	<0.0002	<0.0002	<0.005	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	11/24/2022 13:00	BHS971	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	11/28/2022 9:00	BHX168	<0.0002	<0.0002	<0.005	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	11/30/2022 11:10	BID444	<0.0002	<0.0002	<0.005	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	12/3/2022 11:05	BII774	<0.0002	<0.0002	<0.005	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	12/7/2022 11:55	BIR866	<0.0002	<0.0002	<0.005	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	12/10/2022 12:10	BIX267	<0.0002	<0.0002	<0.005	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	12/14/2022 9:00	BJH811	<0.0002	<0.0002	<0.005	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	12/21/2022 10:50	BJP449	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	12/24/2022 12:50	BJR123	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
FIELDBLANK	12/30/2022 9:00	BJT901	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	0.0016	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
TripBlank	8/14/2022 18:00	AZR296	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
TripBlank	8/23/2022 17:00	BAM966	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
TripBlank	8/29/2022 16:00	BAU336	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001
TripBlank	9/4/2022 18:00	BBI409	<0.0002	<0.0005	<0.01	<0.0002	<0.002	<0.050	<0.001	<0.0000019	<0.001	<0.001	<0.01	<0.050	<0.0001	<0.1	<0.00002	<0.050	<0.001	<3.0	<0.00001	<0.005	<0.005	<0.0001	<0.005	<0.005	<0.0001

Note: Grey shading denotes values above reported detection limit. "<" = Result not detected and is below the indicated detection limit. No value shown indicates a test result was not reported

Appendix 3-E: Water Quality Monitoring Field QA/QC Program

PEACE RIVER
HYDRO PARTNERS

TECHNICAL MEMORANDUM

To:	**Kael Hanak, Caroline Walmsley; PRHP**	**Date:**	**16 May 2018**
From:	**Meghan Goertzen, Neil Mallen**	**Project #:**	**A416-1**
Subject:	**Surface Water Quality QA/QC Program ARD/ML Management and Monitoring Site C Clean Energy Project**		

The purpose of this Memorandum is to document the Quality Assurance / Quality Control (QA/QC) Program that is employed by Lorax Environmental Services Ltd. (Lorax) on behalf of Peace River Hydro Partners (PRHP) for the Main Civil Works Contract for the Site C Clean Energy Project. The QA/QC program has been developed and implemented for surface water quality monitoring within the construction site. It is intended to validate monitoring data, and to identify potential deficiencies of the monitoring program.

The integrity of the water quality sampling program, and analytical measurements of samples collected within it, are evaluated using various QA/QC practices. It is recommended that these practices include collection of quality control samples (blanks and replicates) and the establishment of data quality objectives for sample results (with specific objectives for dissolved vs. total metal concentrations, and sample hold times). Recommended QA/QC components are presented in further detail below.

The results of the QA/QC Program are documented in quarterly and annual metal leaching and acid rock drainage (ARD/ML) monitoring reports that are prepared by Lorax for submission to PRHP. Reporting includes the number of field blanks and replicates collected, as well as the proportion of these samples as compared with the total number of water quality samples obtained. General industry practice suggests one QA/QC sample (*e.g.*, a blank or duplicate) should be obtained for every 10 water quality samples obtained (or 10%) as part of the monitoring program. The report also includes an analysis and interpretation of samples in which a dissolved metal concentration exceeds the total concentration, and documents exceedance of hold times recommended by the analytical laboratory, as well as certain practical limitations with respect to hold times.

1. Blanks

Blank water quality samples are comprised of analyte-free reagent water and are used to assess sample contamination (as recommended by Clark, 2013). Field blanks are used to detect potential contamination resulting from the sample collection method, handling, filtration, preservation, and exposure to the environment. Blank samples are typically collected by having the environmental monitor pour de-ionized (DI) water into clean sample bottles in the same environment in which

actual samples are collected, and then processing the blank at the laboratory in the same manner as other samples.

2. Replicates

Replicates are independent samples collected as close as possible from the same location and at the same time as the original to characterize environmental variability and the precision of the entire sampling and analytical process (as per Clark, 2013). For the purpose of this Memorandum, originals and duplicates are considered paired replicates collected from the same location sequentially in time.

The BC Field Sampling Manual (Clark, 2013) provides the following acceptability criteria for field duplicates:

> *It should be expected that the Relative Percent Difference (RPD) is somewhat greater than that for laboratory duplicates. If one of a set of duplicate values is at or greater than five times the Method Detection Limit, then RPD values >20% indicate a possible problem, and > 50% indicate a definite problem, most likely either contamination or lack of sample representativeness.*

Any duplicate samples for which the RPD is greater than 20% and greater than 50% are reported. In addition, duplicates that had parameters with RPDs greater than 50%, in which the parameter value was greater than five-times the RDL in at least one of the sample duplicates, are reported in a separate table.

3. Total versus Dissolved Metals

For the purpose of this QA/QC program, a dissolved metal concentration that is higher than the corresponding total metal concentration is considered to be an indication of potential sample contamination or analytical error. Total and dissolved metals data for samples collected at all water quality monitoring stations in each quarter are compared. The dissolved metal concentration is flagged as a potential QA/QC issue if the concentration is >20% higher than the corresponding total metal value in the same sample. Variability of less than 20% is excluded because it is within the analytical margin of error.

Dissolved and total metal pairs are included in this analysis if the dissolved value is greater than five-times its reported detection limit (RDL), similar to guidance presented in the BC Field Sampling Manual (Clark 2013) for acceptability criteria for duplicate sample. This is more conservative than the industry convention which limits the analysis to parameter pairs where *both* total and dissolved values are greater than five-times RDL.

4. Sample Hold Time

Sample hold time is the length of time between collection of a water sample and its analysis at the laboratory. Recommended sample hold times are summarized in Table 4-1 below. In general, transport of samples from the Project site to the designated laboratory (Maxxam) depot in Fort St John typically occur on the same day as sample collection. Samples are then transported to the Maxxam laboratory, located in Burnaby B.C., which typically receives the samples the same evening or the following day.

Based on guidance from Maxxam, parameters with the shortest hold-times (three days or less) include ammonia (if unpreserved), nitrate / nitrite, pH, and turbidity. Results for these parameters may be associated with higher uncertainty if the hold times are exceeded.

Table 4-1:
Recommended water quality sample hold times (Source: Maxxam Analytics)

Analytical Parameter	Hold Time
Alkalinity	14 Days
Ammonia	28 Days
Ammonia, Un-Preserved	3 Days
Bromide	28 Days
Chloride	28 Days
Chromium VI - Dissolved	30 Days
Chromium VI - Total	30 Days
Conductivity	28 Days
Dissolved Organic Carbon (DOC)	28 Days
Fluoride	28 Days
Metals – Dissolved	180 Days
Metals – Total	180 Days
Nitrate/Nitrite	3 Days
pH	15 Minutes
Phosphorus – Total	28 Days
Solids - TDS	7 Days
Solids – TSS	7 Days
Sulphate	28 Days
Total Organic Carbon (TOC)	28 Days
Total Nitrogen (TN)	28 Days
Turbidity	3 Days

As of May 2017, hold time exceedances have been flagged by Maxxam and reported in each sample's Certificate of Analysis (CoA) as a laboratory comment. All comments are entered into PRHP's EQWIN database during data import; hold times are reviewed on a weekly basis by Lorax as part of the weekly ARD report, and recommendations for improvement are provided as necessary.

5. Closure

We trust that this technical memorandum addresses your current needs. Please contact us should you have any questions.

Respectively Submitted,
Lorax Environmental Services Ltd.

Original Signed by:

Meghan Goertzen, M.Sc., R.P.Bio.
Environmental Toxicologist

Original Signed by:

Neil Mallen, M.Sc., EP, PMP
Senior Environmental Scientist

Appendix 3-F: Bureau Veritas (Burnaby) Scope of Accreditation

PEACE RIVER
HYDRO PARTNERS

Standards Council of Canada
Conseil canadien des normes

TESTING AND CALIBRATION LABORATORY ACCREDITATION PROGRAM (LAP)

Scope of Accreditation

Accredited Laboratory No. 117

Legal Name of Accredited Laboratory:	**Bureau Veritas Canada (2019) Inc., formerly known as Maxxam Analytics**
Location Name or Operating as (if applicable):	
Contact Name:	Alice (Hsiao Yun) Lu
Address:	<personal information removed>
Telephone:	
Fax:	
Website:	www.bvna.com
Email:	<personal information removed>

SCC File Number:	15188
Accreditation Standard(s):	ISO/IEC 17025:2017
Fields of Testing:	Biological Chemical/Physical Forensic
Program Specialty Area:	Agriculture Inputs, Food, Animal Health and Plant Protection (AFAP) Environmental Testing (ET) Forensic
Initial Accreditation:	1993-06-08
Most Recent Accreditation:	2021-04-22
Accreditation Valid to:	2025-06-08

Forensic Testing currently being conducted at both:
8577 Commerce Court,
Burnaby BC V5A 4N5
And
4606 Canada Way,
Burnaby, BC V5G 1K5

Forensics:
Forensic Equine Drug Testing (Drugs in Horse Hair, Urine and Blood)

ANIMAL AND PLANTS (AGRICULTURE)

Foods and Edible Products: (Human and Animal Consumption)

(Feed)

BBY4SOP-00105	Determination of 17-a-Methyltestosterone in Feed

(Food Methods: Proximate Analysis)

BBY4SOP-00104	Determination Histamine in Fish

(Fruits and Vegetables, Processed Foods, Animal Tissue, Meat, Fish, Dairy, Honey, Eggs and Egg Products and Animal Derived Foods)

BBY4SOP-00048	Determination of Tetracyclines in Tissue and Animal Derived Foods Doxycycline Chlortetracycline Oxytetracycline Tetracycline epi-Tetracycline epi- Oxytetracycline epi- Chlortetracycline
BBY4SOP-00052	Determination of Phenol in Honey
BBY4SOP-00061	Determination of Halofuginone in Tissue and Animal Derived Foods
BBY4SOP-00066	Alachlor Heptachlor Aldrin Heptachlor Epoxide-endo Endosulfan-alpha Heptachlor Epoxide-exo Ametryn Hexachlorobenzene Aspon Iprobenfos Benalaxyl Isofenphos Benfluralin Isopropalin Endosulfan-beta Isoprothiolane

BHC-alpha
Kresoxim-methyl
BHC-beta
Leptophos
BHC-delta
Lindane (gamma-BHC)
Bifenthrin
Malathion
Bromophos
Metazachlor
Bromophos-ethyl
Methoxychlor
Bromopropylate
Methyl Pentachlorophenyl sulphide
Bupirimate
Metolachlor
Butachlor
Mirex
Carboxin
Myclobutanil
Chlorbenzilate
o,p'-DDD (o,p'-TDE)
Chlordimeform
o,p'-DDE
Chlorflurenol-methyl
o,p'-DDT
Chloropropylate
Oxadiazon
Chlorpropham
Oxychlordane
Chlorpyrifos
p,p'-DDD (p,p'-TDE)
Chlorpyrifos-methyl
p,p'-DDE
Chlorthiophos
p,p'-DDT
Chlozolinate
Penconazole
Cyprazine
Pentachloroaniline
Cyprodinil
Phenthoate
Dacthal
Piperonyl Butoxide
Demeton-S-methyl
Pirimicarb
Desmetryn
Pirimiphos-ethyl
Diazinon

Pirimiphos-methyl
Diclobutrazole
Procymidone
Diclofop-methyl
Profenofos
Dieldrin
Profluralin
Diethatyl-ethyl
Prometon
Dimethachlor
Prometryne
Diphenamid
Pronamide
Diphenylamine
Propachlor
Disulfoton
Propanil
Endosulfan Sulfate
Propazine
Endrin
Propetamphos
Ethalfluralin
Prothiophos
Ethion
Pyrazophos
Ethofumsate
Quinalophos
Ethoprophos
Quintozene (PCNB)
Ethylan
Secbumeton
Etrimfos
Sulfotep
Fenarimol
Sulprophos
Fenchlorophos (Ronnel)
Tecnazene
Flamprop-isopropyl
Terbutylazine
Flamprop-methyl
Tetrasul
Fluchloralin
Thiobencarb
Fludioxonil
Tolclofos-methyl
Fluorochloridone
Triazophos
Flusilazole
Trifluralin

	Fonofos Vinclozolin
BBY4SOP-00118	Determination of Herbicide in Food Clopyralid Florasulam Fluroxypyr Bromoxynil Bentazon MCPA (2-methyl-4-chlorophenoxyacetic acid; 4-chloro-o-tolyoxyacetic acid) 2,4-D (2,4-dichlorophenoxyacetic acid) Metsulfuron Methyl (Ally) Thiencarbazone-methyl
BBY4SOP-00121	Fumonisins in Grains, Corn Products and Processed Foods
BBY7SOP-00011	Analysis of Metals in Meat, Fruit and Vegetables, Processed Foods and Animal Derived Foods by ICP-MS
BBY7SOP-00021	Digestion of Tissue, Vegetation for Analysis of Heavy Metals

(Microbiological)

AOAC 2014.05	Enumeration of Yeast and Moulds in Food using 3M™ Petrifilm™ Rapid Yeast And Mold Count (RYM) Plate
Assurance GDS® MPX Top 7 STEC Assay	BioControl Assurance GDS® MPX Top 7 STEC
COR1SOP-00019	Enumeration of Coliforms, Faecal Coliforms and *E.coli* in Foods by using the MPN Method(Modified MFHPB-19; option of standard 3-tube and 10-tube MPN Method)
FDA BAM	BAM FDA Isolation and Identification of Salmonella in Food and Environment Samples
MFHPB-10	Isolation of *Escherichia coli* O157:H7/NM from foods and environmental surface samples
MFHPB-18	Determination of Aerobic Colony Count in Foods
MFHPB-19	Enumeration of Coliforms, Faecal Coliforms and *E. coli* in Foods by using the MPN Method
MFHPB-20	Isolation and Identification of *Salmonella* from Foods and Environmental Samples
MFHPB-21	Enumeration of *Staphylococcus aureus* in Foods
MFHPB-22	Enumeration of Yeasts and Molds in Foods
MFHPB-23	Enumeration of *Clostridium perfringens* in Foods
MFHPB-29	VIDAS Detection of Listeria spp. in Food, Environmental Samples
MFHPB-30	Isolation of *Listeria monocytogenes* and *Listeria spp.* from Foods and Environmental Samples
MFHPB-33	Enumeration of Total Aerobic Bacteria in food Products and Food Ingredients Using 3M™ Petrifilm™ Aerobic Count Plates

MFHPB-34	Enumeration of *E. coli* and Coliforms in Food Products and Food Ingredients using 3M™ Petrifilm™ *E. coli Count* Plates
MFHPB-35	Enumeration of Coliforms in Food Products and Food Ingredients using 3M™ Petrifilm™ Coliform Count Plates
MFLP-09	Enumeration of *Enterobacteriaceae* Species in Food and Environmental Samples Using 3M Petrifilm *Enterobacteriaceae* Count Plates
MFLP-16	Detection of *Escherichia coli* O157:H7 in Foods - Assurance GDS® for E. coli O157:H7 Gene Detection System
MFLP-21	Enumeration of *Staphylococcus aureus* in Foods and Environmental Samples Using 3M™ Petrifilm™ Staph Express Count (STX) Plates
MFLP-25	Isolation and Identification of *Shigella spp*. From Foods
MFLP-28	The Qualicon BAX ®System Method for the Detection of *Listeria monocytogenes* in a Variety of Food
MFLP-29	The Qualicon BAX® System for the Detection of *Salmonella* in Foods and Environmental Surface Samples
MFLP-30	Detection of E. coli O157:H7 in select foods using the BAX® system E.coli O157:H7 MP
MFLP-33	Detection of *Listeria monocytogenes* in Foods by the VIDAS LMO 2™ Method
MFLP-37	Part 1: Detection of Halophilic Vibrio Species in Seafood Part 2: Detection of *Vibrio cholerae*
MFLP-38	Detection of *Salmonella spp*. from All Foods and Selected Environmental Surfaces using IQ-Check™ Salmonella Real-time PCR Test Kit
MFLP-39	Detection of *Listeria* spp. from Environmental Surfaces and heat processed RTE Meat and Poultry Using iQ-CheckTM Listeria spp. Real-Time PCR Test Kit
MFLP-42	Isolation and Enumeration of *Bacillus cereus* Group in Foods
MFLP-46	Isolation of Thermophilic *Campylobacter* from Food
MFLP-49	Detection of Salmonella *spp* in Food Products and environmental surfaces by the VIDAS® UP Salmonella (SPT) Method
MFLP-54	Detection of *Listeria monocytogenes* from selected foods using iQ-Check™ *Listeria monocytogenes* Real-Time PCR Test Kit
MFLP-59	Detection of *Listeria spp.* in food products and environmental surface samples with VIDAS® UP *Listeria* (LPT)
MFLP-74	Enumeration of *Listeria monocytogenes* in Food
MFLP-77	Detection of *Listeria* spp. in food products and environmental samples by the VIDAS® *Listeria* species Xpress (LSX) method
MFLP-79	Detection of *Listeria* spp. in Environmental Surface Samples Using the BAX® System Real-Time PCR Assay for *Listeria* Genus
MFLP-83	Detection of Verotoxins VT 1 And VT 2 from *E. coli* O157:H7/NM by The Merck Duopath® Verotoxin Kit

MLG4	FSIS Procedure for the Isolation and Identification of *Salmonella* from Meat, Poultry, Pasteurized egg and Siluriformes (Fish) products and Carcass and Environmental Sponge samples
MLG41	Isolation, Identification of Campylobacter jejuni/coli/lari from Poultry Rinse and Sponge and Raw Product Samples
COR1SOP-00089	USP: Enterobacterial Count in NHP by MPN Method
COR1SOP-00093	USP: Detection and Enumeration for *Pseudomonas aeruginosa* in NHP

(Natural Health Products)

BBY4SOP-00150	Determination of Pesticides in Natural Health Products
USP40-NF35 S1. Dietary Supplements Chapters: 2021	Microbial Enumeration Tests-Nutritional and Dietary Supplements Total Aerobic Microbial Count by Plate Method
USP40-NF35 S1. Dietary Supplements Chapters: 2021	Microbial Enumeration Tests-Nutritional and Dietary Supplements Total Combined Molds and Yeast Count by Plate Method
USP40-NF35 S1. Dietary Supplements Chapters: 2022	Microbiological Procedures for absence of specified microorganisms - Nutritional and Dietary Supplements Test for Absence of *Staphylococcus aureus*
USP40-NF35 S1. Dietary Supplements Chapters: 2022	Microbiological Procedures for absence of specified microorganisms - Nutritional and Dietary Supplements Test for Absence of *Salmonella species*
USP40-NF35 S1. Dietary Supplements Chapters: 2022	Microbiological Procedures for absence of specified microorganisms - Nutritional and Dietary Supplements Test for Absence of *Escherichia coli*

(Other)

BBY4SOP-00032	Determination of Aminoglycocides in Tissue and Animal Derived Foods
BBY4SOP-00033	Determination of Dithiocarbamates (EBDC) in Fruits and Vegetables, Processed Foods and Animal Derived Foods by CS_2 Evolution
BBY4SOP-00035	Determination of Chlorinated Phenols in Tissue and Animal Derived Foods
BBY4SOP-00036	Determination of Fluoroquinolones and Quinolones in Tissue and Animal Derived Food
BBY4SOP-00037	Determination of Synthetic Pyrethrins in Animals Tissue and Animal Derived Foods
BBY4SOP-00038	Determination of Carbamates in Tissue and Animal Derived Foods
BBY4SOP-00043	Determination of Ethylenebisdithiocarbamate (EBDC) in Fruits and Vegetables,Processed Foods and Animal Derived Foods

BBY4SOP-00044	Determination of Daminozide (ALAR) in Fruits and Vegetables, Processed Foods and Animal Derived Foods
BBY4SOP-00045	Determination of Ethylenethiourea in Fruits and Vegetables, Processed Foods and Animal Derived Foods
BBY4SOP-00046	Determination of Coccidiostats in Tissue and Animal Derived Foods
BBY4SOP-00047	Determination of Gestagens in AnimalTissue and Dairy
BBY4SOP-00050	Determination of Sulfonamides in Tissue and Animal Derived Foods
BBY4SOP-00051	Determination of Amitraz and Metabolites in Fruits and Vegetables, Processed Foods and Animal Derived Foods
BBY4SOP-00054	Determination of Dipyrone Related Residues in Tissue and Animal Derived Foods
BBY4SOP-00055	Determination of Free and Total Residues of Beta Agonists in Tissue and Animal Derived Foods
BBY4SOP-00056	Determination of Virginiamycin in Tissue and Animal Derived Foods
BBY4SOP-00059	Determination of Ceftiofur-Related Residues in Tissue and Animal Derived Foods
BBY4SOP-00060	Determination of Benzimidazoles in Tissue and Animal Derived Foods
BBY4SOP-00062	Determination of Endectocides in Tissue, Feedand Animal Derived Foods
BBY4SOP-00063	Determination of Phenylbutazone in Tissue and Animal Derived Foods
BBY4SOP-00064	Determination of Protein Bound Metabolites of Nitrofurans in Tissue and Animal Derived Foods
BBY4SOP-00068	Determination of Tranquilizers and Carazolol in Tissue and Animal Derived Foods
BBY4SOP-00069	Determination of Morantel and Pyrantel Drug Related Metabolites in Tissue and Animal Derived Foods
BBY4SOP-00070	Determination of Zeranol and Stilbenes in Tissue and Animal Derived Foods
BBY4SOP-00079	Determination of Volatile Pesticides in Tissue
BBY4SOP-00080	Detection of Thyreostats in Animal Tissue, Eggs and Dairy
BBY4SOP-00082	Determination of Triphenylmethane Dyes in Tissue
BBY4SOP-00083	Determination of Carbadox and Olaquindox-Related Metabolites in Tissue
BBY4SOP-00084	Determination of Amphenicols in Tissue and Animal Derived Foods
BBY4SOP-00085	Determination of Bacitracin A in Tissue and Animal Derived Foods
BBY4SOP-00086	Determination of Nitroimidazoles in Tissue and Animal Derived Foods
BBY4SOP-00087	Determination of Aflatoxin in Dairy

BBY4SOP-00089	Determination of Beta Lactams in Animal Tissue and Animal Derived Foods
BBY4SOP-00091	Determination of Non-Steroidal Anti-Inflammatory Drugs (NSAIDS), Hormones and Corticosteroids in Animal Tissue, Eggs and Dairy
BBY4SOP-00092	Determination of Melamine in Eggs, Dairy and Processed Foods
BBY4SOP-00093	Determination of Bisphenol A in Dairy and Processed Foods
BBY4SOP-00094	Determination of Ochratoxin A in Cereals and Processed Foods
BBY4SOP-00095	Determination of Deoxynivalenol (Vomitoxin) in Cereal and Cereal Products
BBY4SOP-00099	Determination of Macrolides in Tissue and Animal Derived Foods
BBY4SOP-00100	Determination of Trenbolone in Tissue and Animal Derived Foods
BBY4SOP-00111	Aflatoxins in Food and Animal Feed
BBY4SOP-00123	Determination of Pesticides in Process Foods by GCMSMS and LCMSMS
BBY4SOP-00128	Determination of Pesticides in FV Products and Honey by GC/LC
BBY4SOP-00129	Determination of Pesticides in Tissue by GCMSMS and LCMSMS
BBY4SOP-00130	Determination of Tiamulin in Animal Tissue
BBY4SOP-00131	Determination of 3-monochloropropane-1,2-diol (3-MCPD) in Food and Food Ingredients
BBY4SOP-00132	Multi-Residue Determination of Multi-Class Drugs in Urine
BBY4SOP-00134	Determination of Ethyl Carbamate in Alcoholic Beverages
BBY4SOP-00135	Determination of Diquat and Paraquat in Fruit, Vegetables and Processed Foods
BBY4SOP-00136	Determination of Glyphosate and Metabolites in Fruit, Vegetables and Processed Foods
BBY4SOP-00137	Determination of Alternaria Mycotoxins in Beverages and Honey
BBY4SOP-00138	Multi-Residue Determination of Multi-Class Drugs in Animal Tissue and Animal Derived Foods
BBY4SOP-00139	Multi-Residue Determination of Multi-Class Antibiotics in Honey
BBY4SOP-00142	Determination of Steroids and Stilbenes in Fish
BBY4SOP-00144	Multi-Residue Determination of Multi-Class Drugs in Animal Feed and Pre-Feed
BBY4SOP-00145	Determination of 4-Methylimidazole in Processed Foods
BBY4SOP-00146	Determination of T-2 and HT2 Mycotoxins in Processed Foods
BBY4SOP-00147	Determination of Zearalenone and Related Mycotoxins in Processed Foods
BBY4SOP-00149	Multi-residue determination of Mycotoxins in Processed Foods
BBY7SOP-00014	Determination of Mercury in Tissue Digests
BBY4SOP-00151	Phthalates in Food by LC-MS/MS
BBY4SOP-00152	Determination of Polar Pesticides in Food Amitrole Chlormequat Cyromazine

Daminozide
Desphenyl Chloridazon
Difenzoquat
Diquat
ETU (Ethylenethiourea)
Melamine
Mepiquat
Nereistoxin
Paraquat
Propamocarb

ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY

Environmental

(Microbiological)

BBY4SOP-00001	Total and Fecal Coliform and *E. coli* in Water by Membrane Filtration
BBY4SOP-00003	Heterotrophic Plate Count in Water
BBY4SOP-00005	*Pseudomonas aeruginosa* Count in Water by Membrane Filtration
BBY4SOP-00006	*Enterrococcus* Count in Water by Membrane Filtration
BBY4SOP-00143	Enumeration of Coliforms and E.coli by MF using Chromocult

(Biological Tissues)

BBY4SOP-00108	Determination of Polycyclic Aromatic Hydrocarbons in Tissue by GC/MS
BBY7SOP-00002	Determination of Metals in Environmental Samples Using CRC ICPMS
BBY7SOP-00012	Determination of Hg in Solids, Tissues and Miscellaneous Solids by CVAFS

(Air)

BBY5SOP-00005	Analysis of Total Suspended Particulates (TSP), PM2.5, and PM10 in Air [modified from BC Environmental Laboratory Manual Section G and EPA 600/R-94/038B]
	Particulate>2.5 microns (gravimetric)
BBY7SOP-00016	Preparation of Air Filters for Metals Analysis [modified from NIOSH 7303]
BBY7SOP-00002	Determination of Metals in Environmental Samples Using CRC ICPMS [modified from EPA 6020]
	Aluminum

	Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Molybdenum Nickel Phosphorus Potassium Selenium Sodium Strontium Sulphur (Sulfur) Tin Titanium Uranium Vanadium Zinc Zirconium
BBY7SOP-00018	Analysis of Various Sample Types by ICP-OES [EPA 6010] Aluminum Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese

	Molybdenum Nickel Phosphorus Potassium Selenium Sodium Strontium Sulphur (Sulfur) Tin Titanium Vanadium Zinc Zirconium
BBY8SOP-00027	Determination of Polycyclic Aromatic Hydrocarbons in Air by GC/MS [modified from BC Environmental Laboratory Manual (Preparation) and EPA 8270 (Analysis)] Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo(a)pyrene Benzo(b,j)fluoranthene Benzo(e)pyrene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenzo (a,h) anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene Naphthalene Perylene Phenanthrene Pyrene
BBY8SOP-00058	VOCs In Air/vapour Using TD Tubes with Analysis by GC/MS [modified from BC Environmental Laboratory Manual Section H] 1,1-Dichloroethane 1,1-Dichloroethene 1,1-Dichloropropene 1,1,1-Trichloroethane 1,1,1,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1,2,2-Tetrachloroethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (Ethylene dibromide) 1,2-Dichlorobenzene

1,2-Dichloroethane
1,2-Dichloropropane
1,2,3-Trichlorobenzene
1,2,3-Trichloropropane
1,2,3-Trimethylbenzene
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,3-Butadiene
1,3-Dichlorobenzene
1,3-Dichloropropane
1,3,5-Trimethylbenzene
1,4-Dichlorobenzene
2-Butanone (Methyl ethyl ketone, MEK)
2-Chlorophenol
2-Chlorotoluene
2-Hexanone (Methyl butyl ketone, MBK)
2-Propanol (Isopropyl alcohol)
4-Chlorotoluene (p-Chlorotoluene)
4-isopropyltoluene (p-Cymene)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromobenzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon Disulphide
Carbon tetrachloride
Chlorobenzene
Chloroethane (Ethyl Chloride)
Chloroethene (Vinyl chloride)
Chloroform
cis-1,2-Dichloroethylene
cis-1,3-Dichloropropene
Dibromochloromethane
Dibromomethane
Dichlorodifluoromethane (Freon12)
Dichloromethane
Ethyl Acetate
Ethylbenzene
Hexachlorobutadiene
Isopropanol
Isopropylbenzene (Cumene)
m,p-Xylene
Methyl tert-butyl ether (MTBE)
Methylcyclohexane
n-Butylbenzene
n-Decane
n-Hexane

	n-Propylbenzene Naphthalene o-Xylene sec-Butylbenzene Styrene tert-Butylbenzene Tetrachloroethylene Toluene trans-1,3-Dichloropropene Trichloroethene Trichlorofluoromethane Trichlorotrifluoroethane Volatile Hydrocarbons (VH): C6-C13

(Soil/Solid/Water/Wastewater)

BBY6SOP-00010	Nitrite and Nitrite Plus Nitrate by Automated Colourimetric Method [modified from SM 4500-NO3- I] Nitrate + Nitrite Nitrogen Nitrite
BBY6SOP-00017	Determination of Sulfate by Konelab [modified from SM 4500-SO4 2-] Sulphate
BBY8SOP-00010	Determination of BTEX in Soil and Waters by Headspace-GC-MS [modified from EPA 5021 and EPA 5035 and EPA 8260] Benzene Ethylbenzene m,p-Xylene Methyl t-butyl ether o-Xylene Styrene Toluene
BBY8SOP-00011	VH Analysis in Soils and Waters by Headspace GC/FID [modified from BC Environmental Laboratory Manual Section D] VH: C6-C10 VPH: C6-C10 - BTEX
BBY8SOP-00029	Extractable Hydrocarbons (Water, Soils, Product, TPH) [modified from BC Environmental Laboratory Manual Section D] Extractable Petroleum Hydrocarbons (EPH): C10-C19 Extractable Petroleum Hydrocarbons (EPH): C19-C32 Total Extractable Hydrocarbons (TEH): C10-C30
BBY8SOP-00030	Determination of CCME (F2-F4) in Water and Soil [CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD] F2: C10-C16 F3: C16-C34 F4: C34-C50
BBY8SOP-00012	F1 and LH Analysis for Soils and Waters by Headspace GC/FID [CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD]

	F1: C6-C10 F1-BTEX: C6-C10 - BTEX
BBY8SOP-00054	CP, NCP, HydroxyPhenol in water (MTBE extraction) and soil by GC/MS [modified from BC Environmental Laboratory Manual Section D] 2-Chlorophenol 2-Hydroxyphenol (Catechol) 2-Methyl-4,6-dinitrophenol (4,6-Dinitro-o-cresol, DNOC) 2-Methylphenol (o-Cresol) 2-Nitrophenol 2,3-Dichlorophenol 2,3,4-Trichlorophenol 2,3,4,5-Tetrachlorophenol 2,3,4,6-Tetrachlorophenol 2,3,5-Trichlorophenol 2,3,5,6-Tetrachlorophenol 2,3,6-Trichlorophenol 2,4 + 2,5-Dichlorophenol 2,4-Dimethylphenol 2,4-Dinitrophenol 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,6-Dichlorophenol 2,6-Dimethylphenol 3 + 4-Chlorophenol 3 + 4-Methylphenol 3-Hydroxyphenol (Resorcinol) 3,4-Dichlorophenol 3,4-Dimethylphenol 3,4,5-Trichlorophenol 3,5-Dichlorophenol 4-Chloro-3-methylphenol 4-Hydroxyphenol (Hydroquinone) 4-Nitrophenol Pentachlorophenol Phenol
BBY8SOP-00060	Determination of Tetraethyllead in Soil and Water by GC/MS [modified from BC Environmental Laboratory Manual Section D and EPA 8000, EPA 8270] Tetraethyl lead
BBY8SOP-00009	Analysis of VOC's in Solids and Waters by Static Headspace GC/MS [modified from EPA 5021 and EPA 8260] 1,1-Dichloroethane 1,1-dichloroethylene 1,1-Dichloropropene 1,1,1-Trichloroethane 1,1,1,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1,2-Trichloropropane

1,1,2-Trichloro-1,2,2-Triflouroethane (Freon 113)
1,1,2,2-Tetrachloroethane
1,2-Dibromo-3-chloropropane (DBCP)
1,2-Dibromoethane (Ethylene dibromide)
1,2-dichlorobenzene
1,2-dichloroethane
1,2-Dichloropropane
1,2,3-Trichlorobenzene
1,2,3-Trichloropropane
1,2,3-Trichloropropene
1,2,3-Trimethylbenzene
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,3-Butadiene
1,3-Dichlorobenzene
1,3-Dichloropropane
1,3,5-Trichlorobenzene
1,3,5-Trimethylbenzene
1,4-dichlorobenzene
2-Butanone
2-Chlorotoluene
4-Methyl-2Pentanone
4-Chlorotoluene (p-Chlorotoluene)
4-isopropyltoluene (p-Cymene)
Acetone
Benzene
Bromobenzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon tetrachloride
Chlorobenzene
Chlorodibromomethane
Chloroethane (Ethyl Chloride)
Chloroethene (Vinyl Chloride)
Chloroform
Chloromethane (Methyl chloride)
cis-1,2-Dichloroethylene
cis-1,3-Dichloropropene
Dibromomethane
Dichlorodifluoromethane
Dichloromethane
Ethylbenzene
Ethylene Dibromide
Hexachlorobutadiene
Hexane
Isopropylbenzene (Cumene)
m,p-Xylene
Methyl t-butyl ether

	Methylcyclohexane n-Butylbenzene n-Decane n-Propylbenzene Naphthalene o-Xylene Pentachloroethane sec-Butylbenzene Styrene tert-Butylbenzene Tetrachloroethylene Toluene trans-1,2-Dichloroethylene trans-1,3-Dichloropropene Trichloroethylene Trichlorofluoromethane
BBY8SOP-00040	VOC Extra Compounds in Soil and Water by Headspace-GC-MS [BC Environmental Laboratory Manual Section D] 1-Butanol (n-Butanol) 1-Chlorobutane 1,4-Dioxane (p-dioxane) 2-Hexanone (Methyl butyl ketone, MBK) 2-Propanol (Isopropyl alcohol) Acrolein (Propenal) Acrylonitrile Allyl chloride (3-chloropropene) Alpha-Diisobutylene Beta-Diisobutylene Butylated hydroxytoluene (BHT) Carbon disulfide Chloroprene (2-Chloro-1,3-butadiene) Cyclohexanone Cyclohexene Dicyclopentadiene Ethyl acrylate Ethyl ether Hexachloroethane Isobutanol (2-Methyl-1-propanol) Methyl methacrylate Methylacrylonitrile Tetrabromomethane Tetrahydrofuran (THF) Vinyl acetate

(Soil/Solid/Waste)

BBY6SOP-00042	Determination of Flash Point by SetaFlash Closed Tester [modified from ASTM D3828] Flashpoint

BBY6SOP-00043	Determination of Free Liquid [modified from EPA 9095] Free Liquid
BBY7SOP-00004	Digestion of Soil, Sediment and Sludge for Total Recoverable Metals [modified from BC Environmental Laboratory Manual Section C]
BBY7SOP-00012	Determination of Hg in Solids, Tissues and Miscellaneous Solids by CVAFS [modified from EPA 245.7 and BC Environmental Laboratory Manual Section C] Mercury
BBY7SOP-00018	Analysis of Various Sample Types by ICP-OES [modified from EPA 6010 and BC Environmental Laboratory Manual Section B] Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Molybdenum Nickel Phosphorus Potassium Selenium Silver Sodium Strontium Tin Titanium Vanadium Zinc Zirconium
BBY8SOP-00003	Gravimetric Heavy Hydrocarbon-CCME F4G in Soils by AME [CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD] F4: Gravimetric
BBY8SOP-00006	Total Oil and Grease in Soils by Sonification Extraction-Dichloromethane [modified from BC Environmental Laboratory Manual Section D] Total Oil and Grease

BBY8SOP-00007	Mineral Oil and Grease in Solid Samples by Sonification Extraction [modified from BC Environmental Laboratory Manual Section D] Mineral Oil and Grease
BBY8SOP-00008	Waste Oil Quantification in Solids, Liquids by Petroleum Ether Extraction [BC Environmental Laboratory Manual Section D] Waste Oil Content
BBY8SOP-00017	Determination of Moisture Content in Solid Samples [modified from BC Environment Laboratory Manual] Percent Moisture
BBY8SOP-00022	Determination of Polycyclic Aromatic Hydrocarbons in Soil by GC/MS [modified from BC Environmental Laboratory Manual Section D] 1-Methylnaphthalene 2-Chloronaphthalene 2-Methylnaphthalene 3-Methylcholanthrene 4-Nitropyrene 7,12-Dimethylbenz(a)anthracene 9,10-Anthraquinone Acenaphthene Acenaphthylene Acridine Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(c)phenanthrene Benzo(e)pyrene Benzo(g,h,i)perylene Benzo(j)fluoranthene Benzo(k)fluoranthene Chrysene Dibenzo(a,e)pyrene Dibenzo(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3 - cd)pyrene N-Methylaniline Naphthalene Perylene Phenanthrene Pyrene Quinoline
BBY8SOP-00050	Determination of Tributyltin in Soil and Sediment by GC-MS [modified from RESTEK CORP APPLICATION NOTE# 59550] Tributyltin Dibutyltin

(Water/Wastewater/Soil Extract/Soil Leachate)

BBY0SOP-00003	Determination of pH in Waters, Leachates and Extracts by pH Meter [modified from SM 4500-H+ B] pH
BBY0SOP-00006	Determination of Conductivity in Waters, Leachates and Extracts by Meter [modified from SM 2510 B] Conductivity (25˚C)
AB SOP-00007	Ammonia-Nitrogen by Automated Phenate Colorimetric method [modified from EPA 350.1] Ammonia
BBY6SOP-00011	Determination of Chloride by Konelab [modified from SM 4500-CL-E and BC Environmental Laboratory Manual Section B] Chloride
BBY6SOP-00013	Ortho-, Total Dissolved, and Total Phosphate by Automated Method [modified from SM 4500-P E] Phosphate Total Dissolved Phosphorus Total Phosphorus
BBY6SOP-00016	Determination of Total and Total Dissolved Nitrogen by Automated Method [modified from SM 4500-N C] Total Dissolved Nitrogen Total Nitrogen
BBY6SOP-00021	Determination of Apparent Colour in Water Samples [modified from SM 2120 B] Apparent Colour
BBY6SOP-00024	Chemical Oxygen Demand (COD) by Closed Reflux, Colorimetric Method [modified from SM 5220 D] COD
BBY6SOP-00025	Determination of pH in Saturated Paste Extract [modified from SM 4500-H+ B] pH
BBY6SOP-00026	pH, Conductivity, Salinity, Alkalinity (Total, Phenolphthalein) in Water [modified from SM 2320 B, SM 2510 B, SM 4500-H+ B] Alkalinity (pH 4.5) Conductivity (25˚C) pH
BBY6SOP-00027	Determination of Turbidity in Water Samples [modified from SM 2130 B] Turbidity
BBY6SOP-00028	Determination of pH in Soil Leachate [modified from BC Environmental Laboratory Manual Section B] pH
BBY6SOP-00029	Specific Conductance in Satpaste and 1:5 DI Leach by Conductivity Cell [modified from SM 2510 B] Conductivity

BBY6SOP-00030	Satpaste Extract Preparation for Saturation Percent, Salinity Analyses [modified from BC Environmental Laboratory Manual Section B] Percent Saturation Saturated Paste
BBY6SOP-00033	Determination of Total Dissolved Solids in Waters and Wastewaters [modified from SM 2540 C] Total Dissolved Solids
BBY6SOP-00034	Determination of Total Suspended Solids in Waters and Wastewaters [modified from SM 2540 D] Total Suspended Solids
BBY6SOP-00035	Determination of Total Solids and Total Solids Fixed in Waters [modified from SM 2540 A] Fixed Solids Total Solids (TS)
BBY6SOP-00037	Determination of Total Acidity pH 8.3, Acidity to pH 4.5, in Waters [modified from SM 2310 B] Acidity
BBY6SOP-00045	Total and Carbonaceous BOD, DO, and pH Analysis [modified from SM 5210 B] BOD (5 day) CBOD (5 day)
BBY6SOP-00048	Determination of Fluoride in Waters, Soil Extracts, Leachates by ISE [modified from BC MOE ENVIRONMENTAL MANAGEMENT ACT HAZARDOUS WASTE REGULATION (EMA/HWR) SCHEDULE 4, PART 2 (Preparation) and SM 4500-F- C (Analysis)] Fluoride
BBY6SOP-00057	Determination of True Colour in Water Samples by Konelab [modified from SM 2120 C] True Colour
BBY7SOP-00001	Determination of Metals in Solids by ICPMS [modified from EPA 6020] Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Manganese Mercury Molybdenum Nickel

	Selenium Silver Thallium Tin Vanadium Uranium Zinc Zirconium
BBY7SOP-00005	Procedure for the Preparation of Solids and Soil using TCLP [EPA 1311]
BBY7SOP-00009	Procedure for the Preparation of Leachates Using BC MLEP [modified from BC MOE ENVIRONMENTAL MANAGEMENT ACT HAZARDOUS WASTE REGULATION (EMA/HWR) SCHEDULE 4, PART 2]
BBY8SOP-00021	Determination of Polycyclic Aromatic Hydrocarbons in Waters by GC/MS [modified from BC Environmental Laboratory Manual Section D] 1-Methylnaphthalene 2-Chloronaphthalene 2-Methylnaphthalene 3-Methylcholanthrene 4-Nitropyrene 7,12-Dimethylbenz(a)anthracene 9,10-Anthraquinone Acenaphthene Acenaphthylene Acridine Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b,j)fluoranthene Benzo(c)phenanthrene Benzo(e)pyrene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenzo(a,e)pyrene Dibenzo(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene N-Methylaniline Naphthalene Perylene Phenanthrene Pyrene Quinoline
BBY7SOP-00018	Analysis of Various Sample Types by ICP-OES [modified from EPA 6010]

	Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Molybdenum Nickel Phosphorus Potassium Selenium Silicon Silver Sodium Strontium Sulphur (Sulfur) Tin Titanium Vanadium Zinc Zirconium
BBY7SOP-00002	Determination of Metals in Environmental Samples Using CRC ICPMS [modified from EPA 6020 and BC Environmental Laboratory Manual Section C] Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Cesium Chromium Cobalt Copper Gold

	Iron Lanthanum Lead Lithium Magnesium Manganese Mercury Molybdenum Nickel Palladium Phosphorus Platinum Potassium Rubidium Selenium Silicon Silver Sodium Strontium Sulphur (Sulfur) Tellurium Thallium Thorium Tin Titanium Tungsten Uranium Vanadium Zinc Zirconium
BBY7SOP-00003	Digestion of Aqueous Samples for Metals by ICPMS or ICP-OES [modified from EPA 6020 and BC Environmental Laboratory Manual Section C]
AB SOP-00084	Mercury in Water, Leachates and Liquids by Bromination and Cold Vapour [modified from BC Environmental Laboratory Manual Section C) Mercury
BBY7SOP-00022	Determination of Ultra-Low Level Mercury in Water by CVAFS [modified from EPA 1631] Mercury
BBY8SOP-00004	Oil and Grease in Water Samples by Hexane Extraction and Gravimetry [modified from BC Environmental Laboratory Manual Section D] Mineral Oil and Grease Total Oil and Grease
BBY8SOP-00059	Determination of Tributyltin in Water by GC-MS [modified from RESTEK CORP LIT. CAT#59550] Dibutyltin Tributyltin

BBY8SOP-00025	Chlorinated Phenols in Water (DCM extraction) by GC/MS [modified from BC Environmental Laboratory Manual Section D] 2-Chlorophenol 2,3-Dichlorophenol 2,3,4-Trichlorophenol 2,3,4,5-Tetrachlorophenol 2,3,4,6-tetrachlorophenol 2,3,5-Trichlorophenol 2,3,5,6-Tetrachlorophenol 2,3,6-Trichlorophenol 2,4 + 2,5-Dichlorophenol 2,4,5-Trichlorophenol 2,4,6-trichlorophenol 2,6-Dichlorophenol 3 + 4-Chlorophenol 3,4-Dichlorophenol 3,4,5-Trichlorophenol 3,5-Dichlorophenol 4-Chloro-3-Methylphenol Pentachlorophenol

(Seawater)

BBY7SOP-00002	Determination of Metals in Environmental Samples Using CRC ICPMS [modified from EPA 6020] Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Molybdenum Nickel Phosphorus Potassium Selenium Silicon Silver

Sodium
Strontium
Sulphur (Sulfur)
Tellurium
Tin
Thallium
Titanium
Uranium
Vanadium
Zinc
Zirconium

(Soil / Solid – Toxicology)

BBY2SOP-00010	Chironomids dilutus 10-Day Survival and Growth Test [EPS 1/RM/32] Chironomids (10d)
BBY2SOP-00011	Hyalella azteca 14-Day Survival and Growth Test [EPS 1/RM/33] Hyalella azteca (14d)
BBY2SOP-00012	Marine or Estuarine Amphipod 10 Day Survival and Reburial Test [EPS 1/RM/26 and EPS 1/RM/35] Marine Amphipods (10d)
BBY2SOP-00014	Microtox - Acute Solid Phase Analysis [EPS 1/RM/42] Microtox IC50
BBY2SOP-00030	Neanthes arenaceodentata Survival and Growth Test Neanthes (20d)
BBY2SOP-00032	Bivalve Larval Development Sediment Test [PUGET SOUND ESTUARY PROGRAM 1995 B] Bivalves (48hr)
BBY2SOP-00062	Echinoderm Embryo / Larval Development Test [EPS 1/RM/58] Echinoid Larval Development (48hr)

(Water – Toxicology)

BBY2SOP-00001	Ceriodaphnia dubia Chronic Survival and Reproduction Test [EPS 1/RM/21] Ceriodaphnia dubia (7d)
BBY2SOP-00002	Fathead Minnow 7 Day Survival and Growth Test [EPS 1/RM/22] Fathead Minnow (7d)
BBY2SOP-00004	Rainbow Trout Acute Survival Test (Environment Canada) [EPS 1/RM/13 and EPS 1/RM/9] Single Concentration (96hr) Trout LC50 (96hr)
BBY2SOP-00006	Pseudokirchneriella Subcapitata 72H Growth Inhibition Test [EPS 1/RM/25] Pseudokirchneriella subcapitata (72hr)
BBY2SOP-00007	Daphnia magna 48 Hour Acute Test [EPS 1/RM/11 and EPS 1/RM/14] Daphnia LC50 (48hr)

	Daphnia Single Concentration (48hr)
BBY2SOP-00009	Echinoid 20 Minute Fertilization Test [EPS 1/RM/27] Echinoderm Fertilization (20 min)
BBY2SOP-00053	Lemna minor 7 Day Growth Inhibition Test [EPS 1/RM/37] Lemna minor (7d)
BBY2SOP-00061	Rainbow Trout Acute Survival Test with pH Stabilization [EPS 1/RM/50] Single Concentration (96hr) - pH Stabilization Trout LC50 (96hr) - pH Stabilization

FORENSICS

Forensic Equine Drug Testing

Description of Activities:
(Drugs in Horse Hair, Urine and Blood)

1.Screening and confirmatory analysis for drugs and metabolites in equine body fluids, including quantification where required.

2.Testing of known and unknown substances including powders, liquids, dosage forms, feeds, drug administration paraphernalia and other materials for the presence of drugs, using in-house validated methods incorporating the following techniques:

Techniques for which laboratory is accredited:

a. High-performance liquid chromatography
b. Immunoassay
c. Mass spectrometry
d. Sample preparation, extraction and general chemical tests

Notes:

(Medical Gases Piping Systems)

The Medical Gas Piping System inspection portion of Bureau Veritas' scope of accreditation has recently been transferred to SCC's Inspection Body program. A scope listing may be found at:
https://www.scc.ca/en/accreditation/programs/inspection-bodies/directory

ISO/IEC 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories

RG FORENSIC: SCC Requirements and Guidance for the Accreditation for Forensic Testing Laboratories

BBY2SOP: Laboratory Standard Operating Procedures.

Standards Council of Canada
Conseil canadien des normes

This document forms part of the Certificate of Accreditation issued by the Standards Council of Canada (SCC). The original version is available in the Directory of Accredited Laboratories on the SCC website at www.scc.ca.

Elias Rafoul
Vice President, Accreditation Services
Publication on: 2021-04-23

Appendix 3-G: Bureau Veritas (Calgary) Scope of Accreditation

PEACE RIVER
HYDRO PARTNERS

TESTING AND CALIBRATION LABORATORY ACCREDITATION PROGRAM (LAP)

Scope of Accreditation

Accredited Laboratory No. 836

Legal Name of Accredited Laboratory:	**Bureau Veritas Canada (2019) Inc. (Formerly Maxxam Analytics)**
Location Name or Operating as (if applicable):	Bureau Veritas Calgary
Contact Name:	Pantea Niksirat
Address:	<personal information removed>
Telephone:	
Fax:	
Website:	www.bvna.com
Email:	Calgary-QA-Staff-AB@bureauveritas.com

SCC File Number:	151043
Accreditation Standard(s):	ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories
Fields of Testing:	Biological Chemical/Physical
Program Specialty Area:	Agriculture Inputs, Food, Animal Health and Plant Protection (AFAP) Environmental Testing (ET)
Initial Accreditation:	2016-08-30
Most Recent Accreditation:	2021-04-15
Accreditation Valid to:	2024-08-30

SCC Group Accreditation:
This laboratory is a part of a Group Accreditation with the following facilities in accordance with SCC's policy on Group Accreditation documented in the Accreditation Services Accreditation Program Overview.

15229 - Bureau Veritas Canada (2019) Inc. (Formerly Maxxam Analytics) - 6744 - 50 Street NW, Edmonton, AB, T6B 3M9, Accredited Laboratory No. 160
151039 - Bureau Veritas Canada (2019) Inc. (Formerly Maxxam Analytics) - Unit D, 675 Berry St., Winnipeg, MB, R3H 1A7, Accredited Laboratory No. 837

Testing is performed at the following locations:

Air testing: #1 2080-39th Avenue N.E. Calgary, AB. T2E 6P7
Inorganic, organic chemistry and water microbiology: 4000-19 Street N.E Calgary, AB T2E 6P8 and #3-4 2080-39th Avenue N.E. Calgary, AB. T2E 6P7, and 2021 – 41 Avenue NE, Calgary, AB T2E 6P2
Food testing: #112, 3442-118 Ave S.E. Calgary, AB T2Z 3X1.

* These test methods can be performed on-site as per RG-On-Site-Testing.

ANIMAL AND PLANTS (AGRICULTURE)

Foods and Edible Products (Human and Animal Consumption):

(Microbiology)

Assurance GDS ® MPX Top 6 STEC Assay	Assay BioControl Assurance GDS ® MPX Top 6 STEC
Assurance GDS ® MPX Top 7 STEC Assay	BioControl Assurance GDS ® MPX Top 7 STEC
MFHPB-10	Isolation of Escherichia coli O157:H7/NM from foods and environmental surface samples
MFHPB-18	Determination of Aerobic Colony Counts in Foods
MFHPB-20	Isolation and Identification of *Salmonella* from Food and Environmental Samples
MFHPB-22	Enumeration of Yeast and Moulds in Foods
MFHPB-30	Isolation of *Listeria monocytogenes* and *Listeria* spp. from foods and environmental samples
MFHPB-33	Enumeration of Total Aerobic Bacteria in Food Products and Food Ingredients Using 3M™ Petrifilm™ Aerobic Count Plates
MFHPB-34	Enumeration of *Escherichia coli* and Coliforms in Food Products and Food Ingredients Using 3M™ Petrifilm™ *E. coli* Count Plates
MFLP-09	Enumeration of *Enterobacteriaceae* species in Food and Environmental Samples Using 3M™ Petrifilm™ *Enterobacteriaceae* Count Plates
MFLP-16	Detection of *Escherichia coli* O157:H7 in foods - Assurance GDS® for *E. coli* O157:H7 Tq Gene Detection System
MFLP-21	Enumeration of *Staphylococcus aureus* in Foods and Environmental Samples Using 3M™ Petrifilm™ *Staph.* Express Count (STX) Plates
MFLP-28	The Qualicon Bax® System Method for the Detection of *Listeria monocytogenes* in a Variety of Food.

MFLP-29	The BAX® System Method for the detection of Salmonella in foods and environmental surface samples.
MFLP-30	Detection of *Escherichia coli* O157:H7 in Select Foods using the BAX® System *E. coli* O157:H7 MP.
MFLP-36	Detection of *Salmonella* in Foods and Environmental Surface Samples-Assurance GDS® for *Salmonella* Tq Genetic Detection System
MFLP-54	Detection of *Listeria monocytogenes* from selected foods using iQ-Check™ *Listeria monocytogenes* Real-Time PCR Test Kit
MFLP-74	Enumeration of *Listeria monocytogenes* in foods
MFLP-79	Detection of *Listeria* spp. in Environmental Surface Samples using the BAX®System Real-Time PCR Assay for *Listeria* genus
MLG4	Isolation and Identification of *Salmonella* from Meat, Poultry, Pasteurized Egg and Siluriformes (fish) Products and Carcass and environmental sponges
MLG41	Isolation and Identification of *Campylobacter jejuni/coli/lari* from Poultry Rinse, Sponge and Raw Product Samples

ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY

Environmental:

Soil/Solid/Waste

AB SOP-00045	Specific Gravity (Modified SM 2710 F, MSSMA 2.25, and Petroleum and Natural Gas Industries- Field Testing of Drilling Fluids NS SM-2710F – water inorganic) Gravimetric Specific Gravity
AB SOP-00047	Free Liquid (Paint Filter Test) (Modified EPA 9095 B) Volumetric Free Liquid in Waste Samples

Water

AB SOP-00011	Silica (Reactive) by Konelab - Molybdate/ANSA Reduction Method (Modified EPA 370.1] Colorimetric Reactive Silica
*AB SOP-00016	Chemical Oxygen Demand (Total and Dissolved) (Modified SM 5220 D) Colorimetric COD

AB SOP-00017	Biochemical Oxygen Demand (Modified SM 5210 B) D.O. Meter BOD (5 day) CBOD (5 day)
AB SOP-00024	Total Phosphorus by Konelab - Ascorbic Acid Reduction Method (Modified from SM 4500-P, A, B, F) Colorimetric Inorganic phosphorus Total Phosphorus
AB SOP-00032	The Determination of Residual Chlorine in Waters (Modified SM 4500 C1G) Colorimetric Free Chlorine Total Chlorine
AB SOP-00041	Ferrous and Ferric Iron in Water-Colorimetric Determination (Modified SM 3500-Fe A, B) Colorimetric Ferrous Iron
AB SOP-00058	Dissolved Oxygen- Modified Winkler Method (Modified SM 4500-O C) Titrimetric Dissolved Oxygen
AB SOP-00060	Naphthenic Acids in water by FTIR (Modified EPA 3510C R3/FTIR) IR Naphthenic Acids
*AB SOP-00061	Total Suspended Solids, Total Fixed Solids, Total Volatile Solids (Modified SM 2540 D, E) Gravimetric Total Suspended Solids Total Suspended Solids Fixed Total Suspended Solids Volatile
AB SOP-00065	Total Dissolved Solids [Modified SM 2540 C] Gravimetric Total Dissolved Solids
AB SOP-00070	Extraction and Analysis of Naphthenic Acids in Water (DCM Extraction) [Modified from Syncrude 1995 m] IR DCM Extraction Naphthenic Acids
AB SOP-00084	Mercury in Waters, Leachates and Liquids by Bromination and Cold Vapour

	[Modified BC MOE LABORATORY MANUAL SECTION C and EPA 245.7] Mercury
AB SOP-00087	Organic Carbon by Technicon - Persulfate UV Oxidation (Modified Methods Manual for Chemical Analysis of Water and Wastes, Method Code 119) Colorimetric Organic Carbon
AB SOP-00092	Oil and Grease Water Analysis by Gravimetric Hexane Extraction Method (Modified SM 5520 B, Gravimetric) Total Oil and Grease Total Petroleum Hydrocarbons (TPH)
CAL SOP-00040	Bromate, Chlorate, Chlorite by IC – Conductivity detection (Modified SM 4110 D) Ion Chromatography Bromate Chlorate Chlorite
CAL SOP-00049	Colour by Konelab (Modified SM 2120C) Spectrophotometric Apparent colour True Color
CAL SOP-00055	Volatile Organic Acids (Modified from Dionex ICE-AS6 DOC NO 34961) Ion Chromatography Glycolic Acid Lactic Acid
CAL SOP-00057	Iodide/Thiocyanate/Thiosulfate (Modified DIONEX, DOC NO 034035) Ion Chromatography Iodide Thiocyanate Thiosulfate
CAL SOP-00063	Volatile Organic Acids (Modified DIONEX ICE-AS1 DOC NO 031181) Ion Chromatography Acetic Acid Butyric Acid Formic Acid Propionic Acid
CAL SOP-00065	Oxalic Acid by Ion Chromatography - Conductivity Detection (Modified from SM 4110B)

	Ion Chromatography Oxalic Acid
CAL SOP-00071	Sulphite by IC (Modified SM 4110 B) Ion Chromatography - Conductivity Detector Sulfite
CAL SOP-00076	Total and Dissolved Inorganic Carbon by Automated Colourimetry (Modified AE 2411) - Water Inorganic Carbon
CAL SOP-00081	Turbidity – Nephelometric Method (Modified SM 2130 B) Nephelometric Turbidity
CAL SOP-00099	Extraction and analysis of Resin and Fatty Acids in water by GCMS (Modified AE 129.0 and EPA 8270E) GC/MS 12,14-Dichlorodehydroabietic Acid 12-Chlorodehydroabietic Acid 14-Chlorodehydroabietic Acid 9,10-Dichlorostearic Acid (C18) Abietic Acid Decanoic Acid C10 Dehydroabietic Acid Docosanoic Acid C22 Docosanoic Acid C12 Eicosanoic Acid C20 Hexadecanoic Acid C16 Isopimaric Acid Linoleic Acid C18:2 Linoleic Acid C18:3 Neoabietic Acid Octadecanoic Acid C18 Oleic Acid C18:1 Palustric Acid Pimaric Acid Sandaracopimaric Acid Tetradecanoic Acid (C14) Undecanoic Acid (C11) Total of Resin Acids Total of Fatty Acids
CAL SOP-00273	Determination of Chlorophyll and Pheophytin (Modified SM 23 10200 H) Chlorophyll A Chlorophyll B Chlorophyll C Pheophytin

Emissions (Air)

EMS SOP-00009	Sorbent traps for the determination of Mercury Emissions (Field) (Modified US EPA Method 30B) Spectrometer - Atomic Absorption Detector Mercury (Hg)

EMS SOP-00110	Anions-Water (Modified Methods Manual for Chemical Analysis of Atmospheric Pollutants method 52121) Ion Chromatography - Conductivity Detector Chloride Fluoride Nitrate Sulfate
EMS SOP-00111	Ammonia – Water (Modified Methods Manual for Chemical Analysis of Atmospheric Pollutants method 52626] Ion Chromatography - Conductivity Detector Ammonia
EMS SOP-00112	Fixed Gases - Air (Modified Method 3, Alberta Stack Sampling Code, 1995, Publication Number: REF.89 and EPA 3C) GC/TCD CO CO_2 N_2 O_2
EMS SOP-00113	Formaldehyde – Water (Modified from Methods Manual for Chemical Analysis of Atmospheric Pollutants, method 12525) Colorimetric Formaldehyde
EMS SOP-00114	Hydrocarbons – Air (Modified AENV18] GC/FID Total Hydrocarbons as Methane
EMS SOP-00115	Total Particulates - Air Filter (Modified method 5, Determination of Particulate Emissions from Stationary Sources, Alberta Stack Sampling Code, 1995, Publication Number: REF.89] Gravimetric Particulates
EMS SOP-00116	Total/Trace Reduced Sulfur - Air (Field) [Modified from AENV.TRS.P&P-1 and AENV.TRS.SGP-1] GC/PID Carbon disulfide Carbonyl sulfide Dimethyl disulfide Dimethyl sulfide Hydrogen sulphide Methyl mercaptan

EMS SOP-00122	Chlorine and Chlorine Dioxide – Air (Field) [Modified Alberta Environment Stack Code, 1995, Publication Number REF 89] Iodometric Determination Chlorine Chlorine Dioxide

Soil/Solid

*AB SOP-00002	Moisture Content in Soil [Modified CCME Petroleum Hydrocarbons in Soil - Tier 1 Method Section 13] Gravimetric % Moisture
*AB SOP-00003	Analysis of PAH in Water, Soil, Oil and Leachates by GC/MS [Modified EPA 8270E, EPA 3540C, EPA 8270E] - Soils and water 1-Methylnaphthalene 2-Methylnaphthalene Acenaphthene Acenaphthylene Acridine Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b, j) fluoranthene Benzo (g,h,i) perylene Benzo (k) fluoranthene Benzo(c)phenanthrene Benzo(e)pyrene Chrysene Dibenzo (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3 - cd) pyrene Naphthalene Perylene Phenanthrene Pyrene Quinoline
*AB SOP-00004	Determination of Electrolytic Conductivity by Manual Meter (Modified SM 2510B - Soils and waters Conductivity Meter (Manual) Conductivity
AB SOP-00005	Alkalinity Conductivity Fluoride and pH by PC-Titrate (Modified SM 2510 B, SM 4500 H+B, SM 2320 B, SM 4500-F C) - Soil & Waters PC Titrate Conductivity (25 °C) Alkalinity Fluoride pH Acidity
*AB SOP-00006	pH by Manual Meter (Modified from SM 4500-H+ B) pH Meter

	pH
*AB SOP-00007	Ammonia-Nitrogen by Konelab - Phenate colorimetric method (Modified SM4500-NH3 A&G) Colorimetric Ammonia Ammonia – Extraction
AB SOP-00008	TKN by Konelab (Modified EPA 351.1, EPA 351.2) Colorimetric Total Kjeldahl Nitrogen
AB SOP-00012	Total Organic Carbon and Organic Matter in Soil (Modified Methods Manual for Soil and Plant Analysis) Reflux – Titrimetric Organic Matter – Calculation Total Organic Carbon
AB SOP-00019	Calcium Carbonate Equivalence by pH (Modified SSMA 20.2) pH Meter Calcium Carbonate Equivalence (CCE)
AB SOP-00020	Chloride and Sulfate Analysis by Discrete Autoanalyzer (Modified SM 4500 Cl E & SM 4500 SO4 E) Chloride *Sulfate
AB SOP-00022	Particle Size Distribution by Sieve Analysis (Modified ASTM D6913) Gravimetric/SIEVE Grain size Particle size by sieve (Special)
AB SOP-00023	Nitrite and Nitrate by Ion Chromatography (Modified SM 4110 B) – Soil and Waters Ion Chromatography Nitrate Nitrite
AB SOP-00025	Ortho-phosphate by Konelab - Ascorbic Acid Reduction Method (Modified SM 4500-P, A and F) Colorimetric Auto Color Ortho-phosphate
*AB SOP-00026	Chloride, Sulphate and Bromide by Ion Chromatography (Modified SM 4110B] Ion Chromatography Chloride Sulfate

AB SOP-00030	PSA by Hydrometer - Texture (Sand, Silt, Clay and gravel) Analysis (Modified SSMA 55.3) Hydrometer % clay % gravel % sand % slit
*AB SOP-00033	Preparation of Saturation and Water-Soil Ratio Samples [Modified from SSMA Method 15.2] Gravimetric % Saturation
AB SOP-00039	Extraction and Analysis of BTEX/F1 and select Volatiles by HS/GC/MS/FID Water, Soil and Oil (BTEX: Modified EPA 8260D, GC/MS – HEADSPACE) (F1/PHC: Modified CCME Petroleum Hydrocarbons - Tier 1 Method and EPA5021A) (BTEX TCLP: EPA 1311) GC/MS - HEADSPACE 1,2,4-Trimethyl Benzene Benzene C5-C10 Ethylbenzene F1: C6-C10 Hexane m/p-xylene Methyl tert-butyl ether (MTBE) o-xylene Styrene Toluene
*AB SOP-00040	Analysis of Extractable Hydrocarbons in Water and Soils by GC/FID (Modified Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil – Tier 1 Method) Modified EPA 1617)- Sheen C6-C50 Hydrocarbons F2 (C10-C16 Hydrocarbons) F3 (C16-C34 Hydrocarbons) F3A (C16-C22 Hydrocarbons) F3B (C22-C50 Hydrocarbons) F4 (C34-C50 Hydrocarbons) Reached Baseline at C50 F4G-SG (Heavy Hydrocarbons-Grav) Total Extractables C10 to C30 Total Extractables C10 to C22 Total Extractables C23 to C60 F4 HTG (>C34 – High Temp GC) Total Petroleum Hydrocarbon Visible Sheen
*AB SOP-00042	Metals on Liquids and Solids by ICP/OES (Modified EPA 6010 D) ICP/OES Aluminum Barium Boron Calcium Chromium Iron Lithium Magnesium Manganese Phosphorus Potassium Silicon Sodium Strontium Sulfur Thorium
*AB SOP-00043	Metals Analysis on Soils and Waters Using ICPMS (Modified EPA 6020 B) - Soils and Waters

	[TCLP: EPA 1311] ICP/MS Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Mercury Molybdenum Nickel Palladium Potassium Selenium Silicon Silver Sodium Strontium Sulphur Tellurium Thallium Tin Titanium Tungsten Uranium Vanadium Zinc Zirconium
AB SOP-00049	Particle Size Distribution by Hydrometer (Modified ASTM D422-63) Hydrometer Particle Size Distribution
AB SOP-00050	Dry Bulk Density and Wet Bulk Density 9Modified McKeague and MSSMA Section 2.21) Gravimetric Bulk Density
AB SOP-00052	Bromide by Ion Chromatography - UV Detection (Modified from SM 4110 B) Ion Chromatography/UV Detector Bromide
AB SOP-00056	Preparation and Analysis VOC -Water and Soil by HS/GC/MS (Modified from EPA8260D and EPA5021A) (VOC TCLP: EPA 1311) GC/MS (Headspace) 1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-dichloroethylene 1,2 dibromoethane 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene 1,2-dichlorobenzene 1,2-dichloroethane 1,2-Dichloropropane 1,3,5 Trichlorobenzene 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,4-dichlorobenzene Benzene Bromodichloromethane Bromoform Bromomethane Carbon Tetrachloride Chlorobenzene Chlorodibromomethane Chloroethane Chloroform Chloromethane cis-1,2-Dichloroethylene

	cis-1,3-Dichloropropene Ethylbenzene Methyl methacrylate o-xylene Tetrachloroethylene trans-1,2-Dichloroethylene Trichloroethylene Vinyl Chloride	Dichloromethane m/p-xylene Methyl t-butyl ether Styrene Toluene trans-1,3-Dichloropropene Trichlorofluoromethane
AB SOP-00062	Flashpoint by Small Scale Closed Cup Tester (SetaFlash) (Modified ASTM D3828) Seta Flash Closed Cup Flashpoint	
AB SOP-00063	Hexavalent Chromium by Konelab (Modified SM 3500-Cr B) Colorimetric Hexavalent Chromium	
AB SOP-00067	Elemental Sulfur (Modified Canadian Journal of Soil Science, 65, Pages 811-813, 1985) Colour-Extraction Elemental Sulphur	
* AB SOP-00071	Electrical Conductivity by Manual Meter - On-Site Testing (Modified SM 2510 B) Conductivity Meter Conductivity (25 °C)	
* AB SOP-00073	Determination of Percent Moisture - On-Site Testing (Modified CCME PHC-CWS] Gravimetric % Moisture	
* AB SOP-00074	Determination of pH in Water and Soil by Manual Meter - On-Site Testing (Modified SM 4500H+ B) pH Meter pH	
* AB SOP-00075	Preparation of Saturation Samples - On-Site Testing (Modified from SSMA Method 15.2) Gravimetric % Saturation	
*AB SOP-00076	BTEX/F1 in Water and Soil by GC Headspace PID/FID - On-Site Testing (BTEX: Modified EPA 8021B] – GC/PID - Headspace (F1: CCME Hydrocarbons Tier 1, BCMOE Section D, BCMELP] - GC/FID – Headspace) Benzene	C6 o-xylene

	Ethylbenzene m/p-xylene O-xylene-C10 Toluene	F1:C6-C10 o-xylene Styrene Total C6-C10
*AB SOP-00077	Extractable Hydrocarbon in Water and Soil - On-Site Testing (Modified CCME hydrocarbons Analysis tier 1, BCMOE Section D, BCMELP] GC/FID - Direct Injection EPH (C10-C19) F2: C10-C16 F4: C34-C50	 EPH (C19-C32) F3: C16-C34 TEH (C10-C30)
*AB SOP-00078	Chloride Analysis by Hach DR2800 - On-Site Testing (Modified SM 4500-ClE) Colorimetric Chloride	
AB SOP-00080	Sulphide, Low level (Modified SM 4500-S2D, A, F) Colorimetric Sulphide	
AB SOP-00088	Phenolics-Automated 4-AAP Colorimetry (Modified SSMA Chapter 40 & EPA 9066) Colorimetric – Distillation Extraction Phenol	
AB SOP-00091	NO_2 and TON by Gallery Plus (Modified SM 4500-NO3-H) Nitrite Total Oxidized Nitrogen (TON)	
AB SOP-00093	Total Nitrogen by Konelab (Modified SM 4500-N C) – Soil and Water Colorimetric Total Nitrogen (water) Total Nitrogen (Dissolved, water) Total Nitrogen (Soluble, soil) Total Nitrogen (Available, soil)	
CAL SOP-00032	Spontaneous combustion (Self Heating) (Modified Recommendations on the Transport of Dangerous Goods: Manual of Tests and Criteria. Sixth Revised edition. United Nations.2015 sections 33.3.1.3 and 33.3.1.6) Combustion Spontaneous Combustion	
CAL SOP-00054	Ethanolamines and DIPA by reversed-phase chromatography (amperometry) (Modified IC US6-0193-062014) – Soil and Water Diethanolamine (DEA) Methyldiethanolamine (MDEA) Monoethanolamine (MEA) Diisopropanolamine (DIPA)	

	Triethanolamine (TEA) – Water only 2-(2-Aminoethoxy)-ethanol (DGA) – Water only
CAL SOP-00093	Preparation and Analysis of Glycols and Sulfolane in Water, Soil and oil by GC-FID (Modified from EPA 8015D) GC/FID – Extraction Diethylene Glycol — Ethylene Glycol Propylene Glycol — Sulfolane Tetraethylene Glycol — Triethylene Glycol
CAL SOP-00094	Herbicides (Modified EPA 8151A and EPA 8270E) GC/MS – Extraction 2,4,5-Trichlorophenoxyacetic acid (2,4,5-T) 2,4,5-Trichlorophenoxypropionic acid (2,4,5-TP) 2,4-Dichlorophenoxyacetic acid (2,4-D) 2,4-Dichlorophenoxybutyric acid (2,4-DB) 3,5-Dichlorobenzoic Acid Bentazon — Bromoxynil Chloramben — Dicamba Dichlorprop — Diclofop-methyl Dinoseb (DNBP) — MCPA MCPP — Pentachlorophenol Picloram
CAL SOP-00096	Extraction and Analysis of OG and TPH in Water and Soil by FTIR (Modified SM 23 5520 C m) IR – Extraction Oil and Grease Total Petroleum Hydrocarbons
CAL SOP-00104	Preparation and Analysis of Extended VOC in Water and Soils by HS/GC/MS (Modified EPA 8260D, EPA 5021A &VOC TCLP: EPA 1311) GC/MS – HS/Extraction 1,2,3-trichloropropane — 1,1-dichloropropene 1,2-dibromo-3-chloropropane — 1,3-dichloropropane 2,2-dichloropropane — 2-butanone (MEK) 2-chlorotoluene — 2-hexanone 2-nitropropane — 4-chlorotoluene 4-methyl-2-pentanone (MIBK) — Acetone Acetonitrile — Acrolein Acrylonitrile — Bromobenzene Bromochloromethane — Carbon disulphide Cyclohexane — Cyclohexanone Dibromomethane — Dichlorodifluoromethane

	Dicyclopentadiene	Ethyl acetate
	Ethyl ether	Ethyl methacrylate
	Hexachlorobutadiene	Hexane
	Iodomethane	Isopropylbenezene
	Naphthalene	n-Butylbenzene
	Nitrobenzene	n-Propylbenzene
	p-Isopropyltoluene	sec-Butylbenzene
	tert-Butylbenezene	
CAL SOP-00149	Polychlorinated Biphenyls (PCB) (Modified EPA 8082A) GC/ECD – Extraction	
	Aroclor 1016	Aroclor 1221
	Aroclor 1248	Aroclor 1254
	Aroclor 1268	Total PCB
CAL SOP-00164	Semi Volatile Phenols (Modified EPA 8270E) GC/MS – Extraction	
	2,3,4,5-tetrachlorophenol	2,3,4,6-tetrachlorophenol
	2,3,4-trichlorophenol	2,3,5,6-tetrachlorophenol
	2,3,5-trichlorophenol	2,3,6-trichlorophenol
	2,3-dichlorophenol	2,4,5-trichlorophenol
	2,4,6-trichlorophenol	2,4-dichlorophenol
	2,4-dimethylphenol	2,4-dinitrophenol
	2,5-dichlorophenol	2,6- dimethylphenol
	2,6-dichlorophenol	2-chlorophenol
	2-methylphenol	2-nitrophenol
	3&4-chlorophenol	3&4-methylphenol
	3,4,5-trichlorophenol	3,4-dichlorophenol
	3,4-dimethylphenol	3,5-dichlorophenol
	4,6-dinitro-2-methylphenol	4-chloro-3-methylphenol
	4-nitrophenol	Pentachlorophenol
	Phenol	
CAL SOP-00184	Aliphatic and Aromatic fractionation and analysis for >C10-C50 PHC (Modified from Atl RBCA m) GC/FID	
	>C10-C12 Aliphatic	>C10-C12 Aromatic
	>C12-C16 Aliphatic	>C12-C16 Aromatic
	>C16-C21 Aliphatic	>C16-C21 Aromatic
	>C21-C34 Aliphatic	>C21-C34 Aromatic
	>C34 Aliphatic (Up to C50)	>C34 Aromatic (Up to C50)
CAL SOP-00239	BC Extractable Petroleum Hydrocarbons in Water and Soil by GC/FID (Modified BCMOE EPH S 12/16) GC/FID EPH: C10-C19	

	EPH: C19-C32
CAL SOP-00240	Fractionation for C6-C10 and BC method VPH by Headspace GC/FID/MS (Modified volatile HC in soils by GC/FID and EPA method 5021A, BC MELP VH; Atl. RBCA) GC/FID Benzene — C6-C8 C6-o-xylene — C8-C10 aromatic Ethylbenzene — Methyl-ter-butylether o-xylene — o-xylene-C10 Styrene — Toluene
CAL SOP-00243/CAL SOP-00263	Carbon, Nitrogen and Sulfur (Modified LECO Corporation Form No. 203-821-170,203-821-165 and Vario El Cube No AN-A-030609, Total Organic Carbon (TOC/FOC) in soil/sediment by combustion (PBM)] IR Combustion Carbon Nitrogen Organic Carbon Sulphur
CAL SOP-00250	Preparation and analysis of Alkylated PAH in soils and water (Modified SM 8270 E and ESTD-OR-20) GC/MS – Extraction 1-Methylnaphthalene — 2-Methylnaphthalene Acenaphthene — Acenaphthylene Acridine — Anthracene Benzo (a) anthracene — Benzo (a) pyrene Benzo (g,h,i) perylene — Benzo (k) fluoranthene Benzo (b&j) fluoranthene — Benzo(c)phenanthrene Benzo(e)pyrene — Biphenyl C1-Acenaphthene C1-Benzo(bjk)fluoranthene / Benzo[a]pyrene C1-Biphenyl — C1-Benzo(a) anthracene/ Chrysene C1-Dibenzothiopene — C2-Fluorene C2-Naphthalene — C2-Phenanthrene/ anthracene C2- Fluoranthene / Pyrene — C3-Benzo(a)anthracene / Chrysene C3-Dibenzothiophene — C3-Fluorene C3-Naphthalene — C3-Phenanthrene/ anthracene C3- Fluoranthene / Pyrene — C4- Benzo(a)anthracene / Chrysene

	C4-Dibenzothiophene		C4-Naphthalene	
	C4-Phenanthrene/ anthracene		Chrysene	
	Dibenzo (a,h) anthracene		Dibenzothiophene	
	Fluoranthene		Fluorene	
	Indeno (1,2,3 - cd) pyrene		Indeno (1,2,3-cd) fluoranthene	
	Naphthalene		Perylene	
	Phenanthrene		Pyrene	
	Quinoline		Retene	
CAL SOP-00251	Extraction and analysis of low level Sulfolane in water and soil by GCMS (Modified EPA 8270E) GC/MSD – Extraction Sulfolane			
CAL SOP-00264	Preparation and Analysis of Alcohol/Solvents (Water, soil, oil) by GCFID (Modified EPA 8015D) – GC/FID – Extraction			
	2-Methylphenol		3- Methylphenol	
	4- Methylphenol		Acetone (2-propanone)	
	Ethanol		Isobutanol	
	Isopropanol		* Methanol	
	n-butanol		Pyridine	
CAL SOP-00265	ICP/MS Analysis for Low Level Metals (Modified EPA SW846 6020B) ICP/MS			
	Aluminum	Antimony	Arsenic	Barium
	Beryllium	Bismuth	Boron	Cadmium
	Calcium	Cesium	Chromium	Cobalt
	Copper	Iron	Lanthanum	Lead
	Lithium	Magnesium	Manganese	Mercury
	Molybdenum	Nickel	Phosphorus	Potassium
	Rubidium	Selenium	Silicon	Silver
	Sodium	Strontium	Sulphur	Tellurium
	Thallium	Thorium	Tin	Titanium
	Tungsten	Uranium	Vanadium	Zinc
	Zirconium			
CAL SOP-00266	Free Cyanide (Modified EPA 9016) Colorimetric- Distillation Free cyanide			
CAL SOP-00270	Determination of cyanide by automated colourimetry (Modified SM 23 4500-CN-,O) Colorimetric- Distillation Cyanide SAD Cyanide WAD			

CAL SOP-00275	Extraction and Analysis of Hydroxyphenols in Water and Soil by GCMS (Modified BC MOE Laboratory Manual and EPA SW 846 8270) 2-Hydroxyphenol (Catechol) 3-Hydroxyphenol (Resorcinol) 4-Hydroxyphenol (Hydroquinone)

Water (Microbiology)

AB SOP-00085	Determination of Iron-Related and Sulfate Reducing Bacteria using the BART Method (Modified Dbi Env Tech Verification of the Irb Bart Tester for the Detection and Evaluation of Iron Bacteria in Water and Dbi Enviro Tech Verification of the Srb Bart Tester for the Detection and Verification of Sulphate Reducing Bacteria in Water) BART™ Iron Related Bacteria (IRB) Sulfate Reducing Bacteria (SRB)
AB SOP-00089	Total and Fecal Coliforms by defined substrate technique (Modified SM 9223 A, B) Most Probable Number (Colilert) *Escherichia coli* (*E. coli*) Total Coliforms Fecal (Thermotolerant) Coliforms
CAL SOP-00012	Heterotrophic Plate Count (HPC) (Modified SM 9215 A, B) Pour Plate Heterotrophic Plate Count (HPC)

Number of Scope Listings: 117

Notes:

ISO/IEC 17025:2017: General Requirements for the Competence of Testing and Calibration Laboratories

MFHPB: Microbiological Foods Health Protection Branch, Health Canada

MFLP: Microbiological Food Laboratory Procedure, Health Canada

MLG: Food Safety and Inspection Services Microbiology Laboratory Guidebook, U.S. Department of Agriculture

SM: Standard Methods for Examination of Water and Wastewater, American Public Health Association (APHA)

EPA: Environment Protection Agency

TCLP: toxicity characteristic leaching procedure

AB SOP: Internal test method (Alberta)

CAL SOP: Internal test method (Calgary)

CCME: Canadian Council of Ministers of the Environment

* These test methods can be performed on-site as per RG-On-Site-Testing.

This document forms part of the Certificate of Accreditation issued by the Standards Council of Canada (SCC). The original version is available in the Directory of Accredited Laboratories on the SCC website at www.scc.ca.

Elias Rafoul
Vice-President, Accreditation Services
Published on: 2021-04-22

Canada

Appendix 3-H: ALS (Burnaby) Scope of Accreditation

PEACE RIVER
HYDRO PARTNERS

CALA Scope of Accreditation

Laboratory Name: ALS Environmental (Vancouver)

Client ID: 1001719

Parent Institution: ALS Canada Ltd.

<personal information removed>

Contact: Ms. Helenita Franco

<personal information removed>

Standard: Conforms with requirements of ISO/IEC 17025:2017

Clients Served: All Interested Parties

Revised On: 01/07/2022

001 - Alkalinity

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: TITRIMETRIC

Preparation Method:

Lab Method ID(s): VA-TM-1053

Method Reference	Modified From	Analytical Method	Preparation Method
SM 2320 B	True	True	False

Parameter	Accredited
Alkalinity (pH 4.5)	Yes
Alkalinity (pH 8.3) (Phenolphthalein Alkalinity)	Yes
Bicarbonate Alkalinity	Yes
Carbonate Alkalinity	Yes
Hydroxide Alkalinity	Yes

004 - Conductivity

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: CONDUCTIVITY METER

Preparation Method:

Lab Method ID(s): VA-TM-1053

Method Reference	Modified From	Analytical Method	Preparation Method
SM 2510 B	True	True	False

Parameter	Accredited
Conductivity (25C)	Yes

008 - Reactive Silica

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLORIMETRIC

Preparation Method:

Lab Method ID(s): VA-TM-1018

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-SIO2 D	True	True	False

Parameter	Accredited
Reactive Silica	Yes

014 - Thiocyanate

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLORIMETRIC

Preparation Method:

Lab Method ID(s): VA-TM-1029

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-CN- M	True	True	False

Parameter	Accredited
Thiocyanate	Yes

015 - Colour

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLORIMETRIC

Preparation Method:

Lab Method ID(s): VA-TM-1004

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	True	True	False
SM 2120 C	True	True	False

Parameter	Accredited
Apparent Colour	Yes
True Colour	Yes

016 - Solids

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GRAVIMETRIC

Preparation Method:

Lab Method ID(s): NA-TM-1004, NA-TM-1008, VA-TM-1050

Method Reference	Modified From	Analytical Method	Preparation Method
SM 2540 B	True	True	False
SM 2540 C	True	True	False
SM 2540 D	True	True	False
SM 2540 E	True	True	False

Parameter	Accredited
Fixed Suspended Solids	Yes
Total Dissolved Solids	Yes
Total Solids (TS)	Yes
Total Suspended Solids	Yes
Volatile Suspended Solids	Yes

018 - pH

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: PH METER

Preparation Method:

Lab Method ID(s): VA-TM-1053

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-H+ B	True	True	False

Parameter	Accredited
pH	Yes

020 - Turbidity

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: TURBIDIMETRIC

Preparation Method:

Lab Method ID(s): NA-TM-1007

Method Reference	Modified From	Analytical Method	Preparation Method
SM 2130 B	True	True	False

Parameter	Accredited
Turbidity	Yes

026 - Anions

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: ION CHROMATOGRAPHY (IC)

Preparation Method:

Lab Method ID(s): NA-TM-1001

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 300.1	True	True	False

Parameter	Accredited
Bromide	Yes
Chloride	Yes
Fluoride	Yes
Nitrate	Yes
Nitrate plus Nitrite	Yes
Nitrite	Yes
Sulfate	Yes

027 - Biochemical Oxygen Demand (BOD)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: DISSOLVED OXYGEN METER (DO)

Preparation Method:

Lab Method ID(s): VA-TM-1032

Method Reference	Modified From	Analytical Method	Preparation Method
SM 5210 B	True	True	False

Parameter	Accredited
BOD (5 day)	Yes
CBOD (5 day)	Yes
Soluble Biochemical Oxygen Demand (SBOD)	Yes

028 - Chemical Oxygen Demand (COD)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLORIMETRIC

Preparation Method: DIGESTION

Lab Method ID(s): VA-TM-1033

Method Reference	Modified From	Analytical Method	Preparation Method
SM 5220 D	True	True	False

Parameter	Accredited
COD	Yes

029 - Fecal (Thermotolerant) Coliforms

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MOST PROBABLE NUMBER (MPN)

Preparation Method:

Lab Method ID(s): VA-TM-1200

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9221 E	True	True	False

Parameter	Accredited
Fecal (Thermotolerant) Coliforms	Yes

030 - Fecal (Thermotolerant) Coliforms

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MEMBRANE FILTRATION (M-FC)

Preparation Method:

Lab Method ID(s): VA-TM-1201

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9222 D	True	True	False

Parameter	Accredited
Fecal (Thermotolerant) Coliforms	Yes

031 - Total Metals

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: ICP/MS

Preparation Method: DIGESTION

Lab Method ID(s): NA-TM-1002, NA-TP-2001, NA-TP-2007

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 200.2	False	True	False
EPA 6020B	True	True	False

Parameter	Accredited
Aluminum	Yes
Antimony	Yes
Arsenic	Yes
Barium	Yes
Beryllium	Yes
Bismuth	Yes
Boron	Yes
Cadmium	Yes
Calcium	Yes
Cerium	Yes
Cesium	Yes
Chromium	Yes
Cobalt	Yes
Copper	Yes
Dysprosium	Yes
Erbium	Yes
Europium	Yes
Gadolinium	Yes
Gallium	Yes
Gold	Yes
Hafnium	Yes
Holmium	Yes
Indium	Yes
Iridium	Yes
Iron	Yes
Lanthanum	Yes
Lead	Yes
Lithium	Yes
Magnesium	Yes
Manganese	Yes
Molybdenum	Yes
Neodymium	Yes
Nickel	Yes
Niobium	Yes
Palladium	Yes
Phosphorus	Yes
Platinum	Yes
Potassium	Yes
Praseodymium	Yes
Rhenium	Yes
Rhodium	Yes
Rubidium	Yes
Ruthenium	Yes
Samarium	Yes
Scandium	Yes
Selenium	Yes
Silicon	Yes
Silver	Yes

Parameter	Accredited
Sodium	Yes
Strontium	Yes
Sulphur (Sulfur)	Yes
Tantalum	Yes
Tellurium	Yes
Terbium	Yes
Thallium	Yes
Thorium	Yes
Thulium	Yes
Tin	Yes
Titanium	Yes
Tungsten	Yes
Uranium	Yes
Vanadium	Yes
Ytterbium	Yes
Yttrium	Yes
Zinc	Yes
Zirconium	Yes

032 - Dissolved Metals

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: ICP/MS

Preparation Method: FILTRATION

Lab Method ID(s): NA-TM-1002, NA-TP-2002, NA-TP-2007

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 6020B	True	True	False
SM 3030 B	True	True	False

Parameter	Accredited
Aluminum	Yes
Antimony	Yes
Arsenic	Yes
Barium	Yes
Beryllium	Yes
Bismuth	Yes
Boron	Yes
Cadmium	Yes
Calcium	Yes
Cerium	Yes
Cesium	Yes
Chromium	Yes
Cobalt	Yes
Copper	Yes
Dysprosium	Yes
Erbium	Yes
Europium	Yes
Gadolinium	Yes
Gallium	Yes
Gold	Yes
Hafnium	Yes
Holmium	Yes
Indium	Yes
Iridium	Yes
Iron	Yes
Lanthanum	Yes
Lead	Yes
Lithium	Yes
Magnesium	Yes
Manganese	Yes
Molybdenum	Yes
Neodymium	Yes
Nickel	Yes
Niobium	Yes
Palladium	Yes
Phosphorus	Yes
Platinum	Yes
Potassium	Yes
Praseodymium	Yes
Rhenium	Yes
Rhodium	Yes
Rubidium	Yes
Ruthenium	Yes
Samarium	Yes
Scandium	Yes
Selenium	Yes
Silicon	Yes
Silver	Yes
Sodium	Yes
Strontium	Yes
Sulphur (Sulfur)	Yes

Parameter	Accredited
Tantalum	Yes
Tellurium	Yes
Terbium	Yes
Thallium	Yes
Thorium	Yes
Thulium	Yes
Tin	Yes
Titanium	Yes
Tungsten	Yes
Uranium	Yes
Vanadium	Yes
Ytterbium	Yes
Yttrium	Yes
Zinc	Yes
Zirconium	Yes

035 - Total Particulates

Field of Accreditation: Environmental

Matrix: Air [Filter, Particulate]

Analytical Method: GRAVIMETRIC

Preparation Method:

Lab Method ID(s): VA-TM-1041

Method Reference	Modified From	Analytical Method	Preparation Method
BC WORKERS COMPENSATION BOARD STANDARDS (BCWCB) 1150	True	True	False
BC MOE LABORATORY MANUAL	False	True	False

Parameter	Accredited
Respirable Dust	Yes
Total Particulate Matter	Yes

059 - Phenols

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/MS

Preparation Method: EXTRACTION

Lab Method ID(s): VA-TM-1101, VA-TP-2113

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	True	True	False
EPA 3510C	True	True	False
EPA 8270E	True	True	False

Parameter	Accredited
2,3,4,5-Tetrachlorophenol	Yes
2,3,4,6-Tetrachlorophenol	Yes
2,3,4-Trichlorophenol	Yes
2,3,5,6-Tetrachlorophenol	Yes
2,3,5-Trichlorophenol	Yes
2,3,6-Trichlorophenol	Yes
2,3-Dichlorophenol	Yes
2,4,5-Trichlorophenol	Yes
2,4,6-Trichlorophenol	Yes
2,4-Dichlorophenol	Yes
2,4-Dimethylphenol	Yes
2,6-Dichlorophenol	Yes
2-Chlorophenol	Yes
2-Methylphenol (o-Cresol)	Yes
3,4,5-Trichlorophenol	Yes
3,4-Dichlorophenol	Yes
3,5-Dichlorophenol	Yes
3-Chlorophenol	Yes
3-Methylphenol (m-Cresol)	Yes
4-Chloro-3-methylphenol	Yes
4-Chlorophenol	Yes
4-Methylphenol (p-Cresol)	Yes
Pentachlorophenol	Yes
Phenol	Yes

061 - Oil and Grease

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GRAVIMETRIC

Preparation Method: EXTRACTION

Lab Method ID(s): NA-TM-1107

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	True	True	False
EPA 1664	True	True	False

Parameter	Accredited
Mineral Oil and Grease	Yes
Total Oil and Grease	Yes

071 - Phenols

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GC/MS

Preparation Method: EXTRACTION

Lab Method ID(s): VA-TM-1122, VA-TP-2113

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 3570	True	True	False
EPA 8270E	True	True	False
KNAPP 1979	True	True	False

Parameter	Accredited
2,3,4,5-Tetrachlorophenol	Yes
2,3,4,6-Tetrachlorophenol	Yes
2,3,4-Trichlorophenol	Yes
2,3,5,6-Tetrachlorophenol	Yes
2,3,5-Trichlorophenol	Yes
2,3,6-Trichlorophenol	Yes
2,3-Dichlorophenol	Yes
2,4,5-Trichlorophenol	Yes
2,4,6-Trichlorophenol	Yes
2,4-Dichlorophenol + 2,5-Dichlorophenol	Yes
2,4-Dimethylphenol	Yes
2,6-Dichlorophenol	Yes
2-Chlorophenol	Yes
2-Methylphenol (o-Cresol)	Yes
3,4,5-Trichlorophenol	Yes
3,4-Dichlorophenol	Yes
3,5-Dichlorophenol	Yes
3-Chlorophenol	Yes
3-Methylphenol (m-Cresol)	Yes
4-Chloro-3-methylphenol	Yes
4-Chlorophenol	Yes
4-Methylphenol (p-Cresol)	Yes
Pentachlorophenol	Yes
Phenol	Yes

080 - Total Polychlorinated Biphenyls (PCB)

Field of Accreditation: Environmental

Matrix: Oil

Analytical Method: GC/ECD

Preparation Method:

Lab Method ID(s): VA-TM-1118, VA-TP-2116

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 3620C	True	True	False
EPA 3660B	True	True	False
EPA 3665A	True	True	False
EPA 8082A	True	True	False
ASTM D4059	True	True	False

Parameter	Accredited
Aroclor 1016	Yes
Aroclor 1221	Yes
Aroclor 1232	Yes
Aroclor 1242	Yes
Aroclor 1248	Yes
Aroclor 1254	Yes
Aroclor 1260	Yes
Aroclor 1262	Yes
Aroclor 1268	Yes
Total PCB	Yes

089 - Moisture

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GRAVIMETRIC

Preparation Method:

Lab Method ID(s): NA-TM-1200

Method Reference	Modified From	Analytical Method	Preparation Method
CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD	False	True	False

Parameter	Accredited
Percent Moisture	Yes

090 - Moisture

Field of Accreditation: Environmental

Matrix: Tissue

Analytical Method: GRAVIMETRIC

Preparation Method:

Lab Method ID(s): VA-TM-1087

Method Reference	Modified From	Analytical Method	Preparation Method
PUGET SOUND PROTOCOLS	True	True	False

Parameter	Accredited
Percent Moisture	Yes

091 - Carbon

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: INFRARED SPECTROSCOPY (IR)

Preparation Method: COMBUSTION

Lab Method ID(s): VA-TM-1037

Method Reference	Modified From	Analytical Method	Preparation Method
SM 5310 B	True	True	False

Parameter	Accredited
Inorganic Carbon	Yes
Organic Carbon	Yes
Total Carbon (TC)	Yes

100 - Total Metals

Field of Accreditation: Environmental

Matrix: Tissue

Analytical Method: ICP/MS

Preparation Method: DIGESTION

Lab Method ID(s): NA-TM-1002, NA-TP-2006, NA-TP-2007

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 200.3	True	True	False
EPA 6020A	True	True	False
BC MOE LABORATORY MANUAL	False	True	False

Parameter	Accredited
Aluminum	Yes
Antimony	Yes
Arsenic	Yes
Barium	Yes
Beryllium	Yes
Bismuth	Yes
Boron	Yes
Cadmium	Yes
Calcium	Yes
Cesium	Yes
Chromium	Yes
Cobalt	Yes
Copper	Yes
Iron	Yes
Lead	Yes
Lithium	Yes
Magnesium	Yes
Manganese	Yes
Molybdenum	Yes
Neodymium	Yes
Nickel	Yes
Phosphorus	Yes
Potassium	Yes
Rhodium	Yes
Rubidium	Yes
Ruthenium	Yes
Samarium	Yes
Selenium	Yes
Silver	Yes
Sodium	Yes
Strontium	Yes
Sulphur (Sulfur)	Yes
Tellurium	Yes
Thallium	Yes
Tin	Yes
Titanium	Yes
Uranium	Yes
Vanadium	Yes
Zinc	Yes
Zirconium	Yes

112 - Total Polychlorinated Biphenyls (PCB)

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GC/ECD

Preparation Method: EXTRACTION

Lab Method ID(s): VA-TM-1119, VA-TP-2116

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 3570	True	True	False
EPA 3620C	True	True	False
EPA 3660B	True	True	False
EPA 3665A	True	True	False
EPA 8082A	True	True	False

Parameter	Accredited
Aroclor 1016	Yes
Aroclor 1221	Yes

Parameter	Accredited
Aroclor 1232	Yes
Aroclor 1242	Yes
Aroclor 1248	Yes
Aroclor 1254	Yes
Aroclor 1260	Yes
Aroclor 1262	Yes
Aroclor 1268	Yes
Total PCB	Yes

115 - Total Polychlorinated Biphenyls (PCB)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/ECD

Preparation Method: EXTRACTION

Lab Method ID(s): VA-TM-1115, VA-TP-2116

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 3510C	True	True	False
EPA 3620C	True	True	False
EPA 3660B	True	True	False
EPA 3665A	True	True	False
EPA 8082A	True	True	False

Parameter	Accredited
Aroclor 1016	Yes
Aroclor 1221	Yes
Aroclor 1232	Yes
Aroclor 1242	Yes
Aroclor 1248	Yes
Aroclor 1254	Yes
Aroclor 1260	Yes
Aroclor 1262	Yes
Aroclor 1268	Yes
Total PCB	Yes

120 - pH

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: METER

Preparation Method: SATURATION EXTRACTION

Lab Method ID(s): NA-TP-2008, VA-TM-1078

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-H+ B	True	True	False
SOIL SAMPLING & METHODS OF ANALYSIS CHAPTER 15	True	True	False

Parameter	Accredited
pH	Yes

123 - Waste Oil

Field of Accreditation: Environmental

Matrix: Solids

Analytical Method: GRAVIMETRIC

Preparation Method: EXTRACTION

Lab Method ID(s): VA-TM-1111

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	False	True	False

Parameter	Accredited
Waste Oil Content	Yes

126 - Heterotrophic Plate Count (HPC)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: POUR PLATE (PCA)

Preparation Method:

Lab Method ID(s): NA-TM-1301

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9215 B	True	True	False

Parameter	Accredited
Heterotrophic Plate Count (HPC)	Yes

136 - Mercury

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLD VAPOUR ATOMIC FLUORESCENCE SPECTROSCOPY (CVAFS)

Preparation Method: DIGESTION

Lab Method ID(s): NA-TM-1005, NA-TP-2002, VA-TP-2068

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1631E	True	True	False

Parameter	Accredited
Mercury	Yes

142 - Total Coliforms

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MOST PROBABLE NUMBER (MPN)

Preparation Method:

Lab Method ID(s): VA-TM-1200

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9221 B	True	True	False

Parameter	Accredited
Total Coliforms	Yes

143 - Total Coliforms

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MEMBRANE FILTRATION (M-ENDO)

Preparation Method:

Lab Method ID(s): VA-TM-1201

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9222 B	True	True	False

Parameter	Accredited
Total Coliforms	Yes

145 - Coliforms

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MOST PROBABLE NUMBER (MPN)

Preparation Method:

Lab Method ID(s): NA-TM-1300

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9223 B	True	True	False

Parameter	Accredited
Escherichia coli	Yes
Fecal (Thermotolerant) Coliforms	Yes
Total Coliforms	Yes

147 - Conductivity

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: METER

Preparation Method: SATURATION EXTRACTION

Lab Method ID(s): NA-TP-2008, VA-TM-1053

Method Reference	Modified From	Analytical Method	Preparation Method
SM 2510 B	True	True	False
SOIL SAMPLING & METHODS OF ANALYSIS CHAPTER 15	True	True	False

Parameter	Accredited
Conductivity	Yes

148 - Anions

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: ION CHROMATOGRAPHY (IC)

Preparation Method: SATURATED PASTE

Lab Method ID(s): NA-TM-1001, NA-TP-2008

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 300.1	True	True	False
SM 4110 B	True	True	False
SOIL SAMPLING & METHODS OF ANALYSIS CHAPTER 15	True	True	False

Parameter	Accredited
Chloride	Yes
Fluoride	Yes
Nitrate-N	Yes
Nitrite (NO2)	Yes
Sulphate	Yes

149 - Percent Saturation

Field of Accreditation: Environmental

Matrix: Solids [Saturated Paste]

Analytical Method: GRAVIMETRIC

Preparation Method: SATURATED PASTE

Lab Method ID(s): NA-TP-2008

Method Reference	Modified From	Analytical Method	Preparation Method
SOIL SAMPLING & METHODS OF ANALYSIS CHAPTER 15	True	True	False

Parameter	Accredited
Percent Saturation	Yes

152 - Metals

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: ICP/MS

Preparation Method: DIGESTION

Lab Method ID(s): NA-TM-1002, NA-TP-2004, NA-TP-2007

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL, SALM	True	False	True
EPA 200.2	True	True	False
EPA 6020B	True	True	False

Parameter	Accredited
Aluminum	Yes
Antimony	Yes
Arsenic	Yes
Barium	Yes
Beryllium	Yes
Bismuth	Yes
Boron	Yes
Cadmium	Yes
Calcium	Yes
Chromium	Yes
Cobalt	Yes
Copper	Yes
Iron	Yes
Lead	Yes
Lithium	Yes
Magnesium	Yes
Manganese	Yes
Molybdenum	Yes
Neodymium	Yes
Nickel	Yes
Phosphorus	Yes
Potassium	Yes
Rhodium	Yes
Ruthenium	Yes
Samarium	Yes
Selenium	Yes
Silver	Yes
Sodium	Yes
Strontium	Yes
Sulphur (Sulfur)	Yes
Tellurium	Yes
Thallium	Yes
Thorium	Yes
Tin	Yes
Titanium	Yes
Tungsten	Yes
Uranium	Yes
Vanadium	Yes
Zinc	Yes
Zirconium	Yes

155 - Glycols

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/FID

Preparation Method: EXTRACTION

Lab Method ID(s): VA-TM-1113

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8015C	True	True	False

Parameter	Accredited
Diethylene glycol	Yes
Ethylene glycol	Yes
Propylene glycol	Yes
Triethylene glycol	Yes

156 - Glycols

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GC/FID

Preparation Method: EXTRACTION

Lab Method ID(s): VA-TM-1113

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8015B	True	True	False

Parameter	Accredited
Diethylene glycol	Yes
Ethylene glycol	Yes
Propylene glycol	Yes
Triethylene glycol	Yes

169 - pH

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: METER

Preparation Method: FIXED RATIO EXTRACTION

Lab Method ID(s): VA-TM-1078

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	True	True	False
SM 4500-H+ B	True	True	False

Parameter	Accredited
pH	Yes

172 - Methyl mercury

Field of Accreditation: Environmental

Matrix: Tissue

Analytical Method: GC/CVAFS-PURGE AND TRAP

Preparation Method: DIGESTION

Lab Method ID(s): VA-TM-1062

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1630	True	True	False

Parameter	Accredited
Methyl mercury	Yes

173 - Methyl mercury

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GC/CVAFS-PURGE AND TRAP

Preparation Method: EXTRACTION

Lab Method ID(s): VA-TM-1062

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1630	True	True	False

Parameter	Accredited
Methyl mercury	Yes

179 - Phosphorus

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLORIMETRIC

Preparation Method: DIGESTION

Lab Method ID(s): VA-TM-1025, VA-TM-1054, VA-TP-2009, VA-WI-3046

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-P B	True	True	False
SM 4500-P E	True	True	False

Parameter	Accredited
Phosphate	Yes
Total Dissolved Phosphorus	Yes
Total Phosphorus	Yes

184 - Extractable Hydrocarbons

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GC/FID

Preparation Method: COLD SHAKE EXTRACTION

Lab Method ID(s): NA-TM-1100, NA-TP-2106

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	True	True	False
EPA 3570	True	True	False

Parameter	Accredited
Extractable Petroleum Hydrocarbons (EPH): C10-C19	Yes
Extractable Petroleum Hydrocarbons (EPH): C10-C19 (sg)	Yes
Extractable Petroleum Hydrocarbons (EPH): C19-C32	Yes
Extractable Petroleum Hydrocarbons (EPH): C19-C32 (sg)	Yes

185 - Polycyclic Aromatic Hydrocarbons (PAH)

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GC/MS

Preparation Method: COLD SHAKE EXTRACTION

Lab Method ID(s): NA-TM-1100, NA-TP-2107

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 3570	True	True	False
EPA 8270E	True	True	False

Parameter	Accredited
2-Methylnaphthalene	Yes
Acenaphthene	Yes
Acenaphthylene	Yes
Anthracene	Yes
Benzo(a)anthracene	Yes
Benzo(a)pyrene	Yes
Benzo(b,j)fluoranthene	Yes
Benzo(g,h,i)perylene	Yes
Benzo(k)fluoranthene	Yes
Chrysene	Yes

Parameter	Accredited
Dibenzo(a,h)anthracene	Yes
Fluoranthene	Yes
Fluorene	Yes
Indeno(1,2,3 - cd)pyrene	Yes
Naphthalene	Yes
Phenanthrene	Yes
Pyrene	Yes
Quinoline	Yes

186 - Enterococci

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MEMBRANE FILTRATION (MENTEROCOCCUS)

Preparation Method:

Lab Method ID(s): VA-TM-1203

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9230 C	True	True	False

Parameter	Accredited
Enterococci	Yes

187 - Pseudomonas aeruginosa

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MEMBRANE FILTRATION (MPAC)

Preparation Method:

Lab Method ID(s): VA-TM-1204

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9213 E	True	True	False

Parameter	Accredited
Pseudomonas aeruginosa (P. aerigunosa)	Yes

189 - Petroleum Hydrocarbons (PHC)

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GC/FID

Preparation Method: TUMBLER EXTRACTION

Lab Method ID(s): NA-TM-1100, NA-TP-2100

Method Reference	Modified From	Analytical Method	Preparation Method
ALBERTA ENVIRONMENT INTERPRETATION, SEPT 2003	True	True	False
CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD (DEC 2000 NO. 1310)	True	True	False

Parameter	Accredited
F2: C10-C16	Yes
F3: C16-C34	Yes
F4: C34-C50	Yes

190 - Petroleum Hydrocarbons (PHC)

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GRAVIMETRIC

Preparation Method: TUMBLER EXTRACTION

Lab Method ID(s): NA-TM-1100

Method Reference	Modified From	Analytical Method	Preparation Method
ALBERTA ENVIRONMENT INTERPRETATION, SEPT 2003	True	True	False
CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD (DEC 2000 NO. 1310)	True	True	False

Parameter	Accredited
F4: Gravimetric	Yes
F4G-SG: Gravimetric Heavy Hydrocarbons - Silica	Yes

192 - Methyl mercury

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/CVAFS-PURGE AND TRAP

Preparation Method: DISTILLATION

Lab Method ID(s): VA-TM-1062

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1630	True	True	False

Parameter	Accredited
Methyl mercury	Yes

196 - Volatile Organic Compounds (VOC)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/MS-HEADSPACE

Preparation Method:

Lab Method ID(s): NA-TM-1102, NA-TP-2102

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 5021A	True	True	False
EPA 8260C	True	True	False

Parameter	Accredited
1,1,1,2-Tetrachloroethane	Yes
1,1,1-Trichloroethane	Yes
1,1,2,2-Tetrachloroethane	Yes
1,1,2-Trichloroethane	Yes
1,1-Dichloroethane	Yes
1,1-Dichloroethylene	Yes
1,2,4-Trimethylbenzene	Yes
1,2-Dichlorobenzene	Yes
1,2-Dichloroethane	Yes
1,2-Dichloropropane	Yes
1,3,5-Trimethylbenzene	Yes
1,3-Dichlorobenzene	Yes
1,4-Dichlorobenzene	Yes
4-Isopropyltoluene (p-Cymene)	Yes
Acetone (2-Propanone)	Yes
Benzene	Yes
Bromodichloromethane	Yes
Bromoform	Yes
Carbon tetrachloride	Yes
Chlorobenzene	Yes
Chlorodibromomethane	Yes
Chloroethane (Ethyl chloride)	Yes
Chloroform	Yes
Chloromethane (Methyl chloride)	Yes
cis-1,2-Dichloroethylene	Yes
cis-1,3-Dichloropropene	Yes
Dichloromethane	Yes
Ethylbenzene	Yes
Ethylene Dibromide	Yes
Isopropylbenzene (Cumene)	Yes
m,p-Xylene	Yes
Methyl ethyl ketone	Yes
Methyl isobutyl ketone (MIBK)	Yes
Methyl t-butyl ether	Yes
Naphthalene	Yes
n-Propylbenzene	Yes
o-Xylene	Yes
Styrene	Yes
Tetrachloroethylene	Yes
Toluene	Yes
trans-1,2-Dichloroethylene	Yes
trans-1,3-Dichloropropene	Yes
Trichloroethylene	Yes
Trichlorofluoromethane	Yes
Vinyl chloride	Yes

197 - Volatile Hydrocarbons (VH)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/FID-HEADSPACE

Preparation Method:

Lab Method ID(s): NA-TM-1102

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	True	True	False
CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD	True	True	False
EPA 5021A	True	True	False

Parameter	Accredited
F1: C6-C10	Yes
Volatile Hydrocarbons (VH): C6-C10	Yes

201 - Volatile Organic Compounds (VOC)

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GC/MS-HEADSPACE

Preparation Method:

Lab Method ID(s): NA-TM-1102, NA-TP-2102

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 5021A	True	True	False
EPA 8260C	True	True	False

Parameter	Accredited
1,1,1,2-Tetrachloroethane	Yes
1,1,1-Trichloroethane	Yes
1,1,2,2-Tetrachloroethane	Yes
1,1,2-Trichloroethane	Yes
1,1-Dichloroethane	Yes
1,1-Dichloroethylene	Yes
1,2,4-Trimethylbenzene	Yes
1,2-Dichlorobenzene	Yes
1,2-Dichloroethane	Yes
1,2-Dichloropropane	Yes

Parameter	Accredited
1,3,5-Trimethylbenzene	Yes
1,3-Dichlorobenzene	Yes
1,4-Dichlorobenzene	Yes
4-Isopropylbenzene	Yes
Benzene	Yes
Bromodichloromethane	Yes
Bromoform	Yes
Carbon tetrachloride	Yes
Chlorobenzene	Yes
Chlorodibromomethane	Yes
Chloroethane (Ethyl chloride)	Yes
Chloroethene (Vinyl chloride)	Yes
Chloroform	Yes
Chloromethane (Methyl chloride)	Yes
cis-1,2-Dichloroethylene	Yes
cis-1,3-Dichloropropene	Yes
Dichloromethane	Yes
Ethylbenzene	Yes
Ethylene Dibromide	Yes
Isopropylbenzene (Cumene)	Yes
m,p-Xylene	Yes
Methyl t-butyl ether	Yes
Naphthalene	Yes
n-Propylbenzene	Yes
o-Xylene	Yes
Styrene	Yes
Tetrachloroethylene	Yes
Toluene	Yes
trans-1,2-Dichloroethylene	Yes
trans-1,3-Dichloropropene	Yes
Trichloroethylene	Yes
Trichlorofluoromethane	Yes

202 - Volatile Hydrocarbons (VH)

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GC/FID-HEADSPACE

Preparation Method:

Lab Method ID(s): NA-TM-1102, NA-TP-2102

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	True	True	False
CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD	True	True	False
EPA 5021A	True	True	False

Parameter	Accredited
F1: C6-C10	Yes
VH: C6-C10	Yes

206 - Volatile Organic Compounds (VOC)

Field of Accreditation: Environmental

Matrix: Air

Analytical Method: GC/MS

Preparation Method:

Lab Method ID(s): VA-TM-1109

Method Reference	Modified From	Analytical Method	Preparation Method
EPA TO-17	True	True	False
BC MOE LABORATORY MANUAL	False	True	False

Parameter	Accredited
1,1,1,2-Tetrachloroethane	Yes
1,1,1-Trichloroethane	Yes
1,1,2,2-Tetrachloroethane	Yes
1,1,2-Trichloro-1,2,2-trifluoroethane (CFC-113, Freon 113)	Yes
1,1,2-Trichloroethane	Yes
1,1-Dichloroethane	Yes
1,1-Dichloroethene (1,1-Dichloroethylene)	Yes
1,1-Dichloropropene	Yes
1,2,3-Trichlorobenzene	Yes
1,2,3-Trichloropropane	Yes
1,2,4-Trichlorobenzene	Yes
1,2,4-Trimethylbenzene	Yes
1,2-Dibromo-3-chloropropane (DBCP)	Yes
1,2-Dibromoethane (Ethylene dibromide)	Yes
1,2-Dichlorobenzene	Yes
1,2-Dichloroethane	Yes
1,2-Dichloropropane	Yes
1,3,5-Trimethylbenzene	Yes
1,3-Butadiene	Yes
1,3-Dichlorobenzene	Yes
1,3-Dichloropropane	Yes
1,4-Dichlorobenzene	Yes
2,2-Dichloropropane	Yes

Parameter	Accredited
2-Butanone (Methyl ethyl ketone, MEK)	Yes
2-Chlorophenol	Yes
2-Chlorotoluene	Yes
2-Hexanone (Methyl butyl ketone, MBK)	Yes
2-Propanol (Isopropyl alcohol)	Yes
4-Chlorotoluene (p-Chlorotoluene)	Yes
4-Isopropyltoluene (p-Cymene)	Yes
4-Methyl-2-pentanone (MIBK)	Yes
Acetone (2-Propanone)	Yes
Benzene	Yes
Biphenyl (1,1-Biphenyl)	Yes
Bromobenzene	Yes
Bromochloromethane	Yes
Bromodichloromethane	Yes
Bromoform	Yes
Bromomethane	Yes
Butylbenzene (n-Butylbenzene)	Yes
Carbon disulfide	Yes
Carbon tetrachloride	Yes
Chlorobenzene	Yes
Chloroethane (Ethyl chloride)	Yes
Chloroethene (Vinyl chloride)	Yes
Chloroform	Yes
Chloromethane (Methyl chloride)	Yes
cis-1,2-Dichloroethylene	Yes
cis-1,3-Dichloropropene	Yes
Cyclohexane	Yes
Decane	Yes
Dibromochloromethane	Yes
Dibromomethane	Yes
Dichlorodifluoromethane (CFC-12, Freon 12)	Yes
Dichloromethane (Methylene Chloride)	Yes
Ethyl acetate	Yes
Ethylbenzene	Yes
Heptane (n-Heptane)	Yes
Hexachlorobutadiene (1,1,2,3,4,4-Hexachloro-1,3-butadiene)	Yes
Hexane (n-Hexane)	Yes
Isopropylbenzene (Cumene)	Yes
m,p-Xylene	Yes
Methyl tert-butyl ether (MTBE)	Yes
Methylcyclohexane	Yes
Naphthalene	Yes
n-Octane	Yes
n-Propylbenzene	Yes
o-Xylene	Yes
sec-Butylbenzene ((1-Methylpropyl)benzene)	Yes
Styrene	Yes
tert-Butylbenzene	Yes
Tetrachloroethylene	Yes
Toluene	Yes
trans-1,2-Dichloroethylene (trans-1,2-Dichloroethene)	Yes
trans-1,3-Dichloropropene	Yes
Trichloroethylene	Yes
Trichlorofluoromethane (CFC-11, Freon 11)	Yes

207 - Volatile Organic Compounds (VOC)

Field of Accreditation: Environmental

Matrix: Air

Analytical Method: GC/FID

Preparation Method:

Lab Method ID(s): VA-TM-1109

Method Reference	Modified From	Analytical Method	Preparation Method
EPA TO-17	True	True	False
BC MOE LABORATORY MANUAL	False	True	False

Parameter	Accredited
F1: C6-C10	Yes
F2: C10-C16	Yes
Total Volatile Organic Compounds (TVOC): >C10-C12	Yes
Total Volatile Organic Compounds (TVOC): >C12-C16	Yes
Total Volatile Organic Compounds (TVOC): >C6-C8	Yes
Total Volatile Organic Compounds (TVOC): >C8-C10	Yes
Volatile Hydrocarbons (VH): C6-C13	Yes

208 - Ammonia

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: FLUOROMETRIC

Preparation Method:

Lab Method ID(s): VA-TM-1048

Method Reference	Modified From	Analytical Method	Preparation Method

Method Reference	Modified From	Analytical Method	Preparation Method
JOURNAL OF ENVIRONMENTAL MONITORING (2005) SECTION 7, P. 37-42	True	True	False

Parameter	Accredited
Ammonia	Yes

209 - Cyanide

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: AUTOMATED COLORIMETRIC

Preparation Method: DISTILLATION

Lab Method ID(s): NA-TM-1003

Method Reference	Modified From	Analytical Method	Preparation Method
ISO 14403	True	True	False
SM 4500-CN- I	True	True	False

Parameter	Accredited
Cyanide (SAD)	Yes
Cyanide (WAD)	Yes

210 - Cyanide

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: AUTOMATED COLORIMETRIC-GAS DIFFUSION

Preparation Method:

Lab Method ID(s): NA-TM-1003

Method Reference	Modified From	Analytical Method	Preparation Method
ASTM D7237	True	True	False
ISO 14403-2	True	True	False

Parameter	Accredited
Free Cyanide	Yes

211 - Total Kjeldahl Nitrogen (TKN)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: FLUOROMETRIC

Preparation Method: DIGESTION

Lab Method ID(s): NA-TM-1006, VA-TM-1044

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-NORG D	True	True	False

Parameter	Accredited
Dissolved Kjeldahl Nitrogen	Yes
Total Kjeldahl Nitrogen	Yes

212 - Resin and Fatty Acids

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/MS

Preparation Method: LIQUID/LIQUID MICRO EXTRACTION (LLME)

Lab Method ID(s): VA-TM-1105, VA-TP-2111, VA-TP-2114

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 3511	False	False	True
EPA 8270E	True	True	False

Parameter	Accredited
12-Chlorodehydroabietic acid	Yes
14-Chlorodehydroabietic acid	Yes
9,10-Dichlorostearic acid	Yes
Abietic acid	Yes
Arachidic acid	Yes
Dehydroabietic acid	Yes
Dichlorodehydroabietic acid	Yes
Docosanoic Acid (Behenic acid)	Yes
Dodecanoic acid (Lauric acid)	Yes
Hexadecanoic acid (Palmitic acid)	Yes
Isopimaric acid	Yes
Levopimaric acid	Yes
Lignoceric acid	Yes
Linoleic acid (Octadecadienoic acid)	Yes
Linolenic acid (Octadecatrienoic acid)	Yes
Myristic acid (Tetradecanoic Acid)	Yes
Neoabietic acid	Yes
Oleic acid	Yes
Palustric acid	Yes
Pimaric acid	Yes
Sandaracopimaric acid	Yes
Stearic acid (Octadecanoic acid)	Yes

213 - Cyanide

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: AUTOMATED COLORIMETRIC

Preparation Method: DISTILLATION, EXTRACTION

Lab Method ID(s): NA-TM-1003, VA-WI-3019

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	True	True	False
ISO 14403	True	True	False
SM 4500-CN- I	True	True	False

Parameter	Accredited
Cyanide (SAD)	Yes
Cyanide (WAD)	Yes

214 - Cyanide

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: COLORIMETRIC-GAS DIFFUSION

Preparation Method: EXTRACTION

Lab Method ID(s): NA-TM-1003, VA-WI-3019

Method Reference	Modified From	Analytical Method	Preparation Method
ASTM 7237	True	True	False
BC MOE LABORATORY MANUAL	True	True	False

Parameter	Accredited
Free Cyanide	Yes

217 - Nitrogen

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: AUTOMATED COLORIMETRIC

Preparation Method: DIGESTION

Lab Method ID(s): VA-TM-1047, VA-WI-3046

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-P J	True	True	False

Parameter	Accredited
Total Dissolved Nitrogen	Yes
Total Nitrogen	Yes

219 - Acidity

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: TITRIMETRIC

Preparation Method:

Lab Method ID(s): VA-TM-1053

Method Reference	Modified From	Analytical Method	Preparation Method
SM 2310	True	True	False

Parameter	Accredited
Acidity	Yes

220 - Chlorophyll A

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: FLUOROMETRIC

Preparation Method:

Lab Method ID(s): VA-TM-1038, VA-TP-2011

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 445.0	True	True	False

Parameter	Accredited
Chlorophyll a	Yes

221 - Oxidation Reduction Potential (ORP)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MV METER

Preparation Method:

Lab Method ID(s): VA-TM-1006

Method Reference	Modified From	Analytical Method	Preparation Method
ASTM 1498-14	True	True	False

Parameter	Accredited
Oxidation Reduction Potential (ORP)	Yes

224 - Metals

Field of Accreditation: Environmental

Matrix: Air [Dustfall]

Analytical Method: ICP/MS

Preparation Method: DIGESTION

Lab Method ID(s): NA-TM-1002, NA-TP-2007, VA-TP-2063

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	True	True	False
EPA 6020B	True	True	False

Parameter	Accredited

Parameter	Accredited
Aluminum	Yes
Antimony	Yes
Arsenic	Yes
Barium	Yes
Beryllium	Yes
Bismuth	Yes
Boron	Yes
Cadmium	Yes
Calcium	Yes
Chromium	Yes
Cobalt	Yes
Copper	Yes
Lead	Yes
Lithium	Yes
Magnesium	Yes
Manganese	Yes
Molybdenum	Yes
Nickel	Yes
Potassium	Yes
Selenium	Yes
Silver	Yes
Sodium	Yes
Strontium	Yes
Thallium	Yes
Tin	Yes
Uranium	Yes
Vanadium	Yes
Zinc	Yes

227 - Dustfall

Field of Accreditation: Environmental

Matrix: Air [Dustfall]

Analytical Method: GRAVIMETRIC

Preparation Method:

Lab Method ID(s): VA-TM-1039

Method Reference	Modified From	Analytical Method	Preparation Method
ASTM D1739-98	False	True	False
BC MOE LABORATORY MANUAL	False	True	False

Parameter	Accredited
Fixed Dustfall	Yes
Total Dustfall	Yes
Total Insoluble Dustfall	Yes
Total Soluble Dustfall	Yes

228 - Simultaneously Extracted Metals (SEM)

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: COLD VAPOUR ATOMIC FLUORESCENCE SPECTROSCOPY (CVAFS)

Preparation Method: SEM EXTRACTION

Lab Method ID(s): NA-TM-1005, NA-TP-2012, VA-TM-1021

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1631E	True	True	False
EPA 821/R-91/100	True	True	False

Parameter	Accredited
Mercury	Yes

230 - Acid Volatile Sulphide (AVS)

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: COLORIMETRIC

Preparation Method: EXTRACTION

Lab Method ID(s): VA-TM-1021

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 821/R-91/100	True	True	False

Parameter	Accredited
Acid Volatile Sulphide (AVS, Acid Volatile Sulfide)	Yes

232 - Arsenic

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: HPLC/ICP/MS

Preparation Method:

Lab Method ID(s): NA-TM-1002, NA-TP-2007, VA-TM-1086

Method Reference	Modified From	Analytical Method	Preparation Method
USGS WATER RESOURCES INVESTIGATION REPORT 02-4144	True	True	False

Parameter	Accredited
Arsenate (As(V))	Yes
Arsenite (As(III))	Yes

Parameter	Accredited
Arsenobetaine (AsB)	Yes
Dimethylarsinic acid (DMA)	Yes
Monomethyl arsenate (MMA)	Yes
Total Arsenic Species	Yes
Total Inorganic Arsenic	Yes
Total Inorganic Arsenic and Methylated Metabolites	Yes

233 - Arsenic Speciation

Field of Accreditation: Environmental

Matrix: Biomaterials [Urine]

Analytical Method: HPLC/ICP/MS

Preparation Method:

Lab Method ID(s): NA-TM-1002, NA-TP-2007, VA-TM-1081

Method Reference	Modified From	Analytical Method	Preparation Method
CDC METHOD 3000.15, 2016	True	True	False
EPA 6020A	True	True	False

Parameter	Accredited
Arsenate (As(V))	Yes
Arsenite (As(III))	Yes
Arsenobetaine (AsB)	Yes
Dimethylarsinic acid (DMA)	Yes
Monomethyl arsenate (MMA)	Yes
Total Arsenic Species	Yes
Total Inorganic Arsenic	Yes
Total Inorganic Arsenic and Methylated Metabolites	Yes

234 - Creatinine

Field of Accreditation: Environmental

Matrix: Biomaterials [Urine]

Analytical Method: COLORIMETRIC

Preparation Method:

Lab Method ID(s): VA-TM-1052

Method Reference	Modified From	Analytical Method	Preparation Method
THERMO DRI CREATININE-DETECT SPECIMEN VALIDITY TEST	False	True	False

Parameter	Accredited
Creatinine	Yes

235 - Leachable Metals

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: ICP/MS

Preparation Method: TCLP

Lab Method ID(s): NA-TM-1002, NA-TM-1700, NA-TP-2007

Method Reference	Modified From	Analytical Method	Preparation Method
BC PROTOCOL 13	True	True	False
EPA 1311	True	False	True
EPA 6020B	True	True	False

Parameter	Accredited
Antimony	Yes
Arsenic	Yes
Barium	Yes
Beryllium	Yes
Boron	Yes
Cadmium	Yes
Calcium	Yes
Chromium	Yes
Cobalt	Yes
Copper	Yes
Iron	Yes
Lead	Yes
Magnesium	Yes
Nickel	Yes
Selenium	Yes
Silver	Yes
Thallium	Yes
Uranium	Yes
Vanadium	Yes
Zinc	Yes
Zirconium	Yes

236 - Arsenic Speciation

Field of Accreditation: Food

Matrix: Food [Egg, Fresh Fruit, Meat, Processed Food, Vegetables]

Analytical Method: HPLC/ICP/MS

Preparation Method:

Lab Method ID(s): NA-TM-1002, NA-TP-2007, VA-TM-1082

Method Reference	Modified From	Analytical Method	Preparation Method
CFIA SOM-DAR-CHE-053-04	True	True	False
EPA 6020A	True	True	False

Parameter	Accredited
Arsenate (As(V))	Yes
Arsenite (As(III))	Yes
Arsenobetaine (AsB)	Yes
Arsenocholine (AsC)	Yes
Dimethylarsinic acid (DMA)	Yes
Monomethyl arsenate (MMA)	Yes

237 - Polycyclic Aromatic Hydrocarbons (PAH)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/MS

Preparation Method: EXTRACTION

Lab Method ID(s): NA-TM-1112, NA-TP-2109

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 3511	True	True	False
EPA 8270D	True	True	False

Parameter	Accredited
1-Methylnaphthalene	Yes
2-Methylnaphthalene	Yes
Acenaphthene	Yes
Acenaphthylene	Yes
Acridine	Yes
Anthracene	Yes
Benzo(a)anthracene	Yes
Benzo(a)pyrene	Yes
Benzo(b,j)fluoranthene	Yes
Benzo(g,h,i)perylene	Yes
Benzo(k)fluoranthene	Yes
Chrysene	Yes
Dibenzo(a,h)anthracene	Yes
Fluoranthene	Yes
Fluorene	Yes
Indeno(1,2,3 - cd)pyrene	Yes
Naphthalene	Yes
Phenanthrene	Yes
Pyrene	Yes
Quinoline	Yes

238 - Petroleum Hydrocarbons (PHC)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/FID

Preparation Method: EXTRACTION

Lab Method ID(s): NA-TM-1112, NA-TP-2100

Method Reference	Modified From	Analytical Method	Preparation Method
CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD	True	True	False
EPA 3511	True	True	False

Parameter	Accredited
F2: C10-C16	Yes
F3: C16-C34	Yes
F4: C34-C50	Yes

239 - Oil and Grease

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GRAVIMETRIC

Preparation Method: EXTRACTION

Lab Method ID(s): NA-TM-1100

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	True	True	False
CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD	True	True	False

Parameter	Accredited
Mineral Oil and Grease	Yes
Total Oil and Grease	Yes

240 - Escherichia coli (E. coli)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MEMBRANE FILTRATION (MFC/NA-MUG)

Preparation Method:

Lab Method ID(s): VA-TM-1201

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9222 G	True	True	False

Parameter	Accredited
Escherichia coli	Yes

241 - Lipid Content

Field of Accreditation: Environmental

Matrix: Tissue

Analytical Method: GRAVIMETRIC

Preparation Method:

Lab Method ID(s): VA-TM-1112

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 3570	True	True	False
EPA 8290A	True	True	False

Parameter	Accredited
Lipid Content	Yes

242 - Dissolved Ferrous Iron

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLORIMETRIC

Preparation Method: FILTRATION

Lab Method ID(s): VA-TM-1046, VA-TP-2009

Method Reference	Modified From	Analytical Method	Preparation Method
ENVIRONMENTAL SCIENCE & TECHNOLOGY, 33(5), PP 807-813	True	True	False
SM 3500-FE	True	True	False

Parameter	Accredited
Ferrous Iron (Fe2+)	Yes

244 - Leachable Anions

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: ION CHROMATOGRAPHY (IC)

Preparation Method: SHAKEFLASK EXTRACTION

Lab Method ID(s): NA-TM-1001, VM-TM-1074

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 300.1	True	True	False
MEND REPORT 1.20.1	True	True	False

Parameter	Accredited
Bromide	Yes
Chloride	Yes
Fluoride	Yes
Nitrate-Nitrogen (NO3-N)	Yes
Nitrite-Nitrogen (NO2-N)	Yes
Sulphate (Sulfate)	Yes

245 - Fecal (Thermotolerant) Coliforms

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: MOST PROBABLE NUMBER (MPN)

Preparation Method:

Lab Method ID(s): VA-TM-1200

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1680	True	True	False

Parameter	Accredited
Fecal (Thermotolerant) Coliforms	Yes

247 - Leachable Metals

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: ICP/MS

Preparation Method: SHAKEFLASK EXTRACTION

Lab Method ID(s): NA-TM-1002, NA-TP-2007, VA-TM-1074

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 6020B	True	True	False
MEND REPORT 1.20.1	True	True	False

Parameter	Accredited
Aluminum	Yes
Antimony	Yes
Arsenic	Yes
Barium	Yes
Beryllium	Yes
Bismuth	Yes
Boron	Yes
Cadmium	Yes
Calcium	Yes
Chromium	Yes
Cobalt	Yes
Copper	Yes
Iron	Yes
Lead	Yes
Lithium	Yes
Magnesium	Yes
Manganese	Yes
Molybdenum	Yes
Nickel	Yes
Phosphorus	Yes

Parameter	Accredited
Potassium	Yes
Selenium	Yes
Silicon	Yes
Silver	Yes
Sodium	Yes
Strontium	Yes
Thallium	Yes
Tin	Yes
Uranium	Yes
Vanadium	Yes
Zinc	Yes

250 - pH

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: PH METER

Preparation Method: SHAKE EXTRACTION

Lab Method ID(s): VA-TM-1074

Method Reference	Modified From	Analytical Method	Preparation Method
MEND REPORT 1.20.1	True	True	False
SM 4500-H	True	True	False

Parameter	Accredited
pH	Yes

251 - Extractable Petroleum Hydrocarbons (EPH)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/FID

Preparation Method: EXTRACTION

Lab Method ID(s): NA-TM-1112, NA-TP-2106, VA-TP-2129

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	False	True	False

Parameter	Accredited
Extractable Petroleum Hydrocarbons (EPH): C10-C19	Yes
Extractable Petroleum Hydrocarbons (EPH): C10-C19 (sg)	Yes
Extractable Petroleum Hydrocarbons (EPH): C19-C32	Yes
Extractable Petroleum Hydrocarbons (EPH): C19-C32 (sg)	Yes
Total Extractable Hydrocarbons (TEH): C10-C30	Yes

252 - Selenium Speciation

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: HPLC/ICP/MS

Preparation Method:

Lab Method ID(s): NA-TM-1002, NA-TP-2007, VA-TM-1084

Method Reference	Modified From	Analytical Method	Preparation Method
SPECTROCHIMICA ACTA PART B60 (2005) 633-641	False	True	False

Parameter	Accredited
Selenium (IV)	Yes
Selenium (VI)	Yes
Selenomethionine	Yes

253 - Selenium Speciation

Field of Accreditation: Environmental

Matrix: Tissue

Analytical Method: HPLC/ICP/MS

Preparation Method:

Lab Method ID(s): NA-TM-1002, NA-TP-2007, VA-TM-1085

Method Reference	Modified From	Analytical Method	Preparation Method
CFIA METHOD SOM-DAR CHE-053-04	False	True	False

Parameter	Accredited
Selenium (IV)	Yes
Selenium (VI)	Yes
Selenomethionine	Yes

254 - UV Absorbance and Transmittance

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: SPECTROPHOTOMETRIC

Preparation Method:

Lab Method ID(s): VA-TM-1042, VA-TP-2011

Method Reference	Modified From	Analytical Method	Preparation Method
SM 5910 B	True	True	False

Parameter	Accredited
UV Absorbance	Yes
UV Transmittance	Yes

255 - Soluble Anions

Field of Accreditation: Environmental

Matrix: Dustfall

Analytical Method: ION CHROMATOGRAPHY (IC)

Preparation Method:

Lab Method ID(s): NA-TM-1001, VA-TM-1039

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	True	True	False
EPA 300.0	True	True	False
SM 4110	True	True	False

Parameter	Accredited
Chloride	Yes
Nitrate (NO3)	Yes

256 - Anions

Field of Accreditation: Environmental

Matrix: Solids [Leachate]

Analytical Method: ION CHROMATOGRAPHY (IC)

Preparation Method: FIXED RATIO EXTRACTION

Lab Method ID(s): NA-TM-1001, VA-TM-1078

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	True	True	False
EPA 300.0	True	True	False
SM 4110	True	True	False

Parameter	Accredited
Chloride	Yes
Sulphate	Yes
Sulphate (Sulfate)	Yes

257 - Acidity

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: TITRIMETRIC

Preparation Method: SHAKEFLASK EXTRACTION

Lab Method ID(s): VA-TM-1053, VA-TM-1074

Method Reference	Modified From	Analytical Method	Preparation Method
MEND REPORT 1.20.1	True	True	False
SM 2320 B	True	True	False

Parameter	Accredited
Acidity (as CaCO3)	Yes

258 - Alkalinity

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: TITRIMETRIC

Preparation Method: SHAKEFLASK EXTRACTION

Lab Method ID(s): VA-TM-1053, VA-TM-1074

Method Reference	Modified From	Analytical Method	Preparation Method
MEND REPORT 1.20.1	True	True	False
SM 2320 B	True	True	False

Parameter	Accredited
Alkalinity (pH 4.5)	Yes

259 - Ashfree

Field of Accreditation: Environmental

Matrix: Tissue

Analytical Method: GRAVIMETRIC

Preparation Method:

Lab Method ID(s): VM-TM-1051

Method Reference	Modified From	Analytical Method	Preparation Method
SM 10300	True	True	False

Parameter	Accredited
Ash-free weight	Yes

261 - Lead

Field of Accreditation: Environmental

Matrix: Paint

Analytical Method: ICP/MS

Preparation Method: DIGESTION

Lab Method ID(s): NA-TM-1002, NA-TP-2004

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 200.2	True	True	False
EPA 6020B	True	True	False

Parameter	Accredited
Lead	Yes

262 - Paint Filter

Field of Accreditation: Environmental

Matrix: Solids [Paint]

Analytical Method:

Preparation Method: FILTRATION

Lab Method ID(s): VA-TM-1055

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 9095B	True	True	False

Parameter	Accredited
Paint Filter (Free Liquid)	Yes

263 - Volatile Organic Compounds (VOC)

Field of Accreditation: Environmental

Matrix: Solids

Analytical Method: GC/MS-HEADSPACE

Preparation Method: TCLP

Lab Method ID(s): NA-TM-1102, VA-TM-1126

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1311	True	False	True
EPA 8260C	True	True	False

Parameter	Accredited
1,1-Dichloroethene (1,1-Dichloroethylene)	Yes
1,2-Dichlorobenzene	Yes
1,2-Dichloroethane	Yes
1,4-Dichlorobenzene	Yes
Benzene	Yes
Bromodichloromethane	Yes
Bromoform	Yes
Carbon tetrachloride	Yes
Chlorobenzene	Yes
Chlorodibromomethane	Yes
Chloroethene (Vinyl chloride)	Yes
Chloroform	Yes
Dichloromethane (Methylene Chloride)	Yes
Ethylbenzene	Yes
m,p-Xylene	Yes
Methyl ethyl ketone	Yes
o-Xylene	Yes
Tetrachloroethylene	Yes
Toluene	Yes
Trichloroethylene	Yes

264 - Flashpoint

Field of Accreditation: Environmental

Matrix: Solids [Ash]

Analytical Method: PENSKY-MARTENS CLOSED CUP

Preparation Method:

Lab Method ID(s): VA-TM-1090

Method Reference	Modified From	Analytical Method	Preparation Method
ASTM D93-15	True	True	False

Parameter	Accredited
Flashpoint	Yes

265 - Mercury

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLD VAPOUR ATOMIC ABSORPTION (CVAA)

Preparation Method:

Lab Method ID(s): NA-TM-1005, NA-TP-2002, NA-TP-2012

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1631E	True	True	False

Parameter	Accredited
Mercury	Yes

266 - Total Mercury

Field of Accreditation: Environmental

Matrix: Tissue

Analytical Method: COLD VAPOUR ATOMIC ABSORPTION (CVAA)

Preparation Method:

Lab Method ID(s): NA-TM-1005, NA-TP-2006, NA-TP-2012

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1631E	True	True	False
EPA 200.3	True	True	False

Parameter	Accredited
Mercury	Yes

267 - Leachable Mercury

Field of Accreditation: Environmental

Matrix: Solids [Waste]

Analytical Method: COLD VAPOUR ATOMIC ABSORPTION (CVAA)

Preparation Method: EXTRACTION

Lab Method ID(s): NA-TM-1005, NA-TP-2012, VA-TM-1071

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE ENVIRONMENTAL MANAGEMENT ACT HAZARDOUS WASTE REGULATION (EMA/HWR)	True	True	False

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1631E	True	True	False

Parameter	Accredited
Mercury	Yes

268 - Leachable Mercury

Field of Accreditation: Environmental

Matrix: Solids [Waste]

Analytical Method: COLD VAPOUR ATOMIC ABSORPTION (CVAA)

Preparation Method: TCLP

Lab Method ID(s): NA-TM-1005, NA-TM-1700, NA-TP-2012

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1311	True	False	True
EPA 1631E	True	True	False

Parameter	Accredited
Mercury	Yes

269 - Mercury

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: COLD VAPOUR ATOMIC ABSORPTION (CVAA)

Preparation Method: DIGESTION

Lab Method ID(s): NA-TM-1005, NA-TP-2004, NA-TP-2012

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL, SALM	True	False	True
EPA 1631E	True	True	False
EPA 200.2	True	True	False

Parameter	Accredited
Mercury	Yes

270 - Leachable Mercury

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: COLD VAPOUR ATOMIC ABSORPTION (CVAA)

Preparation Method: EXTRACTION

Lab Method ID(s): NA-TM-1005, NA-TP-2012, VA-TM-1074

Method Reference	Modified From	Analytical Method	Preparation Method
MEND REPORT 1.20.1	True	True	False

Parameter	Accredited
Mercury	Yes

271 - Mercury

Field of Accreditation: Environmental

Matrix: Air [Dustfall]

Analytical Method: COLD VAPOUR ATOMIC ABSORPTION (CVAA)

Preparation Method: DIGESTION

Lab Method ID(s): NA-TM-1005, NA-TP-2012, VA-TP-2063

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	True	True	False
EPA 1631E	True	True	False

Parameter	Accredited
Mercury	Yes

273 - Metals

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: ICP/MS

Preparation Method: EXTRACTION

Lab Method ID(s): NA-TM-1002, NA-TP-2007, VA-TM-1021

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 6020B	True	True	False
EPA 821/R-91/100	True	True	False

Parameter	Accredited
Arsenic	Yes
Cadmium	Yes
Copper	Yes
Lead	Yes
Nickel	Yes
Zinc	Yes

274 - Leachable Metals

Field of Accreditation: Environmental

Matrix: Solids

Analytical Method: ICP/MS

Preparation Method: MLEP EXTRACTION

Lab Method ID(s): NA-TM-1002, NA-TP-2007, VA-TM-1071

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE CONTAMINATED SITES REGULATION (CSR)	True	True	False
EPA 6020B	True	True	False

Parameter	Accredited
Arsenic	Yes
Barium	Yes
Boron	Yes
Cadmium	Yes
Chromium	Yes
Copper	Yes
Lead	Yes
Selenium	Yes
Silver	Yes
Uranium	Yes
Zinc	Yes

275 - Metals

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: ICP/MS

Preparation Method: EXTRACTION

Lab Method ID(s): NA-TM-1002, NA-TP-2007, NA-TP-2008

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 6020B	True	True	False
SOIL SAMPLING & METHODS OF ANALYSIS, CARTER 15	True	True	False

Parameter	Accredited
Calcium	Yes
Magnesium	Yes
Potassium	Yes
Sodium	Yes

276 - Hexavalent Chromium

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: ION CHROMATOGRAPHY (IC)

Preparation Method:

Lab Method ID(s): NA-TM-1001, VA-TM-1056

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1620B	True	True	False
SM 3500-CR C	True	True	False

Parameter	Accredited
Dissolved Hexavalent Chromium	Yes
Hexavalent Chromium	Yes

277 - Sulphide

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLORIMETRIC-CONTINUOUS FLOW (CFA)

Preparation Method:

Lab Method ID(s): VA-TM-1057

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500 A	True	True	False
SM 4500 E	True	True	False
SM 4500 S2- D	True	True	False

Parameter	Accredited
Sulphide	Yes

278 - Legionella

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: CULTURE

Preparation Method:

Lab Method ID(s): NA-TM-1302

Method Reference	Modified From	Analytical Method	Preparation Method
ISO 11731	True	True	False

Parameter	Accredited
Legionella pneumophila	Yes

279 - Tetraethyllead

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/ICP/MS

Preparation Method: EXTRACTION

Lab Method ID(s): VA-TM-1129, VA-TP-2132

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	True	True	False

Parameter	Accredited
Tetraethyl lead	Yes

† “OSDWA” indicates the appendix is used for the analysis of Ontario drinking water samples, which is subject to the rules and related regulations under the Ontario “Safe Drinking Water Act” (2002).

The list of tests and measurement capabilities for which a laboratory is accredited can change at any time due to circumstances such as scope extensions, voluntary withdrawal of tests by the laboratory and suspension. Scopes are published by the CALA via the Internet at http://www.cala.ca/cala_directories.html

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Appendix 3-I: ALS Analytical QA/QC Program

PEACE RIVER
HYDRO PARTNERS

Quality System Protocols

19 January 2018

ALS is a global diversified testing services organization with a presence on every continent, offering a broad range of services to leading global companies.

The following summarizes standard practices routinely employed by the ALS Environmental Division in Canada. Our practices exceed accreditation requirements and have been designed to meet or exceed the needs of our customers and to give them confidence in the reliability of our test data.

ALS Canada locations hold accreditations and certifications relevant to their work and area of operation. Participation in CALA, USA DOD, NELAP, various USA state and other regional and regulatory programs is location-specific. Refer to Accreditations in the Environmental Testing Downloads section at www.alsglobal.com for information relevant to each ALS location. Alternatively, current scopes and certificates are available from your Account Manager or by contacting our Quality Department.

Additional information is available on request. Customers are invited to audit or tour ALS facilities at their convenience.

Services to Customers:

ALS cooperates closely with our customers to ensure their testing needs are understood, and allows them reasonable access to relevant work areas of the laboratories to audit our management system or to witness test work undertaken on their behalf.

All client issues are logged into our tracking system to ensure each issue is addressed completely and appropriately. Local and national oversight and initiatives ensure that identified improvements are incorporated throughout our Canadian laboratory network so that customers receive the same level of service regardless of which location performs the testing.

Documentation and Document Control:

Test methods and support procedures are documented in detail to ensure consistency of application, repeatability of test results and traceability of analyses.

Test method requirements include but are not limited to sample handling, sample storage, minimizing interference, sample preparation, reagent and standard specifications, equipment, supplies, calibration requirements, instrumental measurement procedures, quality control requirements, data quality objectives and corrective actions, calculations, reporting requirements, reference information, and hazards and their preventive measures.

Administrative support procedures are also documented where needed to ensure quality system procedures and customer services are provided in a controlled, approved manner consistent with ALS policies and client needs.

All documents are authorized prior to use, ensuring adequate technical and quality oversight.

Distribution of documents is controlled to ensure only the most recent version is available for use. Authorized documents are reviewed periodically by the ALS signing authority to ensure they continue to meet both internal ALS requirements and our customers' needs.

Test methods and support procedures are available for client viewing on-site.

Internal Audits:

ALS Canada operates an extensive internal audit program. Audits are performed by qualified Quality Assurance and Technical staff for analytical procedures and Quality System elements. The ALS audit program ensures that

procedures are implemented as intended, that test methods are scientifically defensible and technically sound, and that policies, procedures and records continue to meet the objectives of our Quality System.

Quality staff may periodically initiate unscheduled audits in response to proficiency testing program results, client feedback, requests from managers, or any other circumstance that warrants investigation.

Quality Control (QC):

ALS has established QC procedures for monitoring the validity of tests performed by our laboratories. Individual test methods specify quality control requirements, frequency of use, and Data Quality Objectives (DQOs).

The type of quality control elements used for process monitoring is dependent on the test performed, but typically includes (as appropriate): Calibration Verification Standards, Continuing Calibration Verifications, Instrument Blanks, Method Blanks, Laboratory Control Samples, Reference Materials, Matrix Spikes, Surrogate Spikes, and Internal Standards.

DQOs are established for each QC type, based on a combination of reference method objectives, customer requirements and historical test method performance. Where applicable, prescriptive elements of reference methods take precedence over internal DQOs.

Test results for selected QC samples are available on test reports. Please contact your Account Manager for more information.

Refer to the ALS Quality Control Protocol handout for details on ALS QC practices.

Control Charts:

Control charts are used to provide a graphical representation of QC results and test method performance over time. Control charts graphically display DQOs as well as the statistically derived mean and ± 2 and 3 standard deviations (“sigma”) around the mean, calculated from recent historical QC results. ALS applies advanced trend monitoring algorithms to identify outliers and non-random data distributions (trends) that may indicate undesirable changes in test method performance, so the causes can be investigated and corrected.

Continuous Improvement:

ALS is committed to continuously improving our processes and services. The Quality System feeds into a continuous cycle of review, implementation, and monitoring so that improvements are actively sought and adopted where needed.

Test Data Validation and Record Retention:

ALS analytical data proceeds through several reviews prior to the release of final reports. The ALS data validation process includes test result validation, inter-parameter validation, and report validation. Test result validation involves a thorough analyst review followed by an independent peer review. Inter-parameter validation occurs when all department specific parameters for a sample are completed, and involves an overall review of test results within each sample for consistency among any related test parameters. Report validation occurs when all the requested test results for a work order are completed, and involves a review of the final report before it is sent to the customer.

ALS maintains laboratory records in a traceable manner for a minimum of five years.

Method Validation:

Customers rely on ALS to select test methods that are appropriate to meet their needs. Wherever possible, ALS references the latest versions of published standard methods developed by organizations such as American Public Health Association, United States Environmental Protection Agency, NIOSH, Environment Canada, and other international, regional or regulatory organizations or equipment manufacturers.

Method validations are conducted to confirm that our test methods are fit for their intended use. The validations are as extensive as necessary to meet the needs of the given application. The extent depends on the source of the method. Test methods are revalidated periodically to ensure continued suitability and fitness for purpose.

Method Detection Limits and Limits of Reporting:

ALS Limits of Reporting (LORs) are established using rigorous experimental and statistical procedures that begin with the determination of the Method Detection Limit (MDL) at 99% confidence. The MDL takes into account several factors, like long term Method Blanks, low level Sample Duplicates, and low level Spiked Samples. When detected at or above the MDL, ALS test results are considered to be qualitatively accurate, and a parameter can be reported with 99% confidence as being present in the sample.

$$MDL = (s_0 \times t_{n-1}) + |MBlk|$$

Where:
- s_0 = the standard deviation derived from the analysis of blank or low level samples, whichever gives a higher standard deviation,
- t_{n-1} = the Student's t-distribution with n-1 degrees of freedom for the one-sided 99% confidence interval.
- |MBlk|= the absolute value of the mean method blank.

ALS takes a conservative approach to detection limits. Our goal is to minimize false positives, because we recognize that any false positive results can be damaging for our clients. Where possible, we establish LORs at levels well-above the statistical MDL, and ideally at the LOQ_5. This improves the accuracy and precision of results near the detection limit, and reduces the chance of false positives due to sample-specific issues. At or above the LOQ_5, test results are considered to be quantitatively accurate. A reported parameter at the LOQ_5 is considered to be within 40% of the true value 95% of the time.

$$LOQ_5 = 5s_0 + |MBlk|$$

Where:
s_0 = the standard deviation used in the MDL calculation,
|MBlk | = the absolute value of the mean method blank.

The D.L. column on ALS analytical reports contains the LOR (also known as Detection Limit). The LOR may be the MDL as calculated above, or a higher value. ALS does not report LORs that are less than the calculated MDL.

Measurement Uncertainty (MU):

ALS procedures for calculating measurement uncertainty are based on accepted practices of identifying components contributing to uncertainty, compiling data that represents or includes these components, evaluating the data using appropriate statistical calculations, and reporting in a manner that prevents misunderstanding of the result. ALS follows the Type A method of calculating measurement uncertainty, however additional factors are considered to ensure the best and most complete information is derived from our evaluation of test method performance.

The ALS model describes the dependency of uncertainty on three factors. The first is a constant contribution to uncertainty attributable to s_0, the standard deviation of the method for concentrations that approach zero. The second is a constant relative uncertainty associated with higher parameter concentrations. The third is a constant

contribution to uncertainty attributable to the mean long-term method blank value where it is significant. The following is the ALS equation for measurement uncertainty, using an expansion factor of k=2:

Expanded 95% Uncertainty as a Function of Concentration

$$U(c) = 2 * [\sqrt{ \{ s_0^2 + (\Theta c)^2 \} }] + |MBlk_{LT}|$$

Where:

U(c) = The expanded uncertainty at concentration c. The range c ± U(c) represents approximately the 95% confidence interval (two standard deviations).

c = Measured concentration of parameter in the sample.

s_0 = A constant contribution to standard uncertainty represented by the standard deviation at zero concentration, which is related to the method detection limit.

Θ = Combined relative standard uncertainty, excluding MDL and Method Blank contributions. Theta has no units.

$|MBlk_{LT}|$ = Absolute value of the mean long-term Method Blank value, where significant (i.e. if > 1/5 s_0). [Note that the Method Blank term is not expanded because it represents a constant bias, not a variance.]

Uncertainty values obtained from this procedure must be regarded as estimates. Primarily, this is because all environmental samples are different, especially with regard to matrix effects and heterogeneity. It is our intent with this procedure to arrive at an estimate of a 95% confidence level uncertainty value that can be assumed to apply to 95% (or more) of the samples that a laboratory receives for a given test. It follows that for samples where undetected matrix effects or interferences occur, or for samples that are atypically heterogeneous, uncertainty estimates may be low.

Another aspect of reporting MU is the reporting of test method bias. Bias occurs in a small number of test methods that cannot recover 100% of a parameter from a sample. In these cases ALS reports bias along with the MU to aid with the interpretation of the test result.

Participation in Interlaboratory Proficiency Testing (PT) Programs:

ALS locations participate in an extensive variety of proficiency testing programs. Where available, formal programs operated by outside agencies are used. When not available, ALS utilizes less formal proficiency testing studies.

Root cause analysis is initiated and corrective action plans are developed when PT program results indicate a decline in test method performance.

Staff Training:

Formal training procedures are in place to ensure all staff are trained in ALS polices and analytical procedures prior to performing analyses. A staff orientation program communicates ALS polices to newly hired staff. Task specific training is performed, and analyst proficiency is demonstrated and documented before staff are authorized to work independently. On-going analyst proficiency is monitored using proficiency testing programs. Records are maintained in training logs issued to staff upon hiring.

As well, ALS Canada promotes continuing education and learning by offering advanced courses covering technical and quality functions.

Employee Agreements:

ALS protects our customers' confidential information and proprietary rights. We require all employees to review and sign a Code of Conduct policy that communicates the ALS confidentiality policy. It is ALS practice to never disclose information about a client's analysis to a third party without prior consent of the client, or unless compelled to by law. If we are obligated by law to disclose such information, we will inform the client prior to doing so.

ALS employees avoid involvement in activities that would diminish confidence in their competence, impartiality, judgment, or integrity by complying with the ALS Code of Conduct and Data Integrity Policy.

Sample Tracking:

Procedures are in place to track samples from receipt at the lab through to final reporting. A data management system (LIMS – Laboratory Information Management System) is used to generate a work order number for each sample submission, and a unique identification number is generated for each sample within the work order. The system is then used to assign specific analyses for the samples, to identify methods to be used, and to assign due dates for the results. The system is used to manage analytical workloads and track the status of all samples in-house. LIMS is a secure system that can only be accessed using login passwords. Controlling the level of access according to the needs of individual staff members provides additional security.

When requested by the client, legal sample protocols are implemented to ensure chain of custody defensibility in a court of law. Contact the lab for legal sampling and transportation instructions if this service is needed.

Equipment Calibration:

Measuring and testing equipment used by ALS laboratories that can have a significant effect on the accuracy or validity of test results is calibrated using established procedures. These procedures ensure traceability through an unbroken chain of calibrations or comparisons to national measurement standards. Where traceability of measurements to SI units is not possible and/or not relevant, traceability is provided by the use of certified reference materials and/or consensus standards.

Management Reviews (MR):

ALS management conducts a review at least annually to ensure our management system is effective, and continues to be suitable for our operations, and to identify necessary changes or improvements. Senior management is included in the review process for all locations.

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